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Generation Matters: The Nexus of Nativity, Identity, and Fertility
Among Hispanic Women in the United States

By

Sarah Anne Walchuk Thayer

A dissertation submitted in partial satisfaction of the

requirements for the degree of

Doctor of Philosophy

in

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in the

Graduate Division

of the

University of California, Berkeley

Committee in charge:

Professor Jennifer Johnson-Hanks, Chair
Professor Kenneth Wachter
Professor Marion Fourcade

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Abstract

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Professor Jennifer Johnson-Hanks, Chair

What explains the curious pattern of Hispanic fertility in the United States? This dissertation explores this question, and in doing so sheds new light on processes of immigrant incorporation in the United States.

I examine the fertility of Hispanic women across immigrant generations, and I also examine how the fertility of immigrants and their descendants compares with a mainstream non-Hispanic white population. Previous research on immigrant fertility has drawn predominantly on classic assimilation theory, as well as theories of selectivity and disruption to explain the fertility outcomes of immigrant women in the U.S. These theories have some empirical support, but tests of them have been fairly inconsistent or inconclusive. To date, there is no coherent theory of immigrant fertility. I argue that a theory of segmented assimilation with an intergenerational disjuncture hypothesis offers the most compelling explanation for observed Hispanic fertility patterns.

In an analysis of European, Asian, and Hispanic immigrant generations, I find that fertility change across immigrant generations of European and Asian women is largely consonant with what we would expect from a classic assimilation perspective—also consonant with the upwardly mobile path within a segmented assimilation framework. Although individual level demographic and socioeconomic covariates largely explain the differences between most of the European and Asian immigrant groups and their non-Hispanic white peers, they do not explain the Hispanic fertility differential. I find that a puzzling U-shaped pattern of Hispanic fertility across immigrant generations remains even after adjusting for demographic and socioeconomic factors. Strikingly, fertility decline reverses from the second to the third generation, diverging from the reference population.

In a new contribution to the body of literature on immigrant fertility outcomes, I find that the composition of parent nativity of second generation women is an important predictor of their lower fertility relative to third generation women, even if the exact mechanism of action is still unknown. I theorize a number of ways this mechanism could function and argue that this finding

is further evidence that fertility change across immigrant generations in the U.S. is best explained within a segmented assimilation framework enriched by an intergenerational disjunctures hypothesis.

I also find evidence that women who *can do so* are opting out of Hispanic identity by the third generation. Second generation women of Hispanic origin (identified as such through the nativity of their parents) who did not self-identify as Hispanic are measurably different from their peers who identified as Hispanic on almost all socioeconomic, intergenerational disjuncture factors and contextual variables. The women with discordant identities are clearly a distinct group, and the explanation for this may be tightly linked to segmented assimilation theory, where selective identity occurs at the site of conflict between structural assimilation and cultural factors. By the third generation, women who have achieved assimilation to a mainstream reference group may choose not to identify themselves as Hispanic. The unique pattern of Hispanic fertility, that is, the higher fertility rates we observe in third generation Hispanic women, may be due partially to selection out of Hispanic identity.

Taken together, the findings point to an assimilation process in which Hispanic immigrants become racialized and sent back to the underclass. I show that while second generation Hispanic women are characterized by much higher educational achievement, employment, and household income relative to their first generation peers, the trend stagnates or reverses by the third generation. Hope builds up with the second generation, and even legitimates some sacrifices, as exemplified by fewer children. But these immigrants and their children learn that educational achievement in the U.S. does not translate into long term gains, at least *for them*.

Although this work sought to explain the puzzle of Hispanic fertility across immigrant generations within a segmented assimilation framework, in the end, we may find that the more theoretically compelling site of inquiry may be found by turning the question on its head. How does the curious pattern of Hispanic fertility across immigrant generations help enrich our theories of immigrant incorporation? No demographic work to date has tested the hypothesis that a selection effect with respect to ethnic identification may be taking place with third generation Hispanic women. An analysis here of second generation women finds a selection effect—that is, women who have achieved assimilation on other measures may be opting out of Hispanic identity—and suggests that this process of selection continues into the third generation and beyond. This possibility contributes a new and important modification to the segmented assimilation thesis. The findings from this dissertation demonstrate that analyses of vital events can contribute important insights into immigrant incorporation in the U.S.

For the women who made this work possible.
For Jim Owen, whose wisdom extended far beyond the classroom.

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A doctoral degree may be conferred upon one person, but it takes many to make it a reality. I have benefitted from the expertise, advice, comments, and mentorship of many persons and the financial support of the Demography Department, National Institute on Aging, and University of California, Berkeley.

Jennifer Johnson-Hanks has provided unwavering support of this endeavor. Her office library opened up entire new worlds of thought to me and her insights helped me think deeper and more expansively. The flowered chair in her office was a comfortable place to ponder the implications of uncertainty in modeling demographic events. It became a place of comfort when faced with my own uncertain future. I am forever grateful. Ken Wachter helped me to focus on important demographic details while keeping in mind the big picture of my project. He provided supportive guidance throughout my oral exams and dissertation. Marion Fourcade pressed me to engage with social theory in my work and her key insights have provided sociological depth to my analyses.

The faculty and staff of the Demography Department have been enormously supportive throughout my graduate education. The department provided a stimulating intellectual environment in which to develop my ideas. I am deeply thankful for the friendships I developed. I would especially like to thank my colleagues and friends in Demography 296 for their thoughtful comments and suggestions on each chapter and for their support throughout the process. Gene Hammel facilitated insightful discussions each week. Sarah Tom, Sarah Staveteig, Bryan Sykes, Rachel Sullivan Robinson, Shannon Gleeson, Aliya Saperstein, Pablo Comelatto, and Nobuko Mizoguchi shared their work inside and outside of the classroom, and in turn made my work better. Our discussions in the attic and in the basement both pushed my thinking forward and buoyed my spirit. Carl Mason and Carl Boe provided computational and intellectual support. The administrative excellence of Monique Verrier and Liz Oszelcuk was instrumental in making this degree possible.

An amazing group of women have kept me going through these years. I have been the fortunate recipient of excellent medical care from Elizabeth Crabtree and Avis Logan. They have listened, treated, planned, guided, and adjusted on repeat, over many years. At times they have patched me together so I could simply keep going. They are shining examples of how health care in this country *should* function. Aylin Altan is an inspiration; I am grateful for her professional mentorship and friendship. The Georgetown girls—Annette Andreassen, Megan Gaul, Lauren Meurlin, Chris Ungaro, Genevieve Weber, Meghan Welch, and Rachel Wolf—have been the source of much support and laughter over these years.

I would like to thank my family, and especially my parents, for supporting me through many difficult times. They were always sure I could do it. My mom provided loving “Gramolly” care to my children at critical times this year, enabling me to make progress toward completion. My husband, Jay, has been my source of strength for many years, and I am so grateful to have him in my life. Finally, I would like to thank my beautiful children, Owen and Grady, who make me strive to be a better person every day. I hope they internalize two lessons from my early

mornings and weekends over the past year and a half. First, I want them to know that the deep joy of accomplishment springs from hard work and dedication. Second, I want them to know that women and men have equal purchase on their dreams, and nobody achieves their goals without the support of others.

CHAPTER 1

GENERATION MATTERS: THE NEXUS OF NATIVITY, IDENTITY, AND FERTILITY AMONG HISPANIC WOMEN IN THE UNITED STATES

INTRODUCTION

“We saw how difficult it was for our parents. There were so many demands at work and at home that it didn’t allow for a high quality of life with the children. [A smaller family] was something we’d heard about from our friends who were more middle-class. And we wanted that too.”

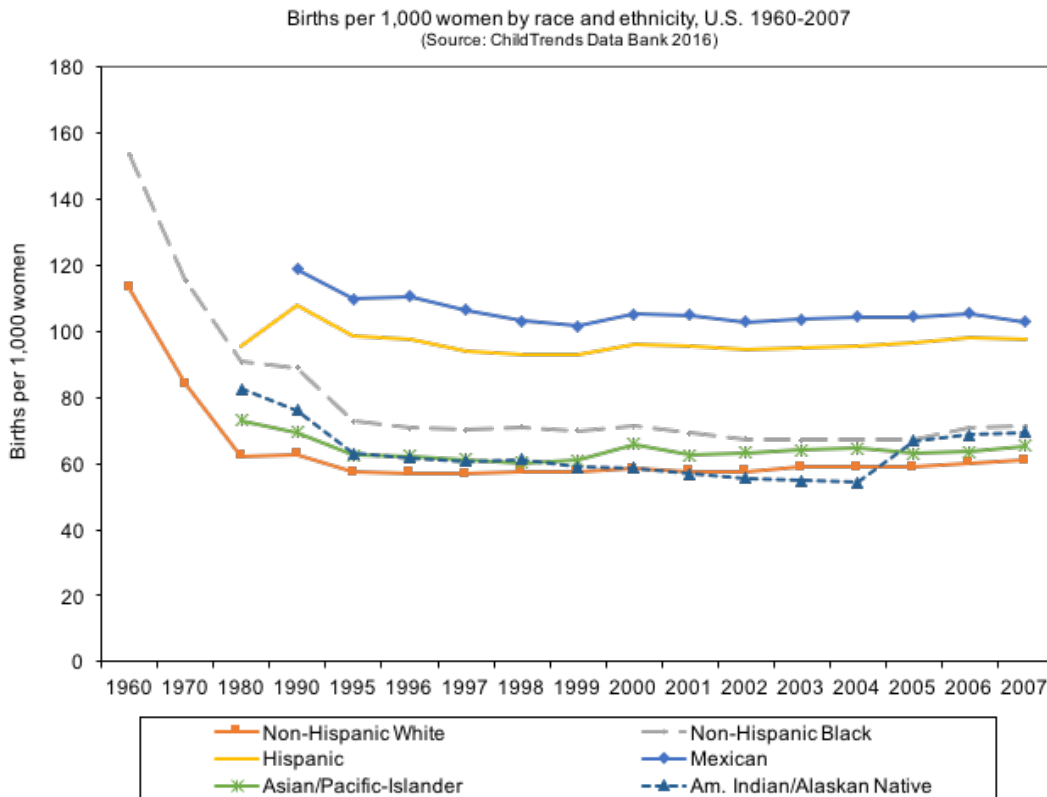
-Maricela, daughter of Mexican immigrants (LA Times: Oct. 4, 2004)

Maricela is a second generation Hispanic woman living in the United States. She and millions of women like her will limit their fertility relative to their immigrant parents. Yet we know from the data that her children will go on to have more children than her. This this is a curious puzzle, and this pattern contradicts some of the prevailing assumptions about incorporation of immigrant groups in the United States. I am not the first person to discover this paradox, yet it is an important question that has been curiously understudied. The objective of this dissertation is to examine and explain this pattern using a theory of segmented assimilation and incorporating a hypothesis that accounts for individual agency within this context.

Since 1970, the United States has experienced the largest migration wave since the great European migrations of the late 19th Century, prompting new questions about the incorporation of immigrants in the United States. While most recent research has focused on economic outcomes of immigrants and their children, such as education, labor market participation, earnings, and participation in social welfare programs, there is a smaller (albeit growing) body of work related to issues of demographic incorporation, that is, outcomes related to mortality and fertility. I argue that demographic rates are an important measure of incorporation, as they are markers for what kind of life immigrants and their children aspire to, and what they can achieve. This dissertation will add to the literature linking assimilation theories and vital events in an analysis of Hispanic fertility in the United States. Just as we look at differential mortality rates among non-Hispanic whites and blacks as a marker of disadvantage, so too can differential fertility rates help us to assess disparities in social status and modes of incorporation in U.S. life.

After an initial assessment of the fertility of all immigrant groups, I will focus my analysis on women of Mexican and Central American descent. Specifically, how does the fertility of immigrants and their descendants compare to the mainstream population? How does the fertility of immigrants change across generations, and what explains this pattern? This group is an especially salient focus of study because it is the largest immigrant population in the U.S., with the highest fertility levels, and thus has the potential to greatly influence the composition of the United States in the long term (see Figure 1.1).

Figure 1.1 Births per 1,000 Women by Race and Ethnicity, U.S. 1960-2007



Up until the mid-20th century, the study of immigration to the United States focused on the great waves of migration from Europe and the forces that pushed or pulled immigrants to the destination country and their impact on the receiving nation (Castles and Miller 1998; Massey et al. 1993). In particular, researchers were interested in the modes of incorporation once immigrants arrived, as well as intergenerational mobility, that is, the extent to which immigrants and their children would converge to the norm and become indistinguishable from mainstream Americans (Park and Burgess 1921; Park and Miller 1921; Gordon 1964; Warner and Srole 1945). Research questions focused on “progress” across time and generation. At what pace would immigrants leave foreign languages and identities behind? By which generation would their descendants converge to mainstream education levels and occupations? At what rate would they intermarry with the native population? At the core of this classic theory of assimilation was the notion that immigrants were moving toward something—the native (white, Anglo) majority population—via the absorption of majority’s norms and values (Portes and Rumbaut 2014). The ‘melting pot’ thesis, popularized through the name of a Broadway play in 1909 and part of the American consciousness ever since, was a variant of classic assimilation, in which over time and subsequent generations, nationalities and ethnic groups would blend into one uniquely American culture (Daniels 2002). This was part of the national narrative, perhaps even a critical piece of the ‘imagined community’ (Anderson 1998) necessary for the continued construction of the United States’ national identity.

For decades, the prevailing empirical pattern was that of “straight-line” classic assimilation first theorized by Park and his contemporaries. A first generation immigrant from Ireland began as a trolley conductor in Chicago; his son became a high school principal; his children became doctors and lawyers. Along the way, the son married a woman born in the U.S. to U.S.-born parents. His children married other Americans. Among European-origin generations at least, ethnic identity became symbolic and optional, typically by the third generation (Waters 1990).

This classic assimilation theory was intuitive and was easy to propose when the main immigrant groups were from Europe and racially reflective of European birth; later proponents of the theory acknowledged there were complexities. Other theorists acknowledged the complexities that had always existed, and contended the melting pot reflected more myth than reality (Glazer and Moynihan 1963).

More recent immigration waves, especially those that began after the 1965 Immigration Act abolished national-origin quotas, have continued to challenge the older assimilation theories. The new immigrants have come largely from Asia and Latin America and therefore do not fit neatly within the black-white model of racial identity that characterized U.S. society during the great European migration waves (Brown and Bean 2006). Whereas some groups of European immigrants may have initially been racialized at the time of mass migration (for example, southern Italians were coded as ‘other’ via certain epithets, stigmatized as violent, and at times were the subject of lynchings) but as a result of increased socioeconomic status and lighter appearance relative to blacks in the U.S., they became viewed and accepted as part of the white population. Racialization, the social process that makes race differences meaningful, has remained persistently salient for these new waves of immigrants in a way it did not for earlier groups of European immigrants (Telles and Ortiz 2008). Will the ethnicity of these immigrants’ children become optional, as it has for the descendants of European Americans in the U.S., or will it remain relevant and an obstacle to intergenerational mobility?

In addition, the new waves of immigration are complicated by an era of massive industrial upheaval, a globalizing economy, and changing domestic politics of immigration beginning in the 1990s. In this context, classic assimilation theory has seemed inadequate in explaining how these new immigrant groups will be incorporated into the United States and how subsequent generations will fare. Segmented assimilation theory (to be described in greater detail later in this chapter) has been developed to account for the complexity of the current context of immigration (Portes and Rumbaut 2014; Portes and Rumbaut 2001; Portes and Zhou 1993). The theory has been used in the study of immigrant settlement and spatial mobility, school engagement and educational attainment, employment and occupations, political participation, and psychosocial outcomes.

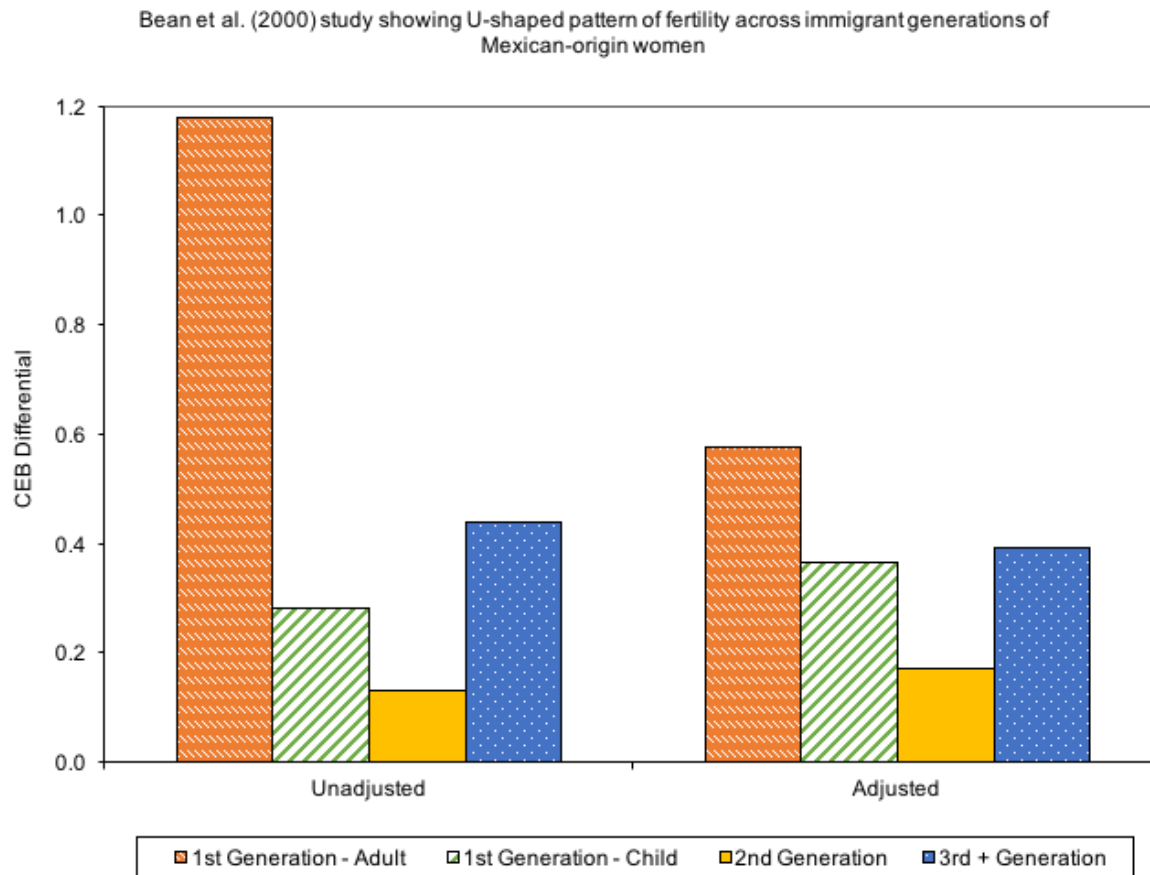
In contrast, others argue the classic core of earlier assimilation theory remains relevant even with newer immigrant groups and in the changed economic landscape of the United States. Alba and Nee, in their “new assimilation theory”, define assimilation as the process of “decline, and at its endpoint, disappearance, of an ethnic/racial distinction and the cultural and social differences that express it” (1997:863). They contend that across many outcomes, assimilation is proceeding, even if it may be proceeding unevenly (Alba and Nee 2003). This classic framework has typically provided the theoretical underpinnings of empirical studies of immigrant fertility.

In this framework, patterns of family building are relatively poorly understood and a number of puzzles remain.

One puzzle involves the fertility of Mexican and Central American origin women.¹ Previous studies of immigrant fertility have shown a fairly consistent pattern in the fertility of foreign-born versus native-born women. Census data and survey data have consistently shown that women of Hispanic or Mexican origin have more children than U.S. born women (Dye 2010; Monte and Ellis 2014). Research has demonstrated that these women still have higher fertility than U.S.-born women after controlling for other factors (Ford 1990; Kahn 1988; Kahn 1994; Stephen and Bean 1992b). Yet when immigrant generations are further delineated, an unusual pattern appears, where fertility decline appears to reverse from the second to the third generation in women from Mexico and Central America. That is, the fertility of second generation women is consistently lower than that of both the first and the third generations (Bean, Swicegood, and Berg 2000; Frank and Heuveline 2005; Hill and Johnson 2004; Forste and Tienda 1996). Bean et al. found that even controlling for demographic and socioeconomic factors did not change this pattern (see Figure 1.2). Classic theories of assimilation cannot explain this pattern.

¹I will detail the specific origin countries used in my study in Chapter 3; however, going forward I will typically use the term “Hispanic” to refer to women of Mexican and Central American descent.

Figure 1.2 Bean et al. (2000) study showing U-shaped pattern of fertility across immigrant generations of Mexican-origin women



The predominant model of immigrant fertility argues that immigrants coming from relatively high-fertility countries (such as Mexico) will have relatively high fertility compared with a U.S. born population due to a cultural background that promotes adherence to pronatalist sub-cultural norms (Abma and Krivo 1991; Blau 1992; Carter 2000; Fernández and Fogli 2009; Frank and Heuveline 2005).

Similarly, a second model suggests that immigrant fertility will be higher due to structurally limited economic opportunities, which lower the opportunity cost of childbearing (Abma and Krivo 1991; Swicegood et al. 1988).² I will describe both of these models in more detail in Chapter 2, but in short, they are rooted in classic assimilation theory and suggest that over time in the U.S. (and implicitly, over generations since immigration), individuals will experience lower attachment to sub-cultural high-fertility norms and more economic opportunities in the U.S., leading to a decrease in fertility levels, toward convergence with the mainstream population. The generational differentials in the fertility of Hispanic women and the persistent differences with the mainstream U.S. population even by the third generation suggest

² Two additional models, disruption and selectivity, are also used in conceptual frameworks of immigrant fertility. I will discuss them further in Chapter 2.

that current theories may not adequately explain contemporary patterns of immigrant fertility in the United States.

An examination of family formation practices is an important addition to the current body of knowledge on incorporation across generations, and the second generation in particular. An analysis of the variation in childbearing behavior will provide insight into the location and trajectory in social space of immigrants and their children. In a broad sense, it will attempt to show that demographic rates are an important measure of incorporation. It will also show that the classic assimilation framework, the prevailing model of immigrant fertility research, is not adequate for explaining fertility differentials between and within sub-populations. I will use the more recently explicated theory of segmented assimilation in conjunction with my own “intergenerational disjuncture” hypothesis to more fully account for differentials (Portes and Rumbaut 2014; Portes and Rumbaut 2001; Portes and Zhou 1993). In this sense, this work also has theoretical implications for our understanding of the life course and social change. In addition, this project will add to current knowledge by integrating the literature on immigrant assimilation with demographic theories of fertility. Relatively few studies have attempted to address these two separate literatures. For exceptions, see Liu(2002) and Mayer and Ripahn (2000).

1.1 STUDY PLAN

This study will focus on two main research questions. The questions will be answered using two nationally-representative data sources and quantitative methods.

1. *How does the fertility of immigrants and their descendants compare to that of the mainstream population?*

This question attempts to understand how personal characteristics explain fertility differentials between first generation, second generation and third generation women from multiple regions of origin with those of their U.S.-born non-Hispanic white peers. Here I ask the question, how, over immigrant generations, do different groups compare to U.S. born non-Hispanic white women? I use data from the Current Population Survey (CPS) to examine cumulative fertility outcomes (as measured by children ever born). I complete an analysis of the determinants of cumulative fertility differentials across immigrant generations among Mexican/Central American, Asian, and European origin groups, relative to the “mainstream” population. This provides the context in which to examine the cumulative fertility of Mexican/Central American women more closely.

2. *How does the fertility of Mexican/Central American women change across generations, and what explains this pattern? How do intergenerational relations interact with socioeconomic and contextual characteristics to affect these outcomes?*

The next part of the analysis examines the pattern of fertility across Hispanic generations. This question attempts to understand how personal, community, and intergenerational characteristics explain fertility differentials across generations. I use the CPS data for this analysis.

I attempt to test segmented assimilation theory, formulated largely by Alejandro Portes, Min Zhou and colleagues, to further explain the fertility outcomes of Mexican/Central American-origin women (Portes and Zhou 1993; Portes, Fernandez-Kelly, and Haller 2005; Portes and Rumbaut 2014). I examine if and how characteristics traditionally used in assimilation research, such as geography, education, income, and employment interact with parent characteristics and community context—the areas in which questions of identity and belonging are often negotiated—affect observed fertility outcomes, thus providing insight into the decisions that individuals make about family formation. For example, previous studies have found that the ethnic homogeneity of one’s neighborhood had a significant effect on fertility (Fischer and Marcum 1984). I will argue that a segmented assimilation framework better explains the pattern of Hispanic fertility than classic assimilation theory (or even the “new assimilation” variant of Alba and Nee). I add a new component as well, in the composition of nativity of the parents of second generation Hispanic women, to argue for an incorporation of the intergenerational disjuncture hypothesis.

For the above analysis, the cross-sectional data of the CPS, combined with limited number of variables limits the extent to which I can test these theories. Future research utilizing longitudinal data and following a cohort of women from early adolescence through their childbearing years would be ideal. In the conclusion, I propose the ideal data set and analytic framework for this type of analysis.

1.2 STATE OF KNOWLEDGE

In 2010, over 13 percent of the United States population was foreign born (Grieco et al. 2012). The magnitude of these numbers over time has led a large body of research on the immigrant experience and outcomes in the United States (Borjas 1999; Borjas 2003; Borjas and Freeman 1992; Card 2005; Portes and Rumbaut 2014; Portes 2004; Rumbaut 1997; Schultz 1998; Smith and Edmonston 1997; Waters and Eschbach 1995; Waters and Jimenez 2005). More recently, scholarly research has turned to the children of these immigrants, in recognition of their increasingly large presence and transformative possibilities for the United States’ demographic, economic, and social landscape (Alba 2005; Van Hook, Brown, and Kwenda 2004; Portes and Rumbaut 2001; Portes and Zhou 1993; Portes and Schauflier 1994; Portes, Fernandez-Kelly, and Haller 2005; Portes and Hao 2004; Portes and MacLeod 1996; Perlmann and Waldinger 1997; Zhou 1997a; Waters 1994; Zhou 1997c). According to Portes and Rumbaut, by 1999, the number of U.S.-born children of immigrants surpassed the previous record that was set by the children of the earlier great European migration waves (2001:xvii). This “new second generation”, often defined as the post-1965 birth cohorts, will continue to grow through sustained high immigration and the high fertility of the first generation (Rumbaut 2004). Yet their experiences and outcomes are diverse, due to variation in factors such as their parents’ country of origin and educational background, parents’ socioeconomic status and documentation status, the context of their parents’ reception, and the communities in which these children grow up.

A spate of recent research on the second generation has focused on measures of incorporation, sometimes using as a point of reference first generation immigrants (to measure change) and other times using U.S.-born non-Hispanics or all U.S.-born Americans (to measure integration in the U.S. “mainstream”). The main threads of research have focused on socioeconomic outcomes in terms of educational attainment and employment (Card 2005;

Driscoll 1999; Gibson 1989; Glick and White 2003; Glick and White 2004; Hagy and Staniec 2002; Kao 2004; Portes and Hao 2004; Portes and MacLeod 1996). Others have focused on language and ethnic self-identity (Alba et al. 2002; Portes and Schauflyer 1994; Waters 1994; Yu et al. 2002; Zhou and Xiong 2005; Zhou and Bankston 1994). Still other studies have focused on health and social psychological outcomes (Harker 2001; Wu and Chao 2005; Yu, Huang, and Singh 2004; Yu et al. 2003). To date, there are relatively few studies examining incorporation across generations as it relates to family formation (see below for a discussion of research that incorporates a generational component).

Previous studies of the intersection of migration and family formation have focused on immigrants (i.e. the first generation), for a number of reasons. Some authors have used studies of fertility to provide a unique perspective on understanding the selection process for immigration, that is, who chooses to migrate (Carter 2000; Kahn 1988; Lindstrom and Saucedo 2002). Fertility has also been used to understand the disruption effects of migration (Stephen and Bean 1992a; Blau 1992; Carter 2000; Mayer and Riphahn 2000). Most often, fertility outcomes have been studied as a window into assimilation processes, based on the theory that over time and with increased contact, the immigrant population will become similar to the native population in the destination country. Thus, many authors have examined fertility differentials between immigrants and the U.S. born population, often controlling for education (Blau 1992; Espenshade and Ye 1994; Ford 1990; Forste and Tienda 1996; Swicegood et al. 1988; Bean, Swicegood, and Berg 2000). There is also a basic demographic reason for the focus on first generation immigrants. Beginning in the late 1960s, the composition of immigrants began to change, and many arrived from countries with relatively high fertility rates (Kahn 1994). Therefore, understanding immigrant fertility patterns became important for the purposes of population projection (Jonsson and Rendall 2004).

Empirical results of immigrant fertility have shown mixed support for theories of classic assimilation, selectivity, and disruption. A number of studies have documented a widening fertility differential between immigrants and native-born women (Blau 1992; Kahn 1994), which they have attributed to a more rapid decline in the fertility of native-born women. Where studies have examined Mexican (and Central American) origin women specifically, they have found little or mixed evidence for assimilation across generations, although one study comparing first to third generation Hispanic women compared with whites, argues that third generation Hispanic women are converging to the fertility of non-Hispanic white women when an approach is used to align an immigrant cohort with children and grandchildren, by offsetting birth cohorts by a 25-year lag (Parrado and Morgan 2008). But of the few other studies that have disaggregated fertility by Hispanic immigrant populations, researchers have found that second generation women have lower fertility than both first and third generation women (Frank and Heuveline 2005; Bean, Swicegood, and Berg 2000). Hill and Johnson (2004) also examine fertility across immigrant generations and find that the low fertility of the second generation relative to the third generation cannot be explained by assimilation or education factors. An outline of previous studies that have examined immigrant fertility in the United States is provided in the Appendix.

Still, relatively little research has been published on the family formation behavior of the children of immigrants (see Bean et al. 2000, Frank and Heuveline 2005, Hill and Johnson 2004, Parrado and Morgan 2006 for studies that have). This dearth of research is most likely due to the relatively young ages of the post-1965 second generation cohorts. The foreign born in the United

States have a younger age structure than does the general population, meaning that their children are young and have only recently begun entering into the ages when we can observe life events related to family formation.

There is also a lack of data available with which to analyze vital events for the second generation. Since 1970, the census has not asked parents' nativity, making it difficult for researchers to identify second generation households. While many investigators now collect data around vital events for representative samples of all U.S. young people, the second generation is necessarily a very small part of the sample. For example, the National Longitudinal Survey of Adolescent Health (ADD Health) conducted Wave IV of the study in 2008 (Wave V is currently in the field), which begins to look at family formation behaviors. However, children of immigrants are often too small of a sample with which to present robust findings on their own (see Harker 2001, however, for an analysis of generational status and adolescent well-being using ADD Health data). Portes and Rumbaut collected data specific to the second generation in the third wave of the Children of Immigrants Longitudinal Study (CILS), but the data were not publicly available at the time this dissertation commenced.³ Up until now, the CILS study has focused mainly on language, ethnic self-identification and school achievement (Portes, Fernandez-Kelly, and Haller 2005; Portes and Hao 2004; Portes and Rumbaut 2001; Portes and MacLeod 1996; Zhou and Xiong 2005).

Mary Waters and collaborators also conducted a survey among the second generation living in metropolitan New York. The New York City Second Generation Study was a telephone survey of over 4,000 respondents of young adults aged 18 to 22 who are the children of post-1965 immigrant parents. They came from five different migrant groups—West Indians, Dominicans, South Americans, Chinese and Russian Jews. The authors compared these groups to native-born blacks, whites and Puerto-Ricans. They conducted in-person, in-depth interviews with 10 percent of the survey respondents. The purpose of this study was to examine concepts of transnationalism, where immigrants and their children maintain strong ties to the origin countries (Kasinitz et al. 2002).

Finally, Edward Telles and Vilma Ortiz conducted an innovative study of multiple generations of immigrants of Mexican descent, in the second wave of the Mexican American Study Project (Telles and Ortiz 2008). Using data files found from the original survey conducted in San Antonio, Texas and Los Angeles, California in 1965, the authors undertook an ambitious research design to find and re-interview the original respondents, as well as their children, to create a longitudinal study examining the integration of immigrants and their descendants in American society.

1.3 PURPOSE OF THE STUDY

This dissertation investigates the pattern of family formation outcomes across immigrant generations, and then more specifically, of generations of Mexican / Central American women in the United States. While immigrant fertility studies and studies of the outcomes immigrants and

³ The Children of Immigrants Longitudinal Study (CILS) is a sample of second generation individuals in Miami and San Diego whose parents come from 77 countries. The first wave took place in 1992 and had a sample size of 5,262 students whose mean age was 14. A second wave took place in 1995-1996 and a third in 2001-2002 (Portes and Rumbaut 2001:23-24).

the children of immigrants are not new, too little has been done to attempt to bring the theories behind this research together. I hope to do this, in order to provide a more comprehensive framework for understanding fertility outcomes across generations of immigrants and their descendants. My dissertation is one of only a handful of fertility studies that disaggregates this population beyond foreign born and native born Hispanic women, into first, second and third (and higher) generations. In addition, only one additional study to my knowledge (Blau et al. 2013) utilizes the parent composition (that is, whether the mother, father, or both parents are born in Mexico / Central America) of the second generation in an analysis of demographic outcomes (and, I should note, my study design was set long before this study was published).

I focus primarily on understanding Hispanic fertility patterns across generations, and thus the definition of generations is theoretically and concretely important. The definition of “generations” in research on immigration is conceptually similar to anthropological definitions of generations, which usually mean genealogical levels. Generations from an immigration perspective carry a genealogical component, since they are defined by the parent. Eckstein contends that immigrant generations are “biologically based within the context of families” (2002: 212). However they are also a political concept, because they are based on the individual's and parents' immigration status in the United States.⁴ Individuals who migrate to a country such as the U.S. are immigrants, and are generally considered “first generation”. Individuals who are born in the U.S. to native-born parents are considered third generation. The definition of the second generation is less consistent (Rumbaut 2004). Most scholars agree that the second generation consists of the children of at least one immigrant parent. However, while some consider immigrants who arrived to the U.S. as children the “1.5 Generation”, others include these with the second generation, because they share many cultural, linguistic and developmental experiences (Portes and Zhou 1993). Following previous research, I define the second generation as children born to at least one parent who is foreign born. I also include in this group children who were born outside of the U.S., but moved to the country before age five (Portes and Rumbaut 2001; Zhou 1997).

Even when the definitions may seem straightforward, the use of “generations” in immigration research is complex (see Rumbaut 2004 for a clear discussion). The current conceptualization of immigrant generations does not take into account cohorts (Eckstein 2002). For example, two first and second generation individuals could be of the same birth cohort. Thus I have decided to use a term to differentiate between historical generations based on family lineage; which I will refer to as family generations, and generations since immigration, which I will refer to as immigrant generations or simply as generations.

I have illustrated the sample in Figure 1.3. Ignoring the rows in gray for the moment, on the left-hand column, the figure shows the concept of family generation. The columns to its right show the immigrant generation, for a given category of family generation. The cross-sectional design, outlined in the blue dotted line, shows the immigrant generations used in a study design using cross-sectional data as I do with the CPS. The gray rows describe the range of birth years

⁴ Rumbaut (2004) points out that immigrant families and communities are highly conscious of the generational status of their members. The Japanese in the United States have specific terms for the first generation that arrived in the initial late 19th Century migration (*issei*) and for the following three generations (*nisei*, *sansei*, *yonsei*) (Rumbaut 2004:1162).

comprising each immigrant generation in the study (birth cohorts), and the range of immigration years comprising each immigrant generation in the study (immigration cohorts).

I use the third (and higher) immigrant generation to fully describe the concepts. We are able to see that the third immigrant generation observable in the data includes women born between 1956 to 1988. Because all third generation women are U.S.-born, nobody in this cohort is part of an immigration cohort. Moving down the column, we can see that conceptually, at least, one of the parents of a third immigrant generation would have been a second immigration generation, born between 1912 and 1973 (assuming that these second generation mothers would have given birth to the third immigrant generation between ages 15-44). And conceptually, at least one grandparent would have been a first generation immigrant born between 1868 and 1958.

However, a key point here is that the CPS (and nearly all data sets available for use) does not ask grandparent nativity; thus we can only know for sure that both parents of the third (and higher) generation were U.S. born, but not beyond this. That is, the third (and higher) immigrant generation can be comprised of individuals whose parents are a mix of second immigrant generation, third immigrant generation, etc. In addition, the family generations are not observable in cross-sectional data.

Figure 1.3. Immigrant generations, family generations, and cohorts

		Immigrant Generations				
		<i>3rd Gen, Non-Hispanic White</i>	<i>3rd+ Immigrant Generation</i>	<i>2nd Immigrant Generation</i>	<i>1st Immigrant Generation</i>	
	<i>"Child"</i>					cross-sectional data
Family Generations	<i>Birth Cohorts</i>	1956-1988	1956-1988	1956-1988	1956-1988	
	<i>Immigration Cohorts (mean)</i>			1959-1993** (1977)	1963-2008 (1993)	
	<i>Parent</i>		2nd Gen Immigrant (1912-1973)*	1st Gen Immigrant (1912-1973)*		
	<i>Grandparent +</i>		1st Gen Immigrant (1868-1958)*			

* Not observable; family generation/immigrant generation for observed 3rd+ gen

** Includes individuals that immigrated by age 5

Another key point illustrated by the figure is that the immigrant generations are comprised of women born across a wide period of years, or multiple birth cohorts. Demographic

studies generally acknowledge that birth cohorts can be subject to very different period conditions that affect fertility, for example, had oral contraception become available by the time a woman reached adolescence (Bongaarts and Feeney 1998; Kohler, Billari, and Ortega 2002; Sobotka 2004).

In addition, birth cohorts may not be the only important aspect of an individual's life in the context of period events (Ryder 1965). The timing of immigration related to age and period events may also be of critical importance. As Figure 1.3 illustrates, the entry-event of migration in the parent lineages of the third (and higher) generation is likely to have occurred prior to an important change in U.S. immigration law in 1965 (to be discussed in greater detail in Chapter 4), whereas the migration entry-event of the parents of the second immigrant generation mostly will have occurred after the 1965 change in laws. Descent from pre-1965 immigrants is a way in which the third (and higher) generation Hispanic women may be differentially selected than other generations in my sample.

Overall, when I refer to generations throughout the paper, it is important to keep in mind that each generation in the CPS is comprised of individuals of many different birth cohorts and many different immigration cohorts, who may have experienced different period conditions related to both the timing of their birth *and* the timing of immigration to the U.S.

Keeping the complexities inherent to the study of generations in mind, there are important reasons for the study of first, second and third (and higher) generation women from Mexico and Central America in the United States. Immigrants from Mexico, and to a lesser extent, other countries in Central America are the only foreign born group to have been part of an immigration flow lasting for over a century.⁵ In contrast to most contemporary immigrant groups, they therefore have a longer history of second and third generations in the U.S. (Portes and Rumbaut 2001; Waters and Jimenez 2005). According to Portes and Rumbaut (2001), this migration history coupled with relatively low human capital (due to lower barriers to entry to the U.S. because of the shared border) and a long history of contested incorporation into U.S. society (often through government policy or political campaigns) have created a unique set of circumstances for the children of Mexican and Central American immigrants. These consequences include a higher likelihood (relative to other second generation groups) to maintain their parents' national identity as their own (Portes and Rumbaut 2001:186), relatively low educational expectations, and relatively low self-esteem (Portes and Rumbaut 2001:278). Parents of the second generation also have the lowest educational aspirations for their children relative to other immigrant groups (Portes and Rumbaut 2001:104).⁶

The study of immigrant generations is important as well from a theory building perspective. Immigrants tend to have meaningful connections to their country of origin. Their experiences and outcomes in the United States are most often framed in reference to the way things were in their native country before they moved. Their standpoint will color their perceptions of their current life in a way that is vastly different than their children or subsequent generations. Most often, the second and third generations evaluate themselves by the standards

⁵I follow convention in grouping immigrants from Central American countries with Mexico, but excluding countries in the Caribbean (Hill and Johnson 2004).

⁶A parent interview was completed in the second wave of the CILS (Portes and Rumbaut 2001:31).

of the receiving country (Gans 1992). They are less likely to see their parents' native country as a point of reference or as "home" (Eckstein 2002; Zhou 1997; Zhou 1997b). In many ways, the contexts in which the second generation, especially, grows up create a number of material and mental paradoxes that they must negotiate in everyday life. Rumbaut argues that the second generation is "situated within two cultural worlds, [and] they must define themselves in relation to multiple reference groups (sometimes in two countries and in two languages) and to the classifications into which they are placed by their native peers, schools, the ethnic community, and the larger society" (Rumbaut 2001: 848). Maricela provides a concrete example of negotiating these two worlds. In only a few words, she identifies herself in relation to her parents and she constructs her intentions vis à vis her peers. This dissertation offers an analysis of the demographic consequences of structural factors and identity, for this second generation, in relation to the first and third.

CHAPTER 2

LITERATURE REVIEW AND THEORETICAL FRAMEWORK

INTRODUCTION

In this dissertation, I ask how the fertility of the Hispanic immigrants changes across subsequent generations, and what explains this pattern. I also ask how the fertility of immigrants and their descendants compares to the mainstream population. I will argue that a theory of segmented assimilation with an intergenerational disjuncture hypothesis offers the most compelling explanation for observed fertility patterns. Previous research on immigrant fertility has drawn predominantly on classic assimilation theory, as well as theories of selectivity and disruption to explain the fertility outcomes of immigrant women in the United States. These theories have some empirical support, but tests of them have often been inconsistent or inconclusive. To date, there is no coherent theory of immigrant fertility.

This chapter outlines the prevailing theories in the field. I begin with a discussion of demographic transition theories and argue that these theories are largely compatible with theories used in immigrant fertility research. I then outline a newer exposition of assimilation research, segmented assimilation theory, which I contend has more explanatory power for contemporary studies examining fertility across generations. I add a hypothesis of “intergenerational disjunctures” to this theory.

2.1 PREVIOUS LITERATURE CONTRIBUTIONS

2.1.1 Demographic Transition Theories

Demographic theories of fertility change were developed to explain the long-term transition from high fertility to low fertility in Western, and later, in developing countries. They have focused mainly on two sets of explanations: the development perspective and the diffusion perspective. The microeconomic, or development perspective emphasizes the impact of social changes on the costs and benefits of childbearing, where the demand for children is the key to understanding fertility behavior (Becker 1991; Ben-Porath 1974; Easterlin and Crimmins 1985; Pritchett 1994). A number of mechanisms in this framework can lead to lower demand for children, for example, lower mortality rates (or conversely, higher child survival). A rational economic choice formulation of this theory contends that a woman’s potential market wage, her husband’s income and other sources of non-labor income, and the costs of market inputs are the main determinants of the demand for children. Becker (1991) contends that a household makes a quantity and quality tradeoff between child tradeoff. When a wife’s wage increases, the demand for children is expected to decrease because her wage is an indicator of the cost of her time. When a husband’s wage increases, the increased income could increase both the demand for child quantity and quality, so the effect on numbers of children is unclear. However, most empirical studies have shown that fertility declines with an increase in male income.

The diffusion perspective, on the other hand, focuses on the effect of changes in social interaction on the spread of ideas, and its subsequent effect on fertility (Bongaarts and Watkins 1996; Cleland and Wilson 1987; Knodel 1979; Montgomery and Casterline 1996). Knodel (1987) linked fertility decline to information about contraception. Others argue that individualist and secular attitudes drive fertility changes (Lesthaeghe and Surkyn 1988; Bumpass 1990). Many mechanisms have been proposed through which these ideas were spread, from Western education systems in colonized areas (Caldwell 1980) to personal networks or international media (Bongaarts and Watkins 1996). The authors of the Princeton European Fertility Project found that fertility decline in Europe spread through ethnicity and language, independent of socioeconomic factors (Coale and Watkins 1986).

The wealth flow theory of fertility change combines structural and cultural approaches. When societies change from a structure where the net wealth flows traditionally move from child to parent to one where the net wealth flow from parent to children, then parents will lose the key incentive to have children and will limit fertility (Caldwell 1982). Empirically, Caldwell (1980) found that the introduction of mass education led to fertility decline. Although Caldwell argued that the advent of mass education in a context of societal structural change allows the cultural transmission of new family values, the causal pathway is difficult to test.

A key component of demographic transition theories is that they typically engage with the mechanisms by which fertility is limited. Characterized as intermediate variables, these include factors related to intercourse (e.g. age of entry, time spent outside union etc), conception (e.g. use of contraceptives, fecundity), and gestation (fetal mortality, induced abortion) (Davis and Blake 1956). Other demographers later refined this framework into seven key factors, or proximate determinants, for example proportion of married women among all women of reproductive age, contraceptive use and effectiveness, and fecundability (Bongaarts 1978).

Demographic theories of fertility change emphasize that 1) individuals make childbearing decisions based on the economic costs and benefits of children or that 2) individuals learn new fertility behaviors through the diffusion of ideas. While it may be difficult to reconcile these two theoretical perspectives, it is not difficult to see how both can apply to immigrant fertility—even if the direction of the effect is not always clear. In fact, they are largely consonant with the immigrant fertility models based on classic assimilation theory. However, relatively few migration studies have attempted to make connections to the demographic literature, and remain rooted in a strictly assimilationist framework (see Liu (2002) and Mayer and Ripahn (2000) for exceptions).

2.1.2 Immigrant Fertility - Selection Model

The selection model of immigrant fertility begins with the assumption that there is a selection process in the decision to migrate, and that immigrants are rarely representative of the general population in their home countries. That is, women who migrate may be qualitatively different than their peers in the origin country in a number of ways that may be associated with fertility outcomes (Hill and Johnson 2004). According to this perspective, Mexican and Central American immigrant women arrive in the U.S. with lower fertility aspirations, and would have fewer children than women in the home country whether or not they migrated (Carter 2000).

Selection effects could work in the opposite direction as well, where women who migrate may be self-selected toward higher fertility.

In general, selection hypotheses are difficult to test because most surveys do not contain comparable information on non-migrant women in the home country (Carter 2000; Stephen and Bean 1992). However, some research indicates that selection effects exist, usually in the direction of lower fertility if originating from a higher fertility country (Lindstrom and Saucedo 2007). Kahn (1988) finds that women who come from countries where immigration is highly selective on education have lower fertility in the U.S. Blau (1992) finds that the fertility of immigrants in the United States is lower than that in the origin country.

2.1.3 Immigrant Fertility - Disruption Model

Migration involves a set of complex logistics, such as allocating resources, planning and making the move, and finding a place to live and work. As a result, immigrants may experience spousal separation, economic hardship, or physical stress which may disrupt childbearing schedules. The disruption model predicts that migration itself causes an initial drop in fertility, and that after an initial period, women's previous pace of childbearing will resume or even accelerate to compensate for earlier delays (Carter 2000; Ford 1990; Mayer and Riphahn 2000). Because this model predicts effects in the short-term, tests of this model usually use a measure of current fertility, such as the number of own children under age three in the household (Ford 1990).

Several studies have found indirect support for a disruption effect in the form of reduced current fertility of immigrant women relative to U.S.-born women (Blau 1992; Carter 2000; Kahn 1994; Ford 1990). However, it is unclear whether this disruption effect is due to economic disruption or other types of interruption, such as separation in living arrangements, biological stress from migration, or the uncertainty implied by moving. Unsurprisingly, there is some evidence that spousal separation reduces short-term fertility. In a bi-national study of U.S.-Mexico migration, temporary migration reduced birth probabilities in the short-term, but did not reduce marital fertility in the long-term (Lindstrom and Saucedo 2002). In contrast, some studies have demonstrated that migration causes a disruption in the tempo of fertility but not the quantum, that is, women reduce fertility prior to migration with acceleration of fertility soon after migration, with evidence of completed fertility lower than those obtained from period calculations (Parrado 2011; Parrado and Flippen 2012).

2.1.4 Immigrant Fertility - Minority Group Status Hypothesis

Some groups react to limited opportunities by delaying family formation. Goldscheider and Uhlenberg (1969) proposed the "minority group status" hypothesis. They argued that minorities face barriers to upward socioeconomic mobility, and in order to surmount these barriers, minorities often make personal sacrifices which include limitations on childbearing. Studies have tested this hypothesis with mixed results. Espenshade and Ye (1994) test this model using a measure of expected versus observed Socioeconomic Index (SEI) score. They hypothesize that there is a discrimination effect for women with the same educational attainment who do not achieve the same occupations (and thus SEI score) as their U.S. born white counterparts, and that this will be associated with lower fertility. The authors find that Chinese American women who are most successful with achieving social and economic equality with non-Hispanic white

women have 18 percent fewer children than Chinese American women who do not achieve socioeconomic equality.

The problem with the minority group status hypothesis is that it is difficult to distinguish between the effects of being a minority and an “economic constraints” model of assimilation (discussed below). In addition, it does not specify the mechanisms that link economic status to fertility outcomes via proximate behaviors such as marriage, contraceptive use or abortion (Forste and Tienda 1996). Finally, it is unable to explain why fertility differentials would widen by the third generation, as they do for Hispanic-origin women.

Nonetheless, the hypothesis is theoretically compelling, and it resonates strongly with Bourdieu’s discussion of “dispositions” (1984). According to Bourdieu, it is possible to observe the middle class’ ascetic disposition in more intimate aspects of practice, such as fertility. In *Distinction*, he argued that the middle classes have lower fertility rates than both the lower classes and the dominant classes (Bourdieu 1984). Why is this? Because in order to continue the pretension of an upward trajectory to the bourgeois class, the middle classes choose to limit their family size, having only one or two children in order to achieve or maintain upward generational mobility. For Bourdieu, this is the ultimate form of asceticism. If a petit bourgeois cannot increase his income, he must limit his expenditure in the form of fewer mouths. As Bourdieu says, “The petit bourgeois is a proletarian who makes himself small to become bourgeois” (1984: 338).

Bourdieu’s observation of the petit bourgeois in France comes out of the tradition of the social capillarity theory first expounded in 19th century France, in which Arsene Dumont claimed that individuals had to make sacrifices in order to ascend the social hierarchy, and these sacrifices included limited numbers or no children. It was in democratic societies with hierarchical structures like that of 19th century France, in which there were opportunities to move within the hierarchy, that Dumont believed such ambitions were possible (like water rising in the narrow neck of a laboratory tube) (Weeks 2011). This theory is largely consonant with the social mobility hypothesis framed out of the mid-century Indianapolis Study of Social and Psychological Factors Affecting Fertility, in which Westoff proposed that greater differences between actual and desired standard of living would lead to higher proportion of couples practicing contraception effectively and smaller planned families (1953: 29).

2.1.5 Assimilation Theory

The predominant models of immigrant fertility are based on classic assimilation theory. These analyses follow an extant body of literature that has used assimilation to explain and predict more traditionally studied immigrant outcomes, such as employment and earnings. The concept of assimilation was developed by scholars who studied the great migration waves to the United States in the early 20th century. One of the defining features of assimilation theory was the idea that adaptation was an irreversible linear process toward cultural and socioeconomic similarity that took place over immigrant generations, until the later generations could not be distinguished from the native population. Park and Burgess at the Chicago school provided the classic formulation (1921: 757-758):

In America it has become proverbial that a Pole, Lithuanian, or Norwegian cannot be distinguished, in the second generation, from an American born of native parents ... As a matter of fact, the ease and rapidity with which aliens, under existing conditions in the United States, have been able to assimilate themselves to the customs and manners of American life have enabled this country to swallow and digest every sort of normal human difference, except the purely external ones, like color of the skin.

This view was supported by other researchers of the European migration waves, who saw assimilation as a process of cultural, psychological (in terms of self-identity), and structural (in terms of residential, employment, and intermarriage) incorporation into the Anglo-American mainstream (Gordon 1964; Warner and Srole 1945). Empirical studies supported this framework as well.⁷ Two of the largest immigrant groups in the early 20th Century, Eastern European Jews and Italians, made impressive socioeconomic gains by the third generation (Foner 2006). Waters (1990) showed that as each successive European cohort born in the United States became integrated through social mobility and intermarriage, the salience of ethnicity decreased to the point that ethnic identity became symbolic and optional. That is, individuals could call upon their ethnicity at times and locations of their choosing, often ceremonially in the form of holiday celebrations and traditions.

Alba and Nee (2003) have recuperated the assimilation framework for more recent waves of migrants. Their “new assimilation theory”, defines assimilation as progress toward an convergence of cultural and social differences within and across ethnic/racial groups, even though progress can happen unevenly (Alba and Nee 1997) In an analysis that looks at language assimilation, residential patterns, socioeconomic status, and intermarriage, they argue that recent migration waves have much in common with the great European migration waves at the turn of the century. They contend that modes of incorporation are very similar, even though the concept of what immigrants are assimilating to—the American “mainstream”—has moved from a largely Anglo point of reference to one that absorbs many of the cultural elements that immigrants bring with them.

Until recently, classic assimilation theories have been the prevailing explanatory models of fertility change among immigrants (Abma and Krivo 1991; Blau 1992; Ford 1990; Kahn 1994; Swicegood et al. 1988). These models predict that immigrants acquire childbearing norms and attitudes, including gender roles, in their country of origin (Blau et al. 2013). Immigrants from high fertility countries initially adhere to pronatalist cultural norms, but over time, they adjust (or in a 1989 study of Indochinese refugees, are predicted to adjust) to the lower fertility levels of the destination country (Bean et al. 1984; Goldstein and Goldstein 1983; Gurak 1980; Schoen and Cohen 1980; Weeks et al. 1989).⁸ I call this the “cultural norms” variant of the

⁷ However, Foner (2006) argues that the process of assimilation for the children of European immigrants was not always easy. Racism was rampant toward eastern and southern European migrant groups. Native-born Americans found their “whiteness” questionable, believed they were of inferior stock, and imagined them as physically distinctive in the popular press. For years, immigrant groups were subject to educational and employment discrimination. Upper class neighborhoods often enacted “restrictive covenants”, allowing them to successfully exclude European Jews from purchasing homes.

⁸ Historically, this meant lower fertility, but it can also mean converging to higher fertility levels as well when

theory. A different model of assimilation theory focuses on the employment and earnings constraints that immigrants may encounter once in the U.S. These models predict that immigrants encounter constrained economic opportunity structures that keep fertility high due to few viable alternatives to childbearing. As immigrants become more incorporated into U.S. life they encounter more opportunities, lowering fertility (Abma and Krivo 1991; Lopez and Sabagh 1978). I call this the “economic constraint” variant. These variants of classic assimilation theory predict that fertility should fall across generations as well, as subsequent generations lose attachment to high-fertility norms in the origin country, and find more economic opportunities in the United States. Similarly, these models can go in the opposite direction as well. Women coming from low fertility countries would be expected to experience increased fertility to eventually converge to U.S. levels.

I contend that the theoretical underpinnings of the “economic constraint” variant are rooted in the microeconomic explanations of the fertility transition. Immigrants to the United States face varied economic situations. Some have high levels of education and have attractive employment prospects, which may increase the opportunity cost of childbearing. Conversely, those with few employment prospects may encounter economic constraints that could also influence their fertility up or down. If wages are depressed for the husband, then fertility may be depressed. However, a lower wife’s wage could be associated with greater fertility, due to a lower opportunity cost (Blau 1992).

In a similar way, the cultural norms variant of classic assimilation draws on the same basic insight as diffusion theories that social interaction matters, by arguing that the family formation norms of the origin country continue to affect the behavior of immigrant women long after they have migrated, and even among subsequent generations. When individuals migrate to the United States from a country with high fertility, in a way they encounter a sudden demographic transition, one that is driven not by development over time, but by change of place. The direction of this effect on fertility depends on the context of the receiving community. Some women may migrate to communities where migrants are few, and they are quickly exposed to the lifestyles and values of the receiving community. Traditionally, however, migrants arrive to places where they have a strong co-ethnic community. These immigrant communities may hold values and ideas similar to that of the home country which would protect current practices around family formation. Their behaviors may be influenced accordingly. These models of fertility change can be conceptualized for subsequent generations as well. The children of immigrants may experience similar fertility pressures if their life chances are influenced by the economic resources or the cultural values of their parents.

There has been some empirical support for immigrant fertility models based on classic assimilation theory. Some studies have used duration of time since immigration to assess levels of assimilation, and have found that a longer duration in the U.S. leads to lower fertility (Ford 1990). An earlier study pointed to convergence to non-Hispanic white fertility levels among Mexican American generations (Uhlenberg 1973). Other studies specifically test the “economic constraints” variant of assimilation theory. Abma and Krivo (1991) find that the local context

immigration takes place from origin countries with higher fertility levels.

affects fertility through structural economic constraints, in the form of limited employment opportunities.

Other studies use demographic rates of the origin country to gauge adherence to cultural norms. Kahn (1988) found that fertility differences between immigrant groups of different origin countries were largely explained by the origin country's net reproduction ratio (NRR). Similarly, Blau (1992) found that the TFR of the source country remained a significant predictor of immigrant women's fertility in the U.S. even after other source country characteristics, such as GNP and infant mortality, were included in the model. Blau argues that these controls account for economic conditions, leaving the origin country TFR to explain the immigrants' taste for children. However, it is difficult to identify the mechanisms by which origin country rates continue to affect women in the destination country.

A better gauge of women's continued adherence to the pronatalist norms of their origin country would be measures of women's expected or ideal number of children. In a study using the 1995 National Survey of Family growth, Carter (2000) found that Mexican immigrant women had a higher ideal number of children than native-born women of Mexican descent. Kahn (1994) found that immigrant women had higher expected fertility than native U.S. women, using CPS data.

However, many studies have fallen short in their explanatory or predictive power. Many authors have found that assimilation theories have mixed empirical support at best (Abma and Krivo 1991; Blau 1992; Kahn 1994). Studies using post-1965 cohorts have found that Mexican and Central American immigrant women have persistently higher fertility than native born or non-Hispanic white reference groups. Indeed, the differential appears to widen by the later generations (Bean, Swicegood, and Berg 2000; Frank and Heuveline 2005; Hill and Johnson 2004; Forste and Tienda 1996). Kahn (1994) found a curvilinear pattern for all origin groups combined, where the first generation has high fertility; it drops for the second generation and then increases again for the third and higher generations. Bean et al. (2000) also found a U-shaped pattern for Mexican-origin women that persisted even after demographic and social factors were controlled for. More recently, Frank and Heuveline (2005) argue that the precipitous drop in fertility in Mexico, coupled with the increases in the fertility of native-born Mexican Americans in the U.S., necessitate a re-examination of the idea that Mexican pronatalist values are responsible for high fertility of Mexican-origin women in the U.S., relative to non-Hispanic white women. These mixed results illuminate both the theoretical promise and limited potential of the "cultural norms" and "economic constraint" models based on classic assimilation theory in providing the only answer to persistent fertility differentials among immigrant generations of Mexican/Central American origin women. In sum, assimilation theory has garnered little empirical support in the context of Hispanic-origin fertility across generations.

Recently, immigration scholars have developed new frameworks with which to understand immigrant trajectories across time and generations in the U.S. Yet, theoretical development of immigrant fertility and family formation has lagged behind, remaining largely rooted in a clearly inadequate assimilation perspective. Even more curious, demographic theories of fertility change have often been ignored in research on immigrant fertility, even though they have been implicitly drawn on to add important insights to this field. First, it would seem to make sense to more rigorously link sociological theories of immigrant assimilation to

demographic theories of fertility change, to gain a greater understanding of the mechanisms through which fertility changes in relation to immigration. This may prompt researchers of immigrant fertility to collect and use additional measures, such as contraceptive use or health clinic location in their studies in order to more closely align cultural and economic factors to proximate determinants of fertility.

As noted in the empirical studies above, the diffusion/cultural norms and the development/economic constraint models of fertility are theoretically compelling, yet we have seen mixed results in their ability to explain some outcomes, especially the puzzling reverse of Hispanic fertility decline between the second and third generations. Therefore, while it is important to use these models in tests of immigrant fertility differentials, we need additional theory development.

2.2 THEORETICAL FRAMEWORK

In recent years, immigration scholars have developed more nuanced theories to drive their empirical models of traditional benchmarks of incorporation, such as language assimilation or socioeconomic status. In contrast to traditional assimilation theory, segmented assimilation theory starts from the standpoint that recent migration waves to the United States (post-1965) are qualitatively different from the early 20th century migrations. Recent migrations have shifted from European origin countries to largely Latin American and Asian countries. In addition, while government legislation effectively cut off the earlier immigration wave in 1924, the same has not occurred for recent waves of migrants. This has resulted in successive and sustained cohorts of new immigrants in the U.S. Finally, the structure of the U.S. economy has changed dramatically in the past thirty years, moving from an industrial to a more knowledge based economy, in a context marked by globalization. Portes, Rumbaut and Zhou, the major proponents of segmented assimilation theory, contend that these factors will have varying effects on different origin groups. Groups will assimilate to different sectors of American society, with some following the traditional assimilation path toward entrance into mainstream middle-class society and others becoming a permanent part of a marginalized, often racialized, group at the bottom (Portes and Rumbaut 2014; Portes and Rumbaut 2001; Portes and Zhou 1993).

In the classic formulation of assimilation theory, groups that adopted the values and cultural practices of the native-born population began making their way toward social and economic mobility. Segmented assimilation theorists argue that this is no longer always the case, and can lead groups in the opposite direction, such as in the case of Caribbean youths who adopt a black American identity. In some cases, the children of immigrants who “remain firmly ensconced in their ethnic communities, may, by virtue of this fact, have a better chance for educational and economic mobility through use of the material and social capital that their communities make available” (Portes and Zhou 1993:82).

Traditional explorations of segmented assimilation theory conceptualize three distinct pathways of incorporation. The first replicates straight-line assimilation, where each generation progresses linearly into a white middle class. In the second pathway, immigrant generations assimilate in the opposite direction, to permanent poverty and a (racialized) underclass. In the third pathway, each generation deliberately conserves the values and cultural solidarity of the immigrant community, allowing for rapid economic advancement (Portes and Zhou 1993). The

major determinants of these differential outcomes are theorized as the context of reception, physical appearance (conceptualized as race), labor markets, the human capital that parents bring, the differential pace of acculturation of parents and children, the culture of school and community, and the co-ethnic community resources (Portes and Rumbaut 2001). More recent formulations have brought a more nuanced view, but the main conceptualization of divergent pathways remains (Zhou et al. 2008).

Segmented assimilation is powerful and extremely useful in its ability to explain variation in a number of outcomes. When applied to an analysis of family formation outcomes, my hope is that it will illuminate and explain the pattern of Hispanic fertility, especially the widening fertility differential between the second and third generations of Hispanic women and the American “mainstream”.

I draw from segmented assimilation theories to argue that the contexts in which the second generation grows up create a number of material and mental paradoxes that they must negotiate in everyday life. These paradoxes can affect many outcomes, including childbearing. Family formation outcomes are signals not only for what kind of life people envision for themselves, but what they are able to achieve. Some might argue that *all* children, no matter the national origin of their parents, can experience incongruities between material resources or values that their parents hold (and attempt to imbue in their children) and those of the wider community. Yet the paradoxes for the second generation are sharper, because they often encounter a configuration of social structure—immigrant neighborhoods, limited economic resources, travel between home and the “home” country, dual languages, cultural events, parents’ documentation status—that native-born children of native-born parents typically do not. These configurations interact with the social structure more common to many in American society, such as public education, to create unique ways in which the second generation interprets and lives in the world. Children of immigrants define themselves in relation to multiple reference groups and two cultural worlds (Rumbaut 2001). Although the second generation is a unique case in this respect, subsequent generations will be affected by their circumstances. Third generation women will most often end up on the trajectory set by their parents. This has implications for their education, employment, earnings, residence, and vital events. Across generations, ethnic identity may become more or less salient, and this may be both influenced by and influence other outcomes.

2.2.1 Cultural ideas about family: What travels across borders?

One of my interests is if and how the values of immigrant parents translate to their children, and how these values are negotiated by their children in their receiving community. I am most interested in values surrounding family formation, such as the timing of marriage, the timing and number of children, type of marriage partner, and educational attainment (which has been shown to be closely related to fertility) because they are signals not only for what kind of life people envision for themselves, but what they are able to achieve. These factors vary widely by country and world region, so a certain set of normative characteristics for a specific type of life in one country may be normative for a completely different life type in another.

Mexico and Central America have experienced dramatic fertility decline over the past forty years, with Mexico and some countries in Central America coming close to U.S. total

fertility rates by 2008 (Figure 2.1). For some countries, the great reductions began in the 1990s. The decline can be also observed in the changes in age specific fertility rates between 1970 and 2008. By 2008, age specific fertility rates looked much closer to those of the U.S.; however, in some countries a pattern of earlier childbearing remains, in Mexico especially (Figure 2.2).

Figure 2.1. Total Fertility Rates for U.S. and select countries in Central America, 1970-2008

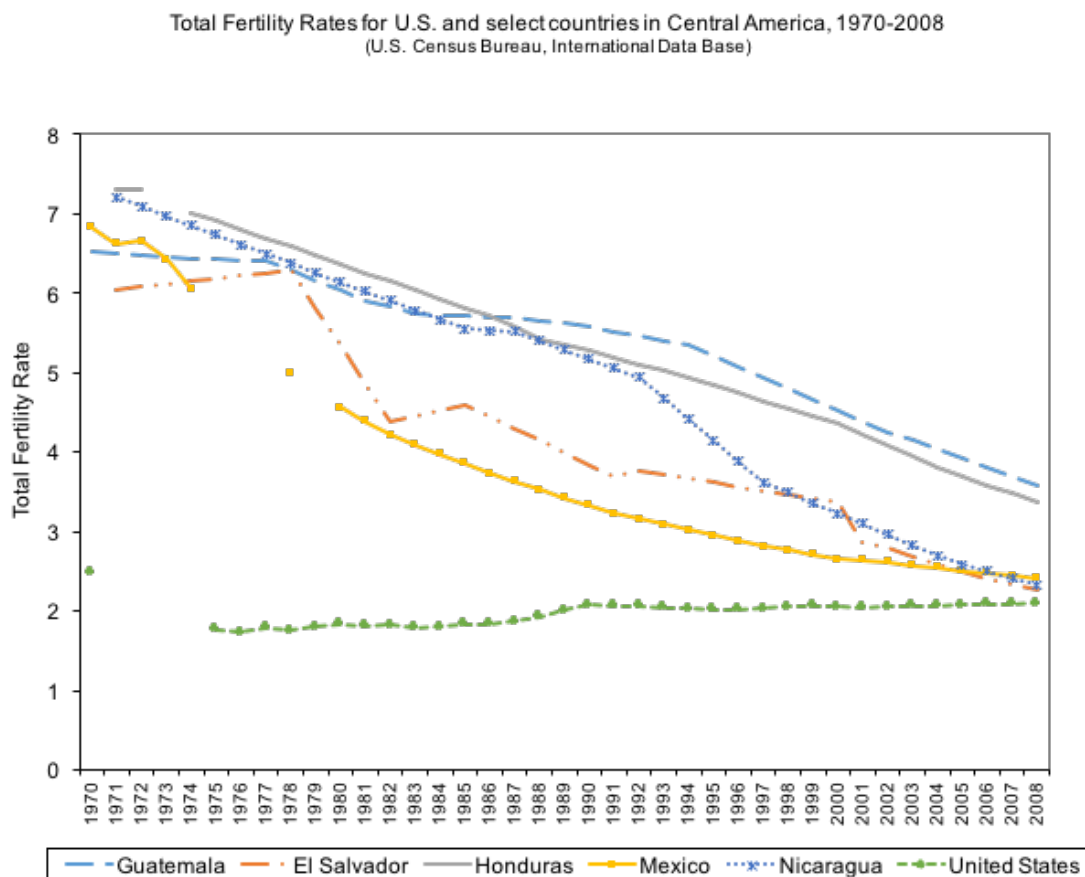
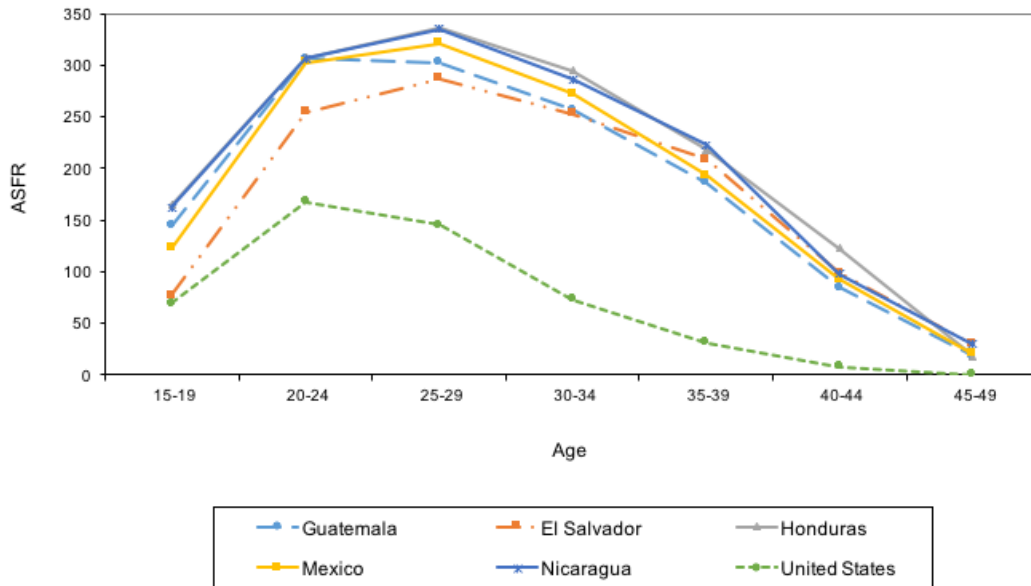
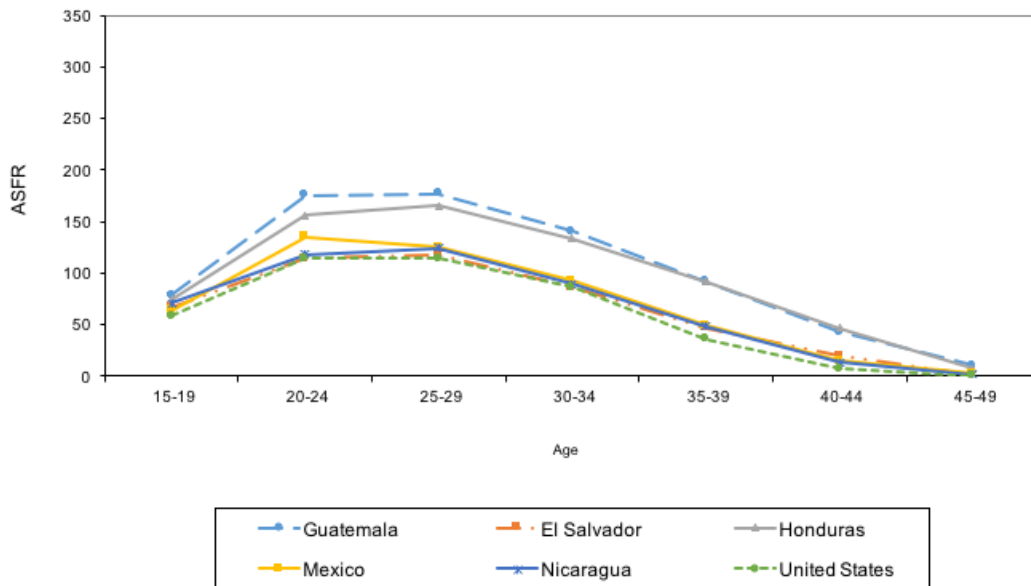


Figure 2.2. Age Specific Fertility Rates for women ages 15-49 in U.S. and select countries in Central America

a. Age Specific Fertility Rates for women ages 15-49 in U.S and select countries in Central America , 1971 (U.S. 1970)
(Source: U.S. Census Bureau, International Data Base)

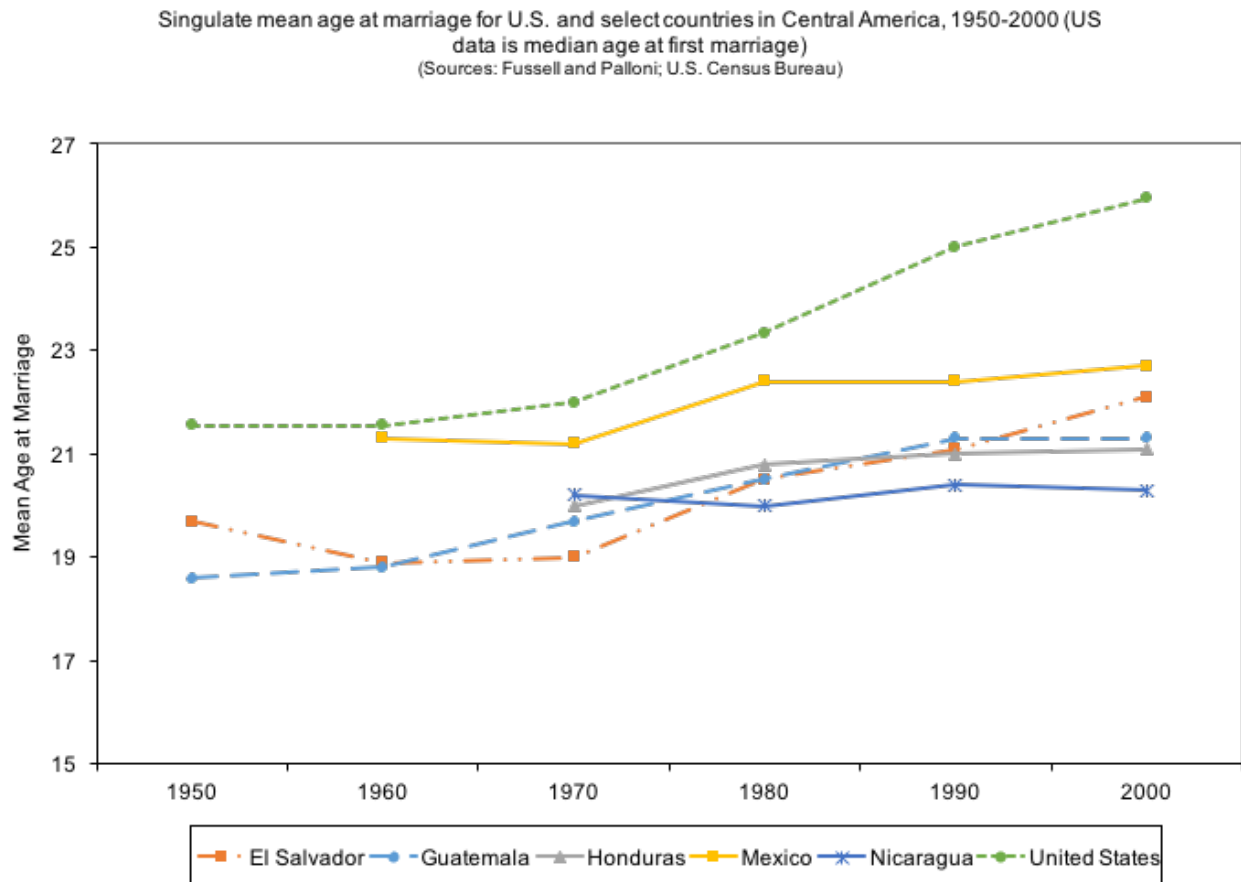


b. Age Specific Fertility Rates for women ages 15-49 in U.S and select countries in Central America , 2008
(Source: U.S. Census Bureau, International Data Base)



Marriage remained nearly universal among women in Latin America through 2000, and it tends to occur relatively early in life (Fussell and Palloni 2004). The singulate mean age at marriage (males and females combined) in Mexico and other Central American countries was lower than the United States from 1950 to 2000, and that the difference appears to increase after 1980, with age at marriage continuing to increase in the U.S. (to 27 for men and 25 for women in 2000) while the other countries remained between ages 20 and 22 (Figure 2.3).

Figure 2.3. Singulate mean age at marriage for U.S. and select countries in Central America



Fussell and Palloni (2004) argue that these patterns persist in Latin American despite the social changes and economic upheavals that have occurred in the region because family can serve as a stabilizing institution during periods of rapid change. Many Central American countries are characterized by deep economic inequality, yet even the elite and the majority share a common cultural history “where family networks within and between households provide the social infrastructure for success and survival” (2004:1207). These demographic rates provide evidence that the requirements for achievement of a socially and economically stable life in Mexico and Central America may include early ages of consensual unions or marriage, early ages of childbearing and in some cases, greater numbers of children. These requirements may have important differences to an envisioned socially and economically stable life in the United States.

One of the flaws in this approach may be a matter of which reference group the observer considers. Perhaps rather than looking to the origin country as the source of norms and values, the reference group may well lie within the more current community. In addition, parents' values from the origin country may heighten or change vis á vis their current situation. Therefore, it may make more sense to compare the values of immigrant parents with their children in an effort to understand how cultural values about family formation transmit across generations.

2.2.2 The Intergenerational Disjuncture Hypothesis

A differential pace of assimilation between immigrant parents and their children has historically occurred with each wave of migration to the United States. Like the second generation today, the children of late 19th century Italian and Eastern European immigrants learned to speak English better than their parents and became acculturated at a faster pace. As in the past, today this often leads to role reversals, where the children become responsible for household decision-making based on their knowledge (Portes and Rumbaut 2001). Portes and Rumbaut (2001) contend that in the current economic and social structure of the U.S., role reversal may be a warning sign of downward assimilation.

Portes and Rumbaut conceptualize parent-child roles as a continuum, where complete role reversal lies on one end, with the full preservation of parental authority on the other end of the incorporation process. Their conceptualization encompasses concordance or discordance between parents and children's English skills, knowledge of American culture, and insertion into the ethnic community (Portes and Rumbaut 2001:52).

However, another important aspect of parent-child relations takes into account values and aspirations that the two groups hold, and their orientation to the world. Many qualitative studies have examined the ways that parents attempt to imbue their children with values and practices around family life (Espiritu 2001; Toro-Morn and Alicea 2003). This practice is common in most families, but what makes immigrant families unique is the standpoint of the members. Immigrant parents often hold as their reference point the values of the origin country, and they often attempt to pass these values and practices to their children even when the social context of the United States does not support it. Their children, on the other hand, have much weaker reasons to adhere to the norms of the home country, since they take their U.S. community as their frame of reference. In addition, period events in relation to their ages and context in which they live are particularly important. I argue that these "intergenerational disjunctures" are important in understanding the pathways to marriage and childbearing. I contend that whether children want the same family life as their parents, whether or not they agree with their parents about educational aspirations, and their own views about the "ideal" time to start a family have explanatory power for family formation outcomes.

Ideally, this hypothesis taken together with segmented assimilation theory would be linked to a proximate determinants framework from demographic theories of fertility in order to test effects on fertility outcomes. In the absence of variables with which to measure proximate determinants, I use the segmented assimilation/intergenerational disjuncture conceptualization to form several hypotheses.

First, I hypothesize that the classic formulation of assimilation will continue to explain the fertility differentials between the mainstream white population in the U.S. and non-black immigrant groups from origin countries with a cultural background similar to the U.S. (i.e. European immigrants). I argue that this conceptualization of incorporation will not be fully adequate to explain differentials of immigrant groups who do not fit neatly in the U.S.'s white/black conceptualization of race.

My main focus of inquiry is the pattern of fertility across generations of Mexican and Central American women. I contend that a straight-line model of assimilation does not obtain for this group. Instead, I hypothesize that variables associated with segmented assimilation theory (such as parents' context of reception) and the intergenerational disjuncture hypothesis (such as discordance between parents' and children's educational aspirations) will account for these differences.

2.3 DETERMINANTS OF GENERATIONAL OUTCOMES

2.3.1 The Economic Landscape of the United States

Unlike immigrant inflows from the early 1900s, contemporary immigrants have large variation in education levels, occupation, and income by country of origin. Following the Immigration and Nationality Act of 1965, which made family reunification a priority, the origin countries have shifted from traditional European sources toward Asian and Latin American countries (Portes and Rumbaut 2014). This variation has important implications for the new second generation, as their futures and fortunes are intimately related to “the advantages or disadvantages that accrue to the socioeconomic status of their parents” (Zhou 1997:66). The structural conditions of the United States have also changed dramatically since 1970, and globalization and economic restructuring have created an “hourglass economy”, with the bulk of the jobs either low-skill or highly-skilled, that makes social mobility difficult (Portes and Rumbaut 2014; Massey et al. 1993). In this environment, human capital, measured in terms of education and occupational and language skills that parents possess, plays a large role in determining their economic adaptation, and consequently, the life chances of their children (Portes and Rumbaut 2001).

Immigrants from Mexico and other Central American countries often fill the labor needs at the bottom of the American labor market. The Mexican immigrant population ranks last in human capital among major immigrant sending countries in the U.S., with just 30 percent of high school graduates and 5.3 percent of college graduates (Grieco et al. 2012). The huge educational disparities are not due to an especially poor Latin American education system, but rather to the geographic proximity of these countries to the United States (Portes 2004). As a result, potential migrants may not be self-selected on educational attainment or other factors. There are many factors influencing whether or not individuals migrate, and they may differ across countries. Mexico has a long history of providing the United States with labor; therefore, many social networks are already in place (additional historical background is provided in Chapter 4). In addition, Mexico shares a border with the United States; thus, the geographic barriers to entry are not as high as for many countries.

2.3.2 Context of Immigrant Reception

Recent waves of migration have been characterized by differential contexts of reception for groups from different origin countries. Political status at entry, that is, whether one arrives as a political refugee, legal immigrant, or undocumented worker, has long-term ramifications for immigrants and their children. Portes and Rumbaut (2014) argue that the context of reception channels immigrants in differing directions and can often alter the relationship between individual skills and expected rewards. Immigrants from Vietnam during the 1970s and 1980s came to the U.S. with very low education levels and were generally poorly equipped to succeed in the U.S. economy. However, most were granted refugee status, which enabled them to gain government sponsorship for settlement and employment (Daniels 2002). Early waves of Cuban immigrants in Miami received similar government support. They created a thriving community, and have achieved economic and political success (Suro 1999).

In contrast, those who fled from Guatemala, El Salvador and Honduras during the political turmoil of the 1980s were not granted refugee status, and were therefore not eligible for government support (Menjivar 2003). Today, many Mexican and Central American immigrants come to the U.S. without legal documentation. In addition, most legislative and policy efforts at controlling unauthorized immigration—including border policing and immigration “raids”—have been directed at Latin American migrants (Portes 2004). These differential contexts of arrival matter greatly for the outcomes of children.

However, a favorable context of reception does not ensure successful incorporation to American life. Individuals from Puerto Rico are not technically immigrants—they are U.S. citizens due to the island’s status as a Commonwealth territory. However, citizenship status has not translated to educational or economic success (Hirschman 2001; Kasinitz et al. 2002). Refugee groups such as the Hmong and Laotians are also greatly disadvantaged relative to other immigrant groups (Daniels 2002).

2.3.3 Community Context

Related to labor market opportunities are the community environments where immigrants migrate. The migrants’ human capital and context of reception often determine what kind of community they join. In turn, the structure and resources of the co-ethnic community also matter for the outcomes of the children of immigrants. Often immigrants have arrived to large gateway cities, where co-ethnics already reside (for a discussion of the changing geography of immigrant settlement, see Waters and Jimenez (2005)). Because many immigrants gain employment through social networks, the socioeconomic composition of the co-ethnic community plays a part in whether the new migrant and his/her children will be channeled to a low-status occupation or will have opportunities for upward mobility. The shared values of a co-ethnic community can have diverse effects. Zhou and Bankston (1994), for example, show that the strong community values of a Vietnamese community in New Orleans have protective effects on their children, even though the parents have relatively low human capital. Other studies point to the immigrant communities that put subsequent generations on a trajectory toward a racialized underclass. Caribbean (or West Indian) youths who grow up in segregated neighborhoods where there is little chance for upward social mobility adopt an adversarial stance toward school and have

poorer educational outcomes than those who come from a middle class background (Waters 1994).

Those with less human capital tend to live near or in poor urban neighborhoods, where the concentration of poverty has negative implications for children (Portes and Rumbaut 2001:61). These children often grow up in structural isolation: in poor communities with poor schools (Zhou 1997a). The structural isolation that some immigrant children encounter is jarringly different from the views of American culture they get from entertainment outlets such as television and movies, the media, and perhaps even certain peers. Their constrained opportunities in the face of a culture that touts an ethic of materialism and upward mobility can lead to what Zhou calls “oppositional culture”, where they reject these “American” goals and rebel against all forms of perceived authority (Zhou 1997a: 69).⁹

Education also shapes outcomes of the children of immigrants. The school experience of the second generation has profound impact on their educational attainment. Hirschman (2001) argues that a demoralized educational climate in urban centers is associated with below-average rates of high school enrollment among individuals from the Caribbean region. There is evidence that test performance declines among immigrant children who face more discrimination (Glick and White 2003). Language proficiency also affects academic success. One study found that lack of language proficiency in the early adolescent years had negative impact on the educational attainment of Cambodians, Laotians, and the Hmong (Zhou and Xiong 2005).

2.3.4 Gender

Portes and Rumbaut theorize the importance of gender of the second generation because of the different roles that girls and boys have during adolescence (2001). However, they miss the important role that parents’ gender plays in household dynamics regarding everything from decision-making about household spending to contraception (Dodoo 1998; Hindin 2000; Mason and Smith 2000; Pedraza 1991; Presser 1994; Thomson 1997; Vogler and Pahl 1994). Most importantly, many recent ethnographic studies have highlighted the reorganization that takes place between men and women in employment responsibilities, childcare, money management, and in attitudes and beliefs when they migrate to the U.S. (Hagan 1994; Hondagneu-Sotelo 1994; Le Espiritu 2003; Menjivar 2003; Parrenas 2005).

In many families, mothers who traditionally did not work now enter the labor force out of economic necessity. In the case of Central American immigrants, women often become the main, if not the sole, breadwinners (Menjivar 2003). Women’s entry into the public sphere shifts the power dynamic between men and women and affects children as well (Zhou 1997). Households of Mexican immigrants often become more egalitarian in decision-making processes. Hondagneu-Sotelo (1994) shows that as the balance of relative resources and contributions shifts, “women assumed more active roles in... [w]here the family might live, how to budget finances, where to go for legal advice” (194). They often become reluctant to give up their earnings or autonomy (Hondagneu-Sotelo 1994). There are other effects as well. Men often

⁹ The term “oppositional culture” is borrowed from J.U. Ogbu (1992), who argued that involuntary minorities, such as African-Americans, develop cultural frames of reference in opposition to the dominant (white) cultural frames, resulting in the rejection of anything that can be equated with the social identity of the American mainstream, including school learning.

become more involved in housework and women may retain more control over their earnings (Hondagneu-Sotelo 1994; Menjivar 2003). Changing roles among men and women can increase tension within the family, sometimes leading to domestic violence (Le Espiritu 2003; Menjivar 2003).

On the other hand, certain types of work may increase women's dependence on their husbands. Among many Asian small business owners, the wives often work in the family store for no pay, often as an extension of their domestic responsibilities (Le Espiritu 2003). This role is crucial to the success of the family business, but it can also keep traditional gender roles intact.

We can theorize that the intersection of gender and immigrant status matters. A child may have different experiences based on whether both parents are immigrants, or the mother or the father is an immigrant. No previous fertility studies that I have seen incorporate this perspective. Nonetheless, an analysis of family formation outcomes is incomplete without integrating gender into a larger segmented assimilation framework.

2.3.5 Identity

Many researchers have argued that assimilation or minority group status frameworks which were constructed in an earlier black/white model of ethnic relations do not fit in the post-1965 era of migration (Brown and Bean 2006). Groups from Asia and Latin America have unique circumstances that fit neither the classic African-American nor European immigrant experiences. For example, it has been difficult for observers to characterize the experiences of Mexican-origin immigrants through the lens of the strictly assimilationist perspective that applied to European immigrants a century ago. On the other hand, the persistent racial disadvantage that has obtained for blacks in the U.S. does not consistently apply either.

A segmented assimilation framework suggests that the factors discussed above, such as context of reception, community context, educational opportunities and outcomes, and parent resources have implications for how subsequent generations define themselves within the U.S. ethnic and racial landscape. For many groups, there is a complex interplay between these factors and skin color. To complicate matters, ethnic and racial identity is subjective and unstable, and changing over time or even situationally (Loveman and Muniz 2007; Mora 2014; Penner and Saperstein 2008; Saperstein and Gullickson 2013; Saperstein and Penner 2012; Rodriguez 2000).

With respect to immigrant generations and identity, some investigators have found that individuals choose particular identities in part to avoid negative associations, or as a matter of social distancing (Doan and Stephan 2006). Waters found that second generation Caribbean youth often chose one of two very different identities, based on their socioeconomic status and type of school. The youth who were raised by parents of higher social class and attended parochial or suburban schools often chose an identity based on the cultural values of their parents' ethnic group. They actively attempted to distance themselves from American blacks. On the other hand, the second generation who had fewer resources and attended inner city schools moved toward a black American-identified identity (Waters 1994). Among Hispanic adolescents, the racial makeup of the school is significantly and positively linked associated with the racial identity they choose (Vaquera and Kao 2006). English monolingualism and school attendance with few Hispanics is strongly associated with inconsistent reporting of Hispanic identity

(Eschbach and Gomez 1998) Ethnic identity in immigrants can fluctuate as a result of “trying on” identities during adolescence (Fuligni et al. 2008). It can also be highly situational. In a study of Hispanic college students in New Mexico, the authors found that individuals used multiple labels, choosing the one they perceived as most acceptable to others in the interaction (Doan and Stephan 2006).

However, racial and ethnic labels are not only about self-identification. There are very real consequences based on the perceptions of others. For example, Dominican men, who are more likely to be of African phenotype than other Latin American groups, often report discrimination in finding employment (Lopez 1999). They believe that “their dark skin precludes them from ever ‘looking American’, regardless of their place of birth or ethnic identification” (Lopez 1999:178).

2.3.6 Intergenerational Relations

Even in households that are not subject to the constraints of poverty and under-privilege, the children of immigrants often encounter tension with the first generation about what kind of life they should aspire to, and what pathways they should take to achieve that life. Even though the first generation is often a self-selected group that does not necessarily share the same characteristics as individuals in the origin country, they often use cultural norms of the origin country as their frame of reference, which may not be consistent with the norms of the United States (Suro 1999; Zhou 1997). In fact, their selection may make them even *more* oriented to conservative home values. Ethnographic accounts and survey data have demonstrated how parents maintain language, religious, and cultural traditions, and values around familism, community ties and deference to parents in the U.S. (Portes and Rumbaut 2014; Portes and Rumbaut 2001; Suro 1999; Zhou 1997b; Zhou 1997; Zhou and Bankston 1994). Yet, their children often take as their frame of reference their experience in the United States (Gans 1992).

Migration can cause a shift in intergenerational relationships. The second generation often grows up in homes where the parents continue to speak their native language, and they often become the interpreters for their parents (Portes and Rumbaut 2001; Zhou 1997). The second generation, therefore, must negotiate different, if not discordant, cultural worlds as they grow up. Trong Nguyen, a Vietnamese father who immigrated to Chicago in 1976 explained why he helped start a counseling program at his Vietnamese Community Center (Dublin 1993: 291):

There are family conflicts, because the children are learning so quickly in school to adopt American culture. The parents might learn a little English at work, but it is a very slow process. They have to rely a lot on the children. The kids watch television and forget about the Vietnamese cultural values. The parents are shocked. They feel they have lost authority. There are arguments. The children want to move out or run away.

Trong’s account of increased conflict with his children is not an isolated event. Other studies have shown that conflict increases in the household when the children of immigrants stop using their parents’ language and adopt “American” behaviors (Portes and Rumbaut 2001). The parents and their children find that their former practices and boundaries around what is

acceptable in intergenerational relations are tested by their different experiences in their new community.

Parents worry not only about new influences, but also about the loss of the cultural values they bring from the home country. One female Dominican immigrant described the tension at home between adopting the American lifestyle and retaining native cultural traditions (Suarez Orozco and Suarez Orozco 2001:89):

Mami and Papi got all worried they were going to lose their girls to America...we four girls would be sent summers to the Island so we wouldn't lose touch with la familia....The hidden agenda was marriage to homeland boys, since...once a girl married an American, those grandbabies came out jabbering English and thinking of the Island as a place to get a suntan.

While relationships between parents and children have their share of difficulties without regard to country, ethnicity, or culture, the process of migration makes certain issues more salient for immigrant families. Portes and Rumbaut (2001) create typologies of consonant and dissonant acculturation as part of their formulation of segmented assimilation theory.

Investigators have paid more attention to the role of conflict between parents and children in immigrant households as it relates to psychological outcomes. Studies in the overall population have found that conflict between parents and children is associated with poor school performance, low self-esteem, and depression among adolescents (Shek 1997). Among immigrant groups in particular, this relationship seems to hold for depression outcomes (Harker 2001). One study found that among Chinese-American families, second generation youth who experience discrepancies with their parents on cultural expressions of parent warmth (affection) have more behavioral problems than children who do not experience a cultural conflict (Wu and Chao 2005). Other studies have found that the children of Korean and Vietnamese immigrants use "The Normal American Family" ideology as their frame of reference, leading them to view their own parents as lacking or deficient in affection and closeness (Pyke 2000).

But an added concept to Portes and Rumbaut's typologies of acculturation within the context of segmented assimilation theory, "intergenerational disjunctures" includes where and how concordant and discordant acculturation takes place related to a second generation's age and experience of period events. How do intergenerational disjunctures play out in the outcomes of the children of immigrants and subsequent generations?

2.4 CONCLUSION

Previous studies of immigrant fertility relied on theories of straight-line assimilation, disruption, selectivity, and minority status which had mixed explanatory and predictive power in empirical studies. The prevailing theory, the classic formulation of assimilation, has two variants, which I call the "cultural norms" model and the "economic constraints" model. I argue that these models are largely consonant with the two main perspectives of demographic theories of fertility, the development and diffusion perspectives. Immigrant fertility research could develop deeper

theoretical insights by explicitly incorporating demographic theory, for example by adding more mechanisms by which fertility might change (such as contraceptive use).

I contend that while classic assimilation theory has had some empirical support in immigrant fertility research, it is not sufficient to explain the observed pattern of Hispanic fertility. I argue that a more nuanced view of assimilation processes, such as that proposed by segmented assimilation theory, will provide more explanatory power in Hispanic fertility patterns. Although segmented assimilation theory addresses the differential incorporation of immigrants and their children, it is less clear in how some of these differences may affect vital events. I propose an “intergenerational disjuncture” hypothesis to understand how parent characteristics, individual characteristics and time may create discordance in world view between immigrants and subsequent generations and can affect outcomes, including childbearing. In the next chapters I examine fertility outcomes using both the classic formulation of assimilation and a segmented assimilation framework.

CHAPTER 3

DATA, VARIABLES, AND METHODOLOGY

INTRODUCTION

Previous research on the children of immigrants has largely focused on ethnographic accounts, partly due to the relative lack of data sets with large enough sample sizes to adequately measure group characteristics. Although Census data and Current Population Surveys have been used, parent nativity, that is, birth country of the respondent's parents was omitted beginning with the 1980 Census, creating difficulty for those researching immigrants across generations. In this study, I use the fertility supplements of the Current Population Survey collected between 2000 and 2008. While the sample sizes generally are not large enough to examine generations by individual country of origin, when grouped into regions, the immigrant subpopulations comprise large enough samples with which to conduct statistical analyses. In this chapter, I outline the data used in my analyses. I introduce the datasets used in the quantitative analysis, followed by a discussion of the construction of my variables and justification for their use. After a discussion of the methodology, I conclude with a discussion of the strengths and limitations of the data.

3.1 CURRENT POPULATION SURVEY FERTILITY SUPPLEMENTS

The Current Population Survey (CPS) is a probability sample of approximately 60,000 occupied households surveyed each month by the Bureau of Labor Statistics in conjunction with the U.S. Census Bureau.¹⁰ The universe consists of the civilian non-institutionalized population age 15 and over (US Department of Labor Bureau of Labor Statistics 2003) from all 50 states and the District of Columbia. Eligible households are included in the survey for four consecutive months, then are out of the survey for the next eight months, finally returning for another four months before leaving the survey permanently. The rotation system reduces sampling error by using a composite estimation procedure, and allows each month's sample to produce a true representation of the target population (U.S. Census Bureau 2006a).

The CPS serves as the primary source of labor statistics in the United States, including the national unemployment rate. Thus, the survey design creates a high degree of continuity from one month to the next while allowing for the constant replenishment of the sample while mitigating burden to the respondents (U.S. Census Bureau 2006). The survey is a computerized document and administered both by phone and in person by Census Bureau field representatives across the country. One individual (i.e. the reference person) typically responds to the survey questionnaire for all eligible members of each household. This individual is usually the renter or owner of the housing unit (U.S. Census Bureau 2006).

Although the CPS is primarily used to assess the labor force characteristics of the U.S. population, supplemental questions on additional topics are included in a given month, typically

¹⁰ Through 2000, the probability sample selected to represent the universe was approximately 50,000 households

annually or biennially. These supplements include topics such as civic engagement, food security, education, the annual social and economic supplement, and fertility, and special populations such as veterans, and displaced workers. My analysis uses pooled 2000, 2002, 2004, 2006 and 2008 June Fertility Supplements of the CPS.

The Fertility Supplement questions are included biennially in the June survey interview in an effort to collect information specifically on the fertility of American women. The questions are asked of all female civilian household members ages 15-44. Although previous years have included detailed questions about birth histories and fertility expectations, the 2000-2008 questions are more limited in scope. The interview questions include number of live births, birth month and year of last child, and woman's age (in months) at birth of the last child (U.S. Census Bureau 2001; U.S. Census Bureau 2004a; U.S. Census Bureau 2004b; U.S. Census Bureau 2006b; U.S. Census Bureau 2009).

In an earlier iteration of these chapters I downloaded and used all survey data from the United States Census Bureau's microdata retrieval system, DataFerrett. However, as additional years of data became available for final analysis, I ultimately used the 2000-2008 June CPS base survey and fertility supplement data available via the Integrated Public Use Microdata Series (IPUMS) (Ruggles and others 2015). Part of the Minnesota Population Center at the University of Minnesota, IPUMS' main activity is to harmonize variable codes and documentation for consistency across datasets. Use of IPUMS-CPS allowed me to create an integrated dataset across multiple supplements without having to recode variables and variable names that had changed over time in the raw files from the US Census Bureau, thus reducing potential programming error. In addition, IPUMS-CPS creates a consistent and reliable set of constructed variables on family interrelationships within the same household, from which I was able to construct spouse variables for married women.

I use weights in all analyses to ensure that results are nationally representative. The sample design creates geographic areas called primary sampling units (PSUs) within the entire U.S., which are then grouped into strata. With these, the CPS constructs a base weight, which is the inverse probability of each respondent being in the sample. This is the approximate measure of the number of persons that the sample person represents. The base weight is adjusted for non-interview and a ratio estimation procedure is applied for the known distribution of population age, sex, and race, resulting in the final weight. Final weights are used in analysis, as the 2000-2008 Fertility Supplements did not have supplement weights associated with them (U.S. Census Bureau 2001; U.S. Census Bureau 2004; Bureau of the Census 2004; U.S. Census Bureau 2006; U.S. Census Bureau 2009).

The CPS implemented the Census 2000-based weights in January 2003. Once the Census data were available, IPUMS replaced the old weights (for CPS 2000 and 2002) based on the 1990 population controls with weights based on the 2000 population controls in the data extract system, so all IPUMS-CPS surveys in my final dataset use final weights according to the 2000 Census (Ruggles and others 2015).

The CPS has an advantage over Census data, the American Community Survey, and the National Survey of Family Growth, among others, in that it has the unique combination of both the fertility outcomes of interest, as well as variables that allow for the construction of immigrant

generations. The CPS asks country of parent nativity, allowing me to distinguish the second generation from first generation immigrants and third (and higher) generations. While nativity may not be the best indicator of incorporation, it has traditionally been used to determine “progress” of migrants in the receiving country (see Chapter 2 for a more extensive discussion of previous research). The surveys provide valuable descriptive statistics on immigrant groups in the United States. Using socioeconomic, demographic and contextual variables, I am able to provide a descriptive backdrop to the analysis, as well as conduct multivariate analyses of the fertility of immigrant women.

3.1.1 Sample years and analysis groups

In this study, I limit the sample to 2000-2008. Although more recent years of CPS data with fertility supplements are available, they include the period of deep recession in the United States (the “Great Recession”) that profoundly influenced both migration patterns and fertility in the United States. Recent studies indicate that period fertility declined on a lagged timetable to the rise in unemployment, and there was a negative association between state-level unemployment and fertility (Morgan and Cumberworth 2011; Schneider and Hastings 2015; Sobotka, Skirbekk, and Philipov 2011). Net migration from Mexico reversed during the Great Recession, with more Mexicans returning to Mexico than migrating to the U.S. Over 1 million Mexicans and their families left the U.S. for Mexico between 2009-2014 versus an estimated 870,000 migrants that came to the U.S. over the same period (Gonzalez-Barrera 2015). Given these complexities, I have chosen to exclude the recessionary period from the study. The interaction between the Great Recession and Hispanic fertility, specifically, is a distinct theoretical question that must be addressed separately.

The recession officially began in December 2007 but fertility patterns largely lagged behind the recession’s immediate effects on employment, housing markets, and wealth, and began to change in late 2008 (Morgan and Cumberworth 2011; Sobotka, Skirbekk, and Philipov 2011). Thus I include the June 2008 CPS sample.

This analysis also restricts the sample to women ages 20-44, even though the CPS Fertility Supplements include women ages 15-44. Adolescent fertility in the United States is certainly an important topic in its own right, and it is the subject of a large body of research. Although rates are currently at a historic low, the teen birth rate in the U.S. is still the highest among industrialized countries mainly due to lower use of contraception (Kearney and Levine 2012; Lindberg, Santelli, and Desai 2016; Santelli and Melnikas 2010; Sweeney and Raley 2014). Adolescent fertility rates differ by race and ethnicity. Although teen childbearing declined dramatically among non-Hispanic white and black women between 1980 and 2000, the decline was considerably weaker in Hispanic women, especially women of Mexican descent (Landale and Oropesa 2007). In 2010, birth rates were twice as high among Hispanic and black women as non-Hispanic white women, among women ages 15-19 (Sweeney and Raley 2014). Certainly, the outcome measure of children ever born will include the children born prior to age 20 in the endpoint of interest and thus reflect some of these patterns. However, adolescent fertility is not the focus of this analysis because I want to focus on generational differences that exclude current fertility of adolescents.

The first part of the subsequent analyses compares immigrant generation / origin groups of interest with non-Hispanic white women as the reference group. This use of non-Hispanic white women as the definition of mainstream society is not without its limitations. As described in greater detail in Chapter 2, there can be many paths to which immigrant groups may assimilate. Waters points out that today, immigrants enter a consciously pluralistic society (in Portes and Rumbaut 2001:247). Therefore, the concept of a single “mainstream” America may be less salient in contemporary U.S. life.

Women of non-Hispanic ethnicity with race reported as black (referred to as non-Hispanic black women) are not included in the main study (although see Appendix for a table with this group included, as well as cohorts of Caribbean-born women), nor are Native American/Pacific Islander women. Many previous studies have used a non-Hispanic white / non-Hispanic black dichotomy to identify opposite ends of an assimilationist spectrum, consonant with the patterns of lower socioeconomic attainment of non-Hispanic blacks in the U.S. Yet for fertility outcomes, this dichotomy may not hold, as non-Hispanic black women have a unique pattern of fertility within the United States, with high rates of teen childbearing. But most importantly, the largest share of births to non-Hispanic black women in the U.S. is in a non-marital context (Sweeney and Raley 2014). While fertility may be an aspect of assimilation we are interrogating, the patterns of marriage, and childbearing may be so different it is not a correct group for comparison.

The full sample consists of 93,967 women, with each survey year contributing approximately one-fifth of the sample. U.S. born, non-Hispanic white women comprise the largest group in the sample (n=72,599). In subsequent analyses I examine Hispanic generations only, and the sample size is much smaller (n=11,146).

3.1.2 Outcome Measures

My measure of fertility (in the CPS) is cumulative fertility, measured as the number of children ever born (CEB). Specifically, the survey asks women, “How many live births, if any, have you ever had?” I treat this measure as a discrete variable with integer values between 0 and 15. For the full sample, the mean CEB is 1.36 (SE .005). Of the women in the sample, 34.9 percent are still nulliparous, 19.0 percent are primiparous, and 46.1 percent of women have had two or more births.

This measure is not perfect. Because the CPS is a cross-sectional survey, it catches women at only one point in time. Thus, a 32 year-old woman may have had one child, but her childbearing career may not be over. Nonetheless, it is the best measure that we can access in the CPS, in which the fertility supplement is limited in scope.

3.1.3 Immigrant Generations

My measures of immigrant generations and origin groups are based on the questions of parents’ and respondents’ nativity. I define a respondent as first generation if she was born outside of the United States to non-U.S. born parents, and immigrated to the U.S. after age 5. An individual is defined as second generation if she was born in the United States and at least one of her parents was born abroad. I follow Zhou (1997) and include with the second generation an individual who

was born abroad to non-U.S. born parents if she immigrated to the United States by age 5. An individual is considered third generation (or higher) if she was born in the United States to two U.S.-born parents. There are a small number of cases where both parents were born in the U.S. but the respondent was born abroad. These cases were excluded from the analysis, as it is unclear how the theories of both immigrant assimilation and immigrant fertility would be applied to this group. Going forward, I will refer to the third and higher generations simply as the third generation.

While the CPS has an advantage over most data sets in which the researcher can determine the nativity of the respondent and the respondent's parents, a main limitation is that it does not ask grandparent nativity. Thus, I am unable to use objective responses on grandparent nativity to construct a third generation cohort, nor am I able to distinguish the third generation from fourth and greater generations. This limitation exists for nearly all research in this area, as few data sets exist in which grandparent nativity can be ascertained, and of those that do exist, the limitations make them unsuitable for this analysis. I follow existing convention and construct the generation variables as in previous research (Bean, Swicegood, and Berg 2000; Frank and Heuveline 2005; Hill and Johnson 2004).

In the first part of Chapter 4, I examine fertility differentials across immigrant generation and origin group subpopulations to provide context to the fertility patterns of Hispanic-origin women (the focus of my main analysis). I have focused on the largest immigrant streams to the U.S., grouping the origin countries into regions. Asia is defined by the countries of East, South and Southeast Asia.¹¹ The characteristics of individuals from Asia vary greatly across countries. For example, immigrants from Japan have much higher educational attainment and income than those from Cambodia. However, because of small sample sizes, I am constrained in my ability to analyze these countries separately, and therefore follow convention and analyze them as one group.

One of the largest immigrant streams to the U.S. has been from Mexico. Because of the size of this group, I have a sufficient sample size to analyze them almost exclusively. However, because the women from other Central American countries share many of the characteristics of women of Mexican descent, and because they are too small a group to be analyzed separately, I include them in the Hispanic group.¹² Throughout the analysis I will use Hispanic as well as Mexican/Central American in reference to this group. I do not include women from countries in South America or the Caribbean in this analysis because the sample sizes are generally too small to analyze them on their own, and their migration histories and context of reception are too distinct from the women of Mexican/Central American descent to group them together.

The process of incorporation of Europeans has often been that to which newer immigrant streams are compared. Therefore, in my analysis of differential fertility by immigrant origin and generation, I also examine European generations. I group European origin groups together, considering first and second generations from western and central Europe, Canada, Australia, and New Zealand as European origin. Third generation and higher European origin women are,

¹¹Bangladesh, Bhutan, Burma, Cambodia, China, Hong Kong, India, Indonesia, Japan, Korea/South Korea, Laos, Malaysia, Nepal, Philippines, Singapore, Taiwan, Thailand, and Vietnam.

¹²Belize, Costa Rica, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama.

of course, categorized as non-Hispanic white women. In the analysis of all immigrant generation and origin subpopulations, I use as my reference category non-Hispanic white women. Using the generational definitions above, for the first analysis I end up with a final sample of 76,111 third and higher generation (this includes third generation non-Hispanic white women), 6,703 second generation, and 11,153 first generation individuals.

The second part of Chapter 4 focuses only on Hispanic-origin immigrant generations. In the models which focus on women of Hispanic descent only, my sample size is considerably smaller. There are 6,047 first generation women, 2,365 second generation women, and 2,734 third generation women, for a total sample size of 11,146. In the models, I include only the second and third generations (n=5,099), with the third as the reference category, as I am most interested in examining the two cohorts that contribute to the curvilinear pattern of fertility. In addition, I created a number of interaction variables using generation status and socioeconomic and incorporation variables, in order to assess any interactions between these. The presence and strength of the interaction variables will indicate any combined effect of socioeconomic status or incorporation on fertility outcomes.

3.1.4 Other Measures

I constructed variables that capture the relevant dimensions of demographic and socioeconomic status, as well as context of incorporation. Demographic and socioeconomic variables of interest include age, marital status, employment status, education, and income. Age and marital status have a clear relationship to fertility, as cumulative fertility increases with age and for the non-Hispanic white reference group and for the immigrant generations and origins of interest, the majority of births take place within marriage. I measure age as discrete years from age 30 in order to measure a meaningful age interval at the midpoint of the reproductive period. I also construct a variable for years from age 30 squared, to account for the quadratic shape that age often takes. Marital status is coded as separate dummy variables for currently married, never-married and widowed, divorced or separated; for the Hispanic-specific analysis I dichotomize this to never-married / ever-married.

Previous research has established a clear inverse association between education and fertility, and I expect more education to be strongly associated with lower fertility in my models (Bledsoe and et al. 1999; Bongaarts 2003; Caldwell 1980; Easterlin and Crimmins 1985; Jejeebhoy 1995; Levine et al. 1991; Martin 1995; Rindfuss, Bumpass, and St. John 1980; United Nations 1995; van de Walle 1992). In the CPS, education is coded in two or four year groups prior to high school, and single years beginning in ninth grade. I treat this variable as a discrete variable with integer values between 0 and 20, recoding education as the midpoint year for the four year groups, and the lowest year for the two-year age groups. For example, if the observation is originally coded as “5th or 6th grade”, I conservatively recode this as 5. The original code for years of post-high school education is qualitative, which I also recode into the same discrete variable. For example, I code “Associate degree – occupational/vocational” as 14, as associate degrees are generally two year degree programs. The single year codes remain the same. I also create a dummy variable for whether a woman is currently enrolled in high school, college or university. The question was asked of individuals under age 25, and controls for individuals who are currently completing their education.

Economic models have theorized that increased income could increase or decrease fertility, but empirically, increased household income has most often been associated with reduced fertility. The CPS collects “household family income” which is defined as the combined income of all family members during the past 12 months.¹³ The income variable is collected as a range (e.g. \$25,000 to \$29,999) which I recode as the midpoint of the range and transform to a log scale. This variable is a more realistic measure of the economic resources available to family members than personal income, as many of the women in the analysis are not in the labor force.

I also created income categories based on the ranges reported in the data, with meaningful cut points. Note that household income was missing for between 10.9 and 14.5 percent of women in each year of the CPS data. I included all women in the analyses, however, I conducted all multivariate models two ways: including only women with reported income in all models, and then including all women with non-missing income in the models. Because results were consistent, I have included only the results of the former in Chapter 4.

I created three variables for analysis that attempt to capture the context in which individuals live, and thus the structural context important in segmented assimilation theory. I use six files which I then merged to the individual level data by FIPS code (for county) and by state code (for state). I applied year 2000 estimates to the 2000, 2002, and 2004 CPS samples, and year 2010 estimates to the 2006 and 2008 CPS samples. County and state level data for percent speak Spanish at home and percent foreign born came from the 2000 Census Summary File 3 and 2010 American Community Survey. County and state level poverty estimates (percent of all ages in poverty) for 2000 and 2010 were from the U.S. Census Bureau, Small Area Income and Poverty Estimates (SAIPE) which uses a set of money income thresholds that vary by family size and composition to determine who is in poverty. If a family's total income is less than the family's threshold, then that family and every individual in it is considered in poverty.

The variables were operationalized such that if an individual's county of residence was available in the CPS, a county-level contextual variable was used for analysis, otherwise context was measured at the state level. Although the county or even neighborhood level variable to measure context would have been ideal, geographic location is limited to the state level for a subset of the sample due to county-level data availability restrictions in the IPUMS CPS.

First, I created a measure for the number of foreign born persons as a percentage of the total population in each county (state). In a segmented assimilation framework, women living in areas with a high concentration of foreign born may have more contact with cultural influences that promote origin-country ties and reinforce or promote an identity that is separate from the majority population. We might hypothesize that the context of foreign born persons would affect fertility outcomes in the direction away from a “mainstream” population (Espenshade and Ye 1994).

Second, I used the number of persons over age 5 who speak Spanish in the home as a percentage of the total population over age 5 as another measure of cultural norms, which may serve also as a proxy for linguistic isolation.¹⁴ In the 1990 Census, about 14 million persons (6

¹³ FAMINC includes money from jobs, net income from business, farm or rent, pensions, dividends, interest, social security payments, and any other money income received by family members who are 15 years or older.

¹⁴ “Linguistic isolation” is a term borrowed from the U.S. Census Bureau. According to Siegel et al. “[l]inguistic

percent of the population) reported some difficulty speaking English, while almost 1 percent could not speak English at all (Siegel, Martin, and Bruno 2001). While speaking a language other than English is an important aspect of maintaining ethnic identity, the inability to speak English well can prohibit individuals from access to educational institutions, the labor force and healthcare, and this can affect subsequent generations. Therefore, the proxy measure for linguistic isolation serves as a proxy for what percent of the population is structurally marginalized. The relative lack of structural incorporation could influence fertility in two ways; it may reinforce sub-cultural fertility norms and it may affect access to economic resources that would affect fertility outcomes. I did not expect that linguistic isolation would be well measured with a continuous variable, and rather expected that if I would find any effect, it would be at the lowest quantiles of percent in community that speak Spanish at home, that is, greatest linguistic isolation. Thus I categorized this variable into quartiles based on the distribution from the Hispanic-only sample, and then created dummy variables.

The measure for percent in poverty was created to measure for effect of economic opportunity in the community, which may be an important component of structural barriers to assimilation according to segmented assimilation theory (Portes and Rumbaut 2014).

IPUMS-CPS creates linked spouse variables in the CPS samples. For married women, I used the linked spouse variables to identify characteristics for spouse age, education, employment status, Hispanic identity, composition of parent nativity, and citizenship status, creating the variables consistent with the definitions and programming used for women in the sample. I used the variables only in the Hispanic-generations analysis of married women only. There were n=6,485 women included in this analysis, after excluding 228 for missing spouse characteristics.

3.1.5 Methodology

In the analysis of CPS data, the outcome is a measure of cumulative fertility, specified as number of children ever born (CEB). This measure is a discrete variable with integer values from 0 to 15. The measure of children ever born is distributed mostly across the lower parities, with a large percentage of women in each generation who are still at parity 0. In 2000-2008, 35.5 percent of third generation was nulliparous, compared with 43.1 percent and 26.0 percent of the second and first generations, respectively. Less than one percent of the overall sample had more than five children. Given the distribution of the data, a count model would appear to be an ideal method to use in this analysis. Although the distribution of cumulative fertility closely resembles a Poisson distribution, the drawback to using Poisson regression is that this method assumes that each event is independent. Some researchers of immigrant fertility have used this method in the past (Espenshade and Ye 1994; Frank and Heuveline 2005). However, a woman may often base her decision to have a child on a number of factors, including the number of children she already has. Even if she is not actively deciding to try to have a child, how passive she is about the use of

isolation' is dependent on the English-speaking ability of all adults in a household. A household is linguistically isolated if all adults speak a language other than English and none speaks English "very well." Adult is defined as age 14 or older, which identifies household members of high school age and older." (2001:3). I use the definition in a broader sense, defining linguistic isolation as an individual's ability to speak English "not well" or "not at all".

contraception may also depend on her current parity, among other things. The birth of a child, therefore, is rarely independent of the previous number of children.¹⁵

In the CPS analysis, I use ordinary least squares (OLS) regression. A potential weakness to multivariate regression using the ordinary least squares procedure is that the predicted values may be negative, outside of the lower bound of cumulative fertility (the number of children ever born). Finally, the residuals show some evidence of non-normality at the tails. The residuals also show some evidence of heteroscedasticity. Despite these problems, the majority of previous analyses on cumulative fertility outcomes have employed OLS regression (Bean, Swicegood, and Berg 2000; Blau 1992; Hill and Johnson 2004; Kahn 1994). For the purposes of multivariable analysis, I follow convention and do so as well.

3.2 STRENGTHS AND LIMITATIONS OF THE DATA AND METHODS

One of the greatest difficulties in conducting fertility research on immigrant populations is the lack of data sources that include comprehensive information on both immigration and fertility. These two processes often occur together, yet researchers are often interested in one or the other. Thus, investigators interested in immigrant fertility are often forced to choose less-than-ideal surveys with which to conduct our research.

The CPS has the distinct advantage as a data source in that fertility data are collected along with immigration data. The size of the survey sample also allows for robust cohort sizes to support comparison. The use of cross-sectional data like the CPS allows the researcher to create immigrant generations using a combination of race, ethnicity, country of parent nativity, and country of respondent nativity, yet it is not possible to distinguish between third and higher generations. The CPS also poses some problems specific to the first generation. Researchers are unable to distinguish between the effects of the amount of time spent in the receiving country (exposure effects), and the effects of the particular group arriving in the receiving country at the same time (cohort effects) (Swicegood and Bean 2001). Thus we are unable to distinguish processes of incorporation from the changing selectivity of the immigrants themselves.

My first analysis examines fertility differentials among the first, second and third and higher generations of women of Hispanic, Asian, and European descent (the third and higher generation of European women is captured by the native-born non-Hispanic white population). I also compare each generation/origin group to U.S. born non-Hispanic white women. I acknowledge that these groups are not perfect. There are numerous social and economic differences among Hispanics, Asians, and the native-born population that makes them far from monolithic categories. These populations may not have a coherent set of values and beliefs, and there are many reasons to believe that education, marriage and fertility outcomes would vary within these populations. (However, see Appendix for country-origin descriptive tables for the largest immigrant generation groups: Mexico, China, India, Philippines, and Vietnam). While this may still leave some weakness in the approach, this comparison across racial and ethnic groups allows me to place the Hispanic fertility patterns within a broader context. As noted earlier, U.S.-born non-Hispanic white women as a reference category can also be problematic, as

¹⁵ However, I ran the models using Poisson regression, and the results remained largely unchanged. (Results not presented).

the concept of a single “mainstream” America may be less salient in contemporary U.S. life. However, in order to understand if and how fertility levels converge, this comparison is still our best available method.

CHAPTER 4

THE HISPANIC FERTILITY PUZZLE: AN ANALYSIS OF FERTILITY ACROSS GENERATIONS

INTRODUCTION

This chapter aims to shed light on observed fertility differentials among immigrant generations using the 2000-2008 Fertility Supplements of the Current Population Survey. As highlighted in Chapter 2, there is great variation in observed cumulative fertility among racial and ethnic groups in the United States. What does this variation look like when we extend the picture to include generations of immigrants and their children? Classic assimilation theory predicts that immigrants begin to converge to “mainstream” U.S. society across generations. If we believe that fertility is another factor in which we can measure convergence, then can the observed differences in fertility compared with non-Hispanic white women largely be explained by the generational composition of these groups? That is, we would expect to observe fertility decline in each generation-since-immigration, in immigrants with higher fertility than that of U.S.-born non-Hispanic white women. Conversely, we would expect to observe an increase in fertility across subsequent generations, in immigrants with lower fertility than that of U.S.-born non-Hispanic white women. For the time period analyzed here, classic assimilation theory would have the following implications: we would expect to see a decrease in children ever born in the first to the second generations, and again from the second to the third (and higher) immigrant generations of Mexican/Central American women. We would expect the opposite in Asian immigrant generations.

More recent assimilation theories, including segmented assimilation, take a more nuanced approach. Can these theories, which contend that groups will assimilate to different sectors of American society—some following the traditional assimilation path toward entrance into mainstream middle-class society and others becoming a permanent part of a marginalized, often racialized, group at the bottom—add explanatory power to an analysis of fertility outcomes? From a segmented assimilation perspective, given the migration history and context of reception discussed in the previous section, we would hypothesize that across Asian immigrant generations fertility would converge to a pattern like that of the non-Hispanic white population of the U.S.—in fact, more similar to the pattern of college-educated non-Hispanic white women in the U.S. than a general reference group. The hypothesized pattern of Hispanic generations is less clear here, because the migration history has been particularly long, punctuated by events creating immense change. Geographic proximity has also affected selectivity of who migrates. In addition, the context of reception in the U.S. has been mixed. The pattern of Hispanic fertility is therefore not likely to be of straight line convergence to a non-Hispanic white reference group. Using segmented assimilation theory, we might expect simply no difference across generations, but if we use education or income measures as a guide, we might expect an initial decline and then stagnation from the second or third, or the U-shaped curve observed in data from earlier periods (Bean, Swicegood, and Berg 2000).

The first section of this chapter provides a descriptive background of generation groups of Hispanic, and Asian and European origin, comparing their demographic and socioeconomic characteristics to each other and to third generation non-Hispanic white women in the United States. Recall from Chapter 3 that in the context of my study, acknowledging all of the important country-nativity groups it ignores, I use the term Hispanic as short-hand for Mexican/Central American. Although the fertility outcomes of immigrant generations from Cuba and Puerto Rico would certainly be of interest in a fertility analysis within a segmented assimilation framework, their history of immigration is so distinct to make grouping with Mexican and Central American women unreasonable, while their numbers are small on their own as to make estimates unreliable. Thus they are not included in this current work. Similarly, as described in Chapter 3, the Asian immigrant generations are comprised of countries from East, Southeast, and South Asia (please see Chapter 3 for definition of Asian third and higher generation). Cohorts of European immigrant generations are also included for comparison purposes. For sample size reasons, Native Americans are not included in the analysis, and as outlined in Chapter 3, I also do not include non-Hispanic black women (Although I do provide statistics for this group compared with non-Hispanic white women, as well as first and second generation Caribbean women in the Appendix).

I then describe the age-specific pattern of observed fertility differentials. To determine what factors are associated with the variation in cumulative fertility, I model children ever born (CEB) outcomes of the aforementioned generation and origin groups relative to U.S.-born non-Hispanic white women using classic immigration theory as the initial framework. This preliminary analysis provides the context in which to examine the particular pattern of Hispanic-origin fertility across first, second and third immigrant generations.

The second section of this chapter begins to explain the fertility differential across generations of Hispanic-origin women. What explains the lower fertility of second generation Hispanic women relative to other generations? Why, after beginning to converge by the second generation, does the fertility of Hispanic women become less, rather than more similar to the U.S.-born non-Hispanic white population by the third generation? To answer these questions, I attempt to reconcile demographic theories of fertility with theories of assimilation in developing the statistical models. Here I model cumulative fertility of second generation Hispanic women, relative to the third. I find that segmented assimilation theory, as operationalized in the models, may provide some insight into the fertility differentials. The findings also suggest that by the third generation, Hispanic identity may play a large role in determining fertility outcomes.

Using the CPS supplements as I do here, we cannot necessarily make inferences about the future fertility of one age group from the observed fertility of another. There is no a priori reason to believe, for example, that third generation Hispanic women who are ages 20-24 will necessarily achieve the same fertility levels as the same generation/origin group who are ages 40-44. These women may experience vastly different period factors that would influence fertility up or down. An additional limitation of using cross-sectional data is that, with possibly the exception of the oldest age group (40-44), the cumulative fertility that we observe is censored at the survey date. Nonetheless, the use of cross-sectional data is still one of the best approaches researchers have available for analyzing fertility outcomes.

4.1 A BRIEF HISTORY OF U.S. MIGRATION

In order to interpret the characteristics of the immigrant generations analyzed in this chapter, some historical background is necessary. When the United States dropped national origin quotas with the Immigration Act of 1965, the country ushered in a new era of migration. Immigrants from Latin America and Asia comprised the majority of the largest migration stream to the United States since the late 19th century. Mexico, the largest supplier of immigrants, has this distinction partly because it shares a 2,000-mile border with the United States, making the geographic barriers to entry very low. However, in a deep history that cannot be done justice here, the history between Mexico and the United States stretches over centuries. Texas was annexed to the United States in 1845. Then in 1848, as part of the Treaty of Hidalgo to end the Mexican-American War, Mexico ceded California and New Mexico (which included the current states of Arizona and New Mexico, as well as parts of Utah, Colorado, Nevada and Wyoming) to the United States and over 100,000 Mexicans became transformed into Americans. The treaty granted them citizenship and, with citizenship came de facto status as white under U.S. law (Telles and Ortiz 2008).¹⁶ However, lived experience for Mexicans varied despite the legal status, often mediated by class, geographic location, and settlement patterns of white Americans.

These regions differed in how quickly their population density and distribution changed; a huge influx of white settlers came to northern California to seek fortune in the California gold rush in 1849, outnumbering the native population very quickly, whereas much of the southwestern U.S., from southern California to south and central Texas, experienced a much slower rate of demographic change until the arrival of the railroad in the 1880s. Beginning in 1910 with the start of the Mexican Revolution, coupled with expanding needs for cheap labor in agriculture and cattle production in the U.S. southwest, a twenty-year period of mass migration from Mexico to the U.S. southwest began (Telles and Ortiz 2008).

Labor demands in the southwest contributed support for Mexican immigration through the 1920s, even as laws like the Chinese Exclusion Act of 1882 and Alien Land Law of 1913 were passed to exclude immigration by Chinese, and restrict landowning by the Japanese (Portes and Rumbaut 2014). The Great Depression of 1929 caused an abrupt end to migration to the U.S., and along with it came large efforts to deport Mexican-origin persons. One account estimates that nearly a third of the Mexican community (including native-born individuals) were repatriated during the 1930s (Balderrama and Rodriguez 1995).

Mexican migration resumed after the start of World War II. In response to a U.S. labor shortage due to the war efforts, the U.S. and Mexican governments instituted the Bracero Program in 1942 to bring farm workers to the large, commercialized agricultural labor market of the southwest. At its start, tens of thousands of workers came to work under this program on temporary visas (Portes and Rumbaut 2014). The result was a continual stream of migration that strengthened ties between Mexican Americans and Mexico. The program tapered off in the early 1960s, but by the time the U.S. government officially ended the program in 1965, over 4.7 million Mexicans had entered the country under the Bracero program and 600,000 had entered as

¹⁶ According the Naturalization Law of 1790 only whites could become citizens. The granting of citizenship under the treaty made those Mexicans living in those (now) U.S. states de facto white. The McCarran-Walter Act of 1952 repealed this law (Telles and Ortiz 2008).

legal immigrants (Massey, Durand, and Malone 2002). Using the multiple social networks that they and agricultural employers had built over previous decades, workers continued to migrate after the program ended—albeit without authorization.

The Immigration Act of 1965 fundamentally changed immigration to the U.S. by basing access on family reunification and occupational merit. Whereas individuals, especially from Asian countries, took advantage of the occupational merit requirement, the family reunification requirement created a previously unavailable avenue for unauthorized immigrants from Mexico to legalize their status via marriage (Portes and Rumbaut 2014). Various factors in the 1980s and 1990s contributed to patterns of migration and legal status; the 1986 Immigration Reform and Control Act and subsequent 1996 legislation declaring legal immigrants ineligible for many social benefits led to record numbers of legal Mexican immigrants becoming naturalized; political instability, brutal civil wars, and economic troubles contributed to large migration and refugee flows from Central America (Massey, Durand, and Malone 2002). Through the mid-2000s, the pace of Mexican migration continued unabated, through both documented and undocumented means. Over the period, the migration flow from other Central American countries contributed over a million (often undocumented, with the exception of persons from Nicaragua) foreign born persons to the U.S. population. During the 2000s, Hispanics overtook non-Hispanic blacks as the largest minority group in the U.S. (Cherlin 2010).

Mexico and Central America have become the main providers of low skilled labor to the U.S. The Mexican foreign-born population in the U.S. ranks last in human capital among the major foreign nationalities in the United States; only 30 percent have graduated from high school and 5.3 percent from college (Grieco et al. 2012). Many arrive in the United States undocumented, and they have been the focus of local, state, and federal efforts to curb the migration flows. The tenuous economic and political position of these immigrants has implications for their children’s life chances.

The human capital of Mexican and Central American migrants and their context of reception in the U.S. differ vastly from some other Hispanic groups. For example, the U.S. government welcomed early waves of Cuban refugees. Many possessed high education levels and they built an economically successful and politically powerful enclave in Miami (Suro 1999) Their children are able to benefit from their success. In a different vein, Puerto Rico’s status as an unincorporated territory of the United States facilitates entry into U.S. life, although this has not translated to an educational or economic advantage (Hirschman 2001).

In addition, immigrants from Mexico and other Latin American countries have a complicated history in the U.S. with respect to race and identity. In response to a long history of both land annexation and immigration, in 1930 the Census officially acknowledged the Latin American presence within the country and created a “Mexican” category within “other races”. In 1940, the Census re-classified Mexicans as a “white” race, but created a linguistically defined population of “persons of Spanish mother tongue” (Rodriguez 2000). The term Chicano emerged in the 1960s as an identity “that symbolized cultural and political autonomy for Mexican Americans rather than assimilation and acceptance as white” (Telles and Ortiz 2008: 92).¹⁷

¹⁷ Because of the earlier patterns of migration coupled with the abrupt end to migration around 1930, some have estimated that size of the Mexican third generation reached its peak in the 1950s, before beginning to decline with

Hispanic as an identity was created from the confluence of activists attempting to create a classification that would allow visibility of differences in poverty rates between whites and Mexicans, and media executives seeing the consumer possibilities of a large cohesive group, who worked together with U.S. Census Bureau officials to bring it about (Mora 2014). The complex interplay of lengthy and fraught immigration history, context of reception, self-identity and classification by others creates the context in which Mexican and Central American immigrants and subsequent generations must be understood.

The Mexican case probably stands in starkest contrast to Asia, the second largest post-1965 sending region. Immigrants from Asia are the fastest growing group in the United States, with an increase in population from 1.4 million in 1970 to 11.9 million in 2000 (Zhou and Xiong 2005). Far from being a homogenous group, they often have come to the United States under very different circumstances. Immigrants from Cambodia and Laos, of whom less than 5 percent have college education, largely entered the country with refugee status. In contrast, immigrants from Taiwan, of whom over 60 percent have college degrees, have been able to take advantage of economic opportunities (Zhou 1997:66). Yet persons of Asian origin are often discussed as a pan-ethnic group, and held up as an assimilation “success story” due to their high average earnings, high percentage of two-parent families, and high educational attainment (Okamoto and Mora 2014; Zhou and Xiong 2005).

The unique migration histories of Hispanic and Asian groups explain many of the differences in demographic and socioeconomic characteristics that are highlighted in the CPS data. To a large degree, human capital, the post-industrial labor market, geographic proximity to the U.S., and international geopolitical relations and events play important roles in influencing the distribution of immigrant characteristics. Their particular constellations are the context in which vital events occur.

4.2 IMMIGRANT GENERATIONS IN THE U.S.: AN OVERVIEW

First Generation

In this section, I provide an overview of the similarities and differences across generations of the largest foreign-born groups in the U.S. I contend that the patterns we see, both across different groups of the same immigrant generation, and across immigrant generations of the same region of origin, cannot be fully explained by a classic assimilation perspective.

Table 4.1 outlines the background characteristics of the generation and origin groups in the study. In many ways, the demographic and socioeconomic characteristics of these women, when disaggregated in this way, provide a window into the context of reception of immigrants and the trajectories on which it placed subsequent generations. First generation immigrant women vary widely in their characteristics depending on their region of birth. Unsurprisingly, first generation European women are very similar to third generation non-Hispanic white women across most characteristics. Non-Hispanic white women are the reference group because the strictest view of classic assimilation theory predicts that immigrants will eventually assimilate to

the re-emergence of wide scale immigration after 1965. This demographic pattern coincides with the Civil Rights Era.

the characteristics of a “mainstream”. Whereas first generation European origin women are largely geographically diverse like their third generation non-Hispanic white counterparts, first generation Asian and Hispanic women are highly concentrated in the traditional immigrant receiving states of California and New York, as well as Texas and Florida. A staggering 37 and 32 percent of first generation Hispanics and Asians live in California, respectively, compared with fewer than 12 percent of first generation European origin women. According to segmented assimilation theory, context of reception has great implications for mode of incorporation into U.S. life, thus the magnitude of these numbers cannot be understated.

First generation European women are a highly educated, high income cohort. Over 44 percent of these women have a bachelor’s degree or higher, and their mean household income of \$69,588 is higher than any other first generation group (as well as the reference group). Although only slightly over one-fourth of these women are U.S. citizens, it is likely that the Europeans are mainly highly skilled workers, here as permanent residents.

First generation Asian women also live in households with relatively high incomes, and nearly 55 percent of these women have completed college or pursued graduate studies. First generation Asian women are also more likely to be citizens of the United States, than are their European and Hispanic first generation peers. Like first generation European women, first generation Asian women have education and income levels even higher than the reference group--third generation non-Hispanic white women.

In stark contrast, Mexican/Central American women have the lowest levels of educational achievement across all first generation groups. Nearly 58 percent of these women have less than a high school education and only six percent have obtained a bachelor’s degree or higher. Among women ages 20-24, only approximately one in 15 of first generation Hispanic women are enrolled in high school or college compared with nearly one in two first generation Asian women and one in three first generation European women. They have the lowest mean household income of *all* generation and origin groups by at least \$13,000, and on average earn half of the earnings of their first generation peers. Texas is the second largest place of residence after California, and over 56 percent of first generation women live in these two states alone.

These women are slightly younger than other first generation cohorts. One of the few commonalities is their marital status; approximately 70 percent of each first generation group is currently married. Yet despite similar marriage rates and younger average age, first generation Hispanic women have a much higher number of children ever born, 2.04 compared with 1.21 and 1.20 of first generation Asian and European women.

Second Generation

The second generation women exhibit clear similarities to their first generation counterparts while appearing to follow a trajectory of assimilation to the third generation non-Hispanic norms (with the acknowledgement that the CPS surveys are cross-sectional and the immigrant generation cohorts analyzed here are not sequential across time). The second generation largely mirrors the first in their residential distribution. Hispanic and Asian women overwhelmingly live in a concentrated number of states. Over 44 percent of Hispanics live in California, followed by 24 percent in Texas. Nearly 36 percent of the Asian second generation live in California. Second

generation Europeans are more widely distributed. There are differentials in marital status as well. Fewer than 39 percent of Asian women are married, compared with 46 percent of Hispanics and 56 percent of European women.

Both second generation Asians and Europeans are highly educated. 47 percent and 41 percent of these women, respectively, have obtained a bachelor's degree or higher. Their incomes reflect their high educational attainment. Second generation Asian women have the highest mean household income of all generation and origin groups, over \$72,000. The incomes of European origin women are only slightly lower. In contrast, only 14 percent of second generation Hispanic women have obtained a college degree, and 18 percent of second generation Hispanic women have less than a high school education compared with 2.0 and 3.5 percent of Asian and European women. Their incomes are lower than their second generation counterparts, at less than \$48,000. These socioeconomic factors, while on a trajectory away from first generation Hispanics and toward average characteristics of the reference cohort, lag far behind other second generation groups, who on education and income measures do as well or better as the first generation and continue to do better than the reference population.

One could potentially attribute some of the educational and income disparity to younger age, as second generation Hispanic are, on average, under 29 years old, whereas European women are, on average, 33 years old. Yet second generation Asian women have the same average age as their Hispanic peers. And of women ages 20-24 years old, only 27 percent of second generation Hispanic women are enrolled in school compared with over 39 percent of second generation Asian women. It is not surprising that in these unadjusted means, second generation Hispanic women have a much lower rate of childbearing compared with the first generation Hispanic cohort, due to lower marriage rates and a younger average age, and we see this reflected in the observed means in the second generation Asian and European women as well. In observed fertility at least, it appears that second generation Hispanic women are moving toward convergence with non-Hispanic white women while the other second generation groups experience fertility decline further away from the reference group.

Third (and higher) Generation

By the third generation, we are unable to observe European origin women, due to the limitations on observing third and higher generations by grandparent nativity in the survey data. Thus, they are considered equivalent to the reference group our analysis. Yet the residential and socioeconomic patterns found for the previous generations of Hispanic and Asian women continue with the third generations. Again, state of residence cannot be ignored; nearly seven in ten Hispanic women live in either California or Texas, and one in three Asian women reside in California, whereas over eight in ten non-Hispanic white women live in states *other than* California, New York, and Texas.

Notably, third generation Hispanic women still lag behind their third generation Asian and non-Hispanic white counterparts in education and household income. Nearly 20 percent of Hispanic women have less than a high school degree and fewer than 14 percent of have a college degree or higher. In contrast, nearly 32 percent of non-Hispanic white women and 40 percent of Asian women have obtained their bachelor's degree, and 6 percent and 5.2 percent have less than a high school degree, respectively. Lower educational attainment translates into lower income;

mean income of third (and higher) generation Hispanic women is about \$15,000 lower than the reference group and over \$22,000 lower than third generation Asian women.

On average, third generation Hispanic women are less than a year younger than third generation Asian women and 1.4 years younger than non-Hispanic white women. The slight age difference may partly account for some differences in marriage rates; half of third generation Asian and Hispanic women are married, slightly lower than the nearly 58 percent of non-Hispanic white women who are currently married.

In broad strokes, looking across these immigrant / origin groups we can observe general patterns in the characteristics relating to economic and social mobility in the U.S. In most of the economic and human capital indicators, the second generation cohorts tend to do better than the first generation of the same origin background, with Asian and European women further diverging from the place of relative advantage the first generations of these origin groups already had. In third generation Asian women, the education and household income means have declined some from the second generation. On the one hand, greater similarity to the reference group in human capital factors could be interpreted as evidence of assimilation to a mainstream U.S. reference group. However, third generation Asian women are clearly set apart in terms of human capital from the reference population, more along the lines of the “model minority” of achievement explained by segmented assimilation theory. In contrast, while second generation Hispanic women are characterized by much higher education achievement, employment and household income relative to their first generation peers, the trend stagnates or reverses by the third generation; at the same time demonstrating a pattern of divergence to the reference population. These patterns are consonant with segmented assimilation theory, where for this group, structural barriers impact education, employment, and other opportunities leading to stagnant or downward mobility. Given the differences in these characteristics across these immigrant / origin groups, we then turn to an examination of fertility outcomes to understand how these factors are associated with vital events.

Table 4.1. Weighted characteristics of women ages 20-44 by immigrant generation and origin status, June Fertility Supplement, 2000-2008 CPS (n=93,967)

<i>Generation/Origin</i>	3rd Gen Non- Hispanic White	3rd Gen Hispanic[^]	3rd Gen Asian	2nd Gen Hispanic	2nd Gen Asian	2nd Gen European	1st Gen Hispanic	1st Gen Asian	1st Gen European
<i>Characteristic</i>									
<i>Number of Observations</i>	72,599	2,734	778	2,365	1,404	2,934	6,047	3,721	1,385
<i>Mean Age</i>	32.7	31.3	32.0	28.6	28.5	33.1	32.3	33.7	33.9
<i>Lives in State (%)</i>									
California	7.4	29.8	32.6	44.0	35.9	12.4	37.2	31.8	11.9
Florida	4.6	1.6	1.2	2.7	1.4	4.7	4.2	3.4	8.2
Illinois	4.5	2.9	1.8	4.6	3.1	4.8	5.0	4.0	9.5
New York	5.3	0.5	3.2	1.6	9.5	13.0	3.3	11.9	12.0
Texas	5.5	37.7	2.8	24.4	6.3	4.0	18.8	6.9	5.3
<i>Enrolled in HS / College (% of women age 20-24)</i>	23.5	17.7	41.5	27.1	39.2	33.3	6.5	48.9	33.2
<i>Education (%)</i>									
Less than high school	6.0	19.1	5.2	18.0	2.0	3.5	57.5	8.2	5.5
BA or higher	31.5	13.8	40.0	14.4	46.8	41.1	6.0	54.7	44.5
<i>Citizen (%)</i>	100.0	100.0	100.0	90.7	96.0	98.0	17.0	40.5	26.8
<i>Mean Household Income*</i>	\$61,587	\$46,497	\$68,662	\$47,594	\$72,298	\$70,593	\$33,328	\$67,329	\$69,588
<i>Currently Married (%)</i>	57.8	50.0	50.3	45.7	38.5	56.4	69.7	73.0	68.9
<i>Mean Number of Children</i>	1.31	1.71	1.20	1.35	0.77	1.16	2.04	1.21	1.20

Note: Pooled data from 2000, 2002, 2004, 2006, and 2008 June CPS with Fertility supplement for civilian women 15-44. Women or parents born in Puerto Rico or U.S. outlying areas are excluded
Hispanic: Belize, Costa Rica, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Central America; [^]Both parents US born and woman is Mexican or C.Am. origin/descent
Asia: Bangladesh, Bhutan, Burma, Cambodia, China, Hong Kong, India, Indonesia, Japan, Korea/South Korea, Laos, Malaysia, Nepal, Philippines, Singapore, Taiwan, Thailand, Vietnam
Europe: Western and Central Europe, Canada, Australia and New Zealand; *Missing income for 13.0 percent of sample

4.2.1 Fertility Differentials among Generation / Origin Groups

Family formation patterns of generations of immigrant women vary greatly by region of origin. The second generation overall has the lowest cumulative fertility, measured as children ever born. Is this simply a product of their young ages? When cumulative fertility is disaggregated into 5-year age categories and by immigrant generation, we are able to observe more. Figure 4.1 shows children ever born, by age category and region of origin for the sample of women from the pooled 2000-2008 CPS data. Separate panels illustrate the generations for each race/ethnicity group being analyzed. (Recall that the data are cross-sectional, as described in Chapter 1 and illustrated in Figure 1.3). The non-Hispanic white reference group is the same in all three panels of the figure.

Panel 4.1a reports cumulative fertility of all Hispanic generation cohorts, and compares to non-Hispanic white women. Across all age groups, first generation Hispanic women have the highest fertility relative to second and third generation Hispanic women, and with a dramatically higher number than the reference group. At the ages of 40-44, when childbearing is largely complete, first generation Hispanic women ages 40-44 have an average of 2.7 children, on average, one child more than the 1.8 children of non-Hispanic women in the same age category. The second generation continues the trajectory toward the lower fertility of the reference population, and yet it is here in this panel that we see the puzzle of Hispanic fertility demonstrated most starkly. Although second and third generation women have the same cumulative fertility at ages 40-44, fertility of the third generation at every other age category is higher than the second—away from the reference population and opposite of what classic assimilation theories would suggest. Even if the second generation is shifting fertility to older ages as the similarities in the 40-44 age category would suggest, the lower rates in all other age categories makes it unlikely that overall cumulative fertility for this cohort will ever reach that of the third generation. What is occurring here? Is this pattern similar in the other groups analyzed?

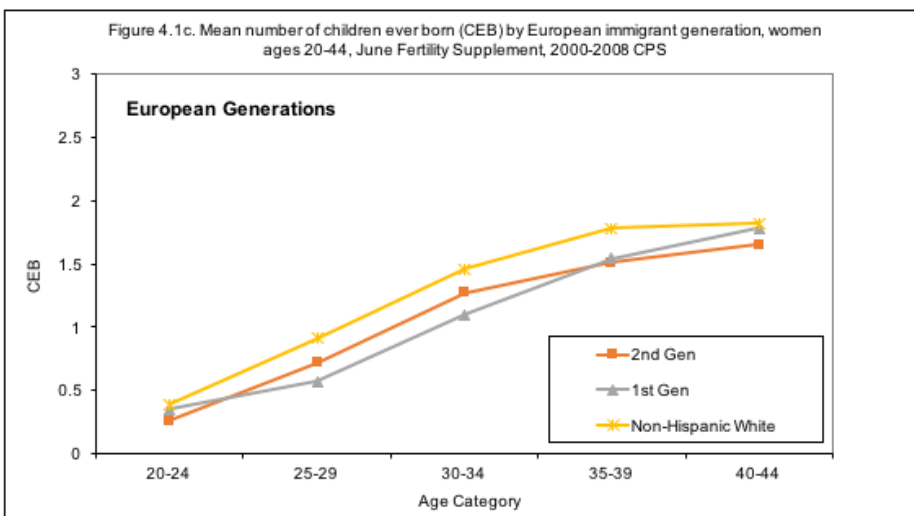
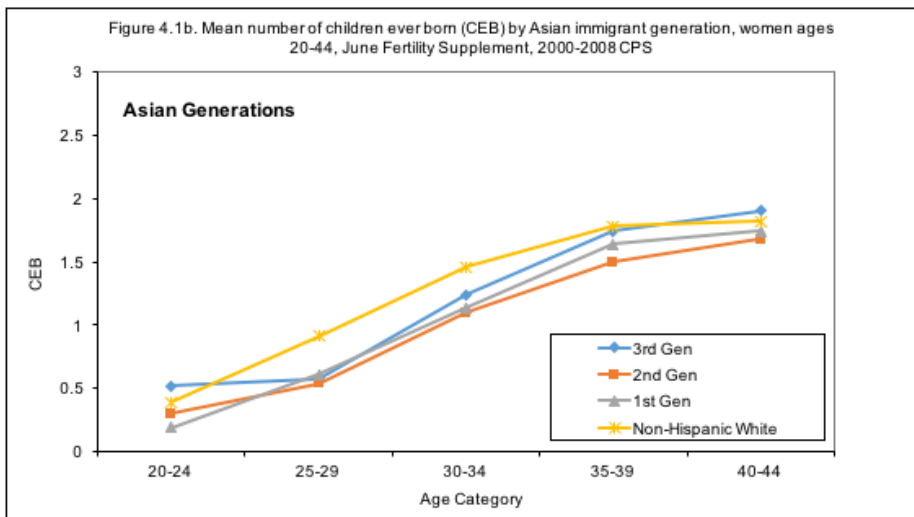
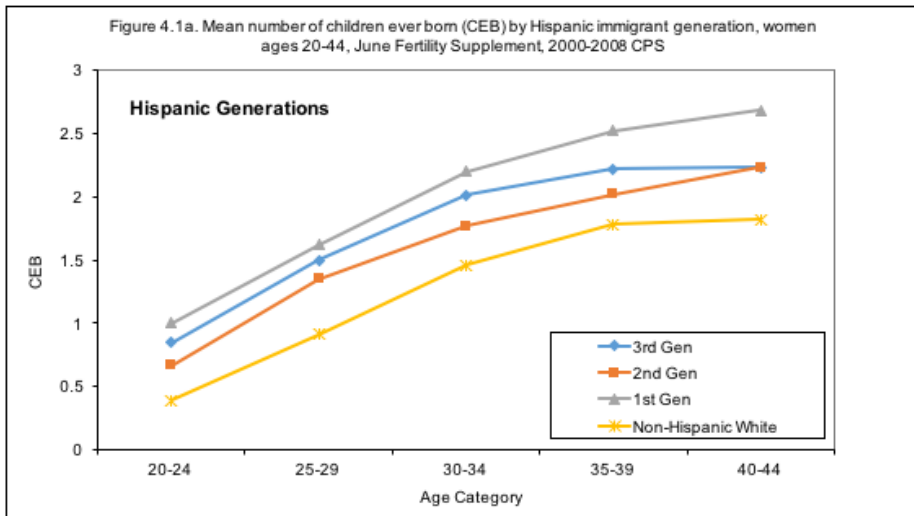
Figure 4.1b shows cumulative fertility of the generations of Asian women. Compared with Hispanic generations, there is far less variation in fertility of Asian women in each age category and all age categories have lower fertility than that of non-Hispanic white women. Fertility remains quite low in the age 25-29 category across all generations of Asian women, much lower than non-Hispanic white women, before beginning to rise. A pattern of convergence or divergence compared to the reference group is less clear at younger ages, although at the older age categories, third generation Asian women appear to converge to the higher fertility of non-Hispanic white women. What is shown very clearly, in fact, is a consistent pattern of delayed childbearing across all Asian immigrant generations, which to my knowledge has never been studied and observed in disaggregated generations in previous studies of fertility among Asian groups in the United States. Interestingly, in the oldest two age categories, the second generation appears to have slightly reduced fertility compared to both the first and third generations—that same decline then increase observed across Hispanic generations—albeit in an opposite direction (divergence then convergence) than Hispanics when compared with the reference population. With cumulative fertility across all age groups of 1.2 compared with 1.3 of non-Hispanic white women, broadly, the Asian population appears to have nearly achieved parity with childbearing of non-Hispanic white women with the reference population.

As shown in Figure 4.1c, there is some variation in fertility within each age group across first and second European origin women; (recall there is no third generation European cohort as they become indistinguishable from the non-Hispanic white reference category by the third generation as an artifact of variable construction). Although fertility appears similar across all groups at both the youngest and oldest ages, fertility is lower than the reference population. From the first to the second generation of European women there is not a clear pattern of convergence or divergence in each age category to non-Hispanic white fertility.

Looking across the panels reveals other patterns. Across the figures, the differences in cumulative fertility are greatest between women of Hispanic origin and all other groups, across all age categories. The figures show that each Hispanic generation has higher fertility than their Asian and European generation peers within each age group. European and Asian origin groups have lower fertility than third generation non-Hispanic white women at younger ages, but they largely achieve similar fertility levels at older ages (40-44); no such pattern can be detected for Hispanic women. While third generation Hispanic-origin women between the ages 40-44 complete their reproductive lives with an average of 2.2 children, their non-Hispanic white counterparts have 1.8 children.

In cumulative fertility across all ages, and age-specific cumulative fertility, the Hispanic pattern is markedly different, in that there is no convergence in outcomes by the third generation. From the immigrant fertility literature based on economic constraint and cultural norms models, which themselves are rooted in a classic assimilation theoretical perspective, we would expect the fertility of third generation Hispanic women to decrease relative to the second generation and move toward convergence with the reference population. Yet we observe the opposite. Here the U-shaped puzzle of Hispanic fertility is clearly evident: third generation women of Hispanic-origin have higher fertility than their second generation counterparts, further diverging from the fertility levels of their U.S. born non-Hispanic white peers.

Figure 4.1. Mean number of children ever born (CEB) by immigrant generation and origin, women ages 20-44, June Fertility Supplement, 2000-2008 CPS



4.2.2 Models – All Generation / Origin Groups

What accounts for the fertility differentials across all immigrant generation / origin groups? This section of the chapter will use OLS regression to model children ever born, using demographic theories of fertility and theories of assimilation. The first column of Table 4.2 shows the unadjusted differences in the mean number of children ever born between the generation and origin groups and non-Hispanic white women. These observed differentials tell the same story as the mean number of children by generation / origin reported in Table 4.1. As noted earlier, the differential between first generation Hispanic women and their non-Hispanic white peers is the greatest. Third generation Hispanic women have 0.73 more children than the reference group. On the other end of the spectrum, second generation Asian women have 0.54 fewer children than non-Hispanic white women. To determine if these differences were measurable, I tested the difference in the means using weighted t-tests with unequal variances. All means were significantly different from the reference group at the .001 level, with the exception of third generation Asian and second generation Hispanic women (first generation European women had statistically significant lower fertility at the $p < 0.01$ level). Notably, on average, second generation women of Hispanic origin have observed fertility nearly equal to their U.S. born non-Hispanic counterparts.

I use a similar framework to what Bean and colleagues used in their analysis of children ever born in cohorts of Mexican-origin women in the 1980s, and then control for demographic factors that are some of the strongest predictors of fertility, namely age and marital status. The second column of Table 4.2 shows the differentials adjusted for these characteristics. After controlling for these demographic factors, the differentials remain measurable. European and Asian women still have fewer children than their third generation non-Hispanic white peers; with the differential increasing for some groups, and the observed difference increasing in magnitude and becoming statistically significant for second generation Hispanic women. Although the large gap between the low fertility of second generation Asian women and the reference is markedly reduced, in contrast, the differential decreases only slightly for first generation Hispanic women, to 0.65 children.

The third column shows the fertility differentials after adjusting for additional factors that have been found to influence immigrant fertility in previous studies using a classic assimilation perspective. In addition to the demographic variables above, I include controls for educational attainment, employment status, household income categories (including missing), U.S. citizenship, and whether the woman has been in the U.S. to stay for 5 years or less. The measurable fertility differentials between European and Asian generations with the reference group disappear or attenuate to the point of the magnitude of difference being very small with the addition of these controls. First generation Asian women continue to have slightly lower fertility than the non-Hispanic white reference population, and across generations become more similar to the reference population. The pattern is consonant with what we would expect from a classic assimilation perspective—also consonant with the upwardly mobile path of segmented assimilation.

In contrast, even after controlling for these factors, all generations of Hispanic women have a measurably greater number of children than non-Hispanic white women. The differential

between first generation women and the reference group is 0.34, dropping to 0.24 for the second generation, and then widening again to 0.36 for the third generation. Although individual level demographic and socioeconomic covariates largely explain the differences between most of the European and Asian immigrant groups and their non-Hispanic white peers, they do not explain the Hispanic fertility differential. Hispanic immigrant generations remain less like the reference population in fertility outcomes even after controlling for these factors. More importantly, while the decline in fertility from the first to the second generation suggests convergence, divergence is observed from the second to the third generation. The U-shaped pattern remains, even after controlling for these factors, indicating that fertility outcomes in Hispanic generations cannot be explained by classic assimilation theory and suggesting a segmented assimilation story. The next section will focus exclusively on generations of Hispanic women, in order to investigate these patterns more closely.

Table 4.2. Unadjusted and adjusted differences in mean number of children ever born between generation/origin groups of women and non-Hispanic white women ages 20-44, June Fertility Supplement, 2000-2008 CPS

<i>Generation/Origin</i>	Children Ever Born Differentials Between Generation/Origin Groups and Non-Hispanic White Women		
	Unadjusted	Adjusted ¹	Adjusted ²
3 rd Gen Non-Hispanic White			
3 rd Gen Hispanic [^]	0.40 ^{***}	0.51 ^{***}	0.36 ^{***}
3 rd Gen Asia	-0.11	0.03	0.06
2 nd Gen Hispanic	0.04	0.36 ^{***}	0.24 ^{***}
2 nd Gen Asia	-0.54 ^{***}	-0.11 ^{***}	-0.03
2 nd Gen Europe	-0.15 ^{***}	-0.15 ^{***}	-0.10 ^{***}
1 st Gen Hispanic	0.73 ^{***}	0.65 ^{***}	0.34 ^{***}
1 st Gen Asia	-0.10 ^{***}	-0.25 ^{***}	-0.07 ^{**}
1 st Gen Europe	-0.11 ^{**}	-0.25 ^{***}	-0.05

Note: Pooled data from 2000, 2002 2004, 2006, and 2008 June CPS with Fertility supplement for civilian women 15-44. Women born in, or parents born in Puerto Rico or U.S. outlying areas are excluded. n=93,967

¹ OLS regression model controls for years from age 30, years from age 30 squared, and marital status.

² OLS regression model controls for years from age 30, years from age 30 squared, marital status, education attainment, employment status, household income categories including missing, U.S. citizenship, and in U.S. 5 years or less.

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

Origin:

Asia: Bangladesh, Bhutan, Burma, Cambodia, China, Hong Kong, India, Indonesia, Japan, Korea/South Korea, Laos, Malaysia, Nepal, Philippines, Singapore, Taiwan, Thailand, Vietnam

Hispanic: Belize, Costa Rica, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama

[^] identifiable by birthplace of both parents US and response to origin/descent question as Mexican/Chicano or Central American

Europe: Western and Central Europe, Canada, Australia and New Zealand

4.3 THE HISPANIC FERTILITY PUZZLE

From Table 4.2, it becomes apparent that demographic and socioeconomic factors explain a large piece of the difference in the fertility of Asian and European-origin women and U.S. born non-Hispanic white women. These factors influence the differentials between Hispanic fertility and the reference group as well. However, unlike the fertility differentials of most Asian and European groups, the magnitude of the differentials and statistical significance remain across all Hispanic generations even after I control for a number of factors. The U-shaped pattern remains, suggesting that other factors contribute to childbearing patterns across generations of Hispanic women. The observed pattern holds even when I examine observed fertility across 5-year age groups. Notably, these results are consistent with the Bean et. al (2000) study using CPS data collected in the 1980s.¹⁸

I now turn my focus specifically to Mexican/Central American-origin women to interrogate this puzzle more fully. In this section, I still find that demographic and socioeconomic factors are the most important determinants of fertility outcomes of Hispanic-origin women. But I include a segmented assimilation framework through the operationalization of variables that attempt to provide additional explanatory power for context of reception. Through the introduction of parent nativity composition, I also introduce the intergenerational disjunctures hypothesis, and I explain that this is largely consonant with a segmented assimilation theoretical perspective. The chapter concludes with a surprising hypothesis—ethnic identity itself may reflect these factors, influencing the measurement of fertility using public use data.

4.3.1 Analytic Framework

In Chapter 2, I laid out the theoretical framework for an analysis of immigrant fertility with the following points. First, I argued that, to date, most research on immigrant fertility has drawn predominantly upon classic assimilation theory as well as theories of selectivity and disruption to explain the fertility outcomes of immigrant women in the United States, with mixed explanatory power in empirical studies.

Second, I contended that the puzzle of Hispanic fertility, especially, cannot be explained with prevailing theories of immigrant fertility and thus we should incorporate the more recently explicated theory of segmented assimilation into our analytic frameworks. Segmented assimilation posits that structural factors (e.g. quality of school system, employment opportunities) and contextual factors (e.g. refugee status, reception of receiving community, availability of institution support) create barriers to employment and other opportunities differentially for immigrant groups, effectively creating distinct trajectories for immigrant assimilation. These trajectories range from upward mobility or assimilation to mainstream status, to stagnation or downward mobility to a marginalized, often racialized, group at the bottom, as well as rejection of assimilation altogether into oppositional identities or selective acculturation (ethnic enclaves would be an example). When applied to an analysis of vital events, a theory of

¹⁸ The Bean et. al (2000) study looked specifically at the fertility of Mexican women across generations, but given that Mexican-origin women comprise 86.2 percent of the second generation Hispanic cohort and 79.5 percent of the first generation Hispanic cohort in my sample, I contend the two studies are comparable.

segmented assimilation will help explain the widening fertility differential from the second to the third generations of Hispanic women, away from the American “mainstream”.

Finally, I argued that the second generation occupies a unique space in society where structural, cultural, and period factors collide with family dynamics in a way not generally experienced by U.S. born children of U.S. born adults (Eckstein 2002; Foner and Dreby 2011; Rumbaut 2001; Zhou 1997). I hypothesized that this confluence of factors creates particular circumstances within which “intergenerational disjunctures” can occur. Using this concept together with segmented assimilation theory may provide additional explanatory power for outcomes including family formation. Below I explain the concept more fully.

Intergenerational disjunctures occur when parent-child dynamics operating in relation to structural and contextual factors create particular loci for action. Usually, they will be specific to first and second immigrant generation interaction and would have less application to native-born families. While I believe structural and contextual factors will have greatest explanatory power for second generation outcomes, I contend that the intergenerational disjuncture hypothesis allows for us to introduce individual agency within a segmented assimilation framework.

There is already a growing body of literature on intergenerational conflict (Foner and Dreby 2011). In addition, within a theory of segmented assimilation, Portes and Rumbaut also conceive that parent-child dynamics around language, insertion into the ethnic community, and learning of American customs creates a continuum of acculturation which can range from consonant to dissonant, where dissonant acculturation places children at risk for downward assimilation. Consonant acculturation, while not guaranteeing successful assimilation, often “lays the basis” for the likelihood of better outcomes (2001:54). On its face, an intergenerational disjuncture hypothesis is similar to dissonant acculturation or simply intergenerational conflict, as intergenerational disjunctures could be hypothesized to most often occur as sites of conflict between the immigrant parents’ orientation to the home country and their children’s orientation to U.S. society. For example, immigrant parents attempt to imbue their children with their values and practices around family life which are taken from their home country (Espiritu 2001; Toro-Morn and Alicea 2003). Intergenerational disjunctures could occur when the second generation takes as their frame of reference the values of their peer-group and acts discordantly with the parent values.

Children of immigrants switching into parental roles as language brokers, cultural interpreters, or institutional guides can also create sites of conflict.¹⁹ For example, children of immigrants that live in a community with fewer co-ethnics may take up English and take their U.S. community as their frame of reference more quickly or easily than their parents. They may become interpreters of both language and culture for their parents. Or living in a community with less employment opportunity may require that adolescent children of immigrants to contribute economically to the family. Portes and Rumbaut characterize these examples as role reversal and as examples of dissonant acculturation, often tied to downward mobility (2001).

¹⁹ “Language brokering” is defined as translating on behalf of parents and family and may include both face-to-face interactions and written documentation. Children may not simply translate but may alter the communication to best convey the intent between parties (Katz 2014; Tse 1995)

With formulations of intergenerational conflict and consonant and dissonant acculturation already existing, why do we need this hypothesis? First, at its simplest, I attempt to provide a common language that can be used across disciplines for the sites where immigrant family relations and structural factors meet, in which the site of action is not necessarily one of conflict. Intergenerational disjunctures can occur within both consonant and dissonant acculturation. For example, immigrant parents may uptake English and U.S. customs alongside their children in a joint search for integration into U.S. society. Portes and Rumbaut would frame this as consonant acculturation (2001). Continuing the example, immigrant parents and children could have consonant goals for educational and employment mobility of the second generation, but period events (which may transform into structural barriers in the long term but in the short term can be experienced as “shocks”) may be the site of action that could have potential long-term consequences for the second generation’s assimilation trajectory. One recent example is when fears of increased immigration enforcement caused a sharp decline in applications of student financial aid through the California Dream Act in early 2017 (Resmovits 2017).

In addition, a hypothesis of intergenerational disjunctures includes temporal and situational elements that seem to be missing in structural assimilation theory. While role reversal can certainly lead to conflict and intergenerational conflict, it could also be hypothesized that role reversal in one period or particular situation create opportunities in another. The twelve-year old that acted as language broker and institutional guide for her mother at community health clinic visits may have gained competencies that translated to other areas of life at a different period of time, such as better ability to navigate high school in adolescence. While there is not a great amount of literature in this area, there is some evidence to support this view; one study found that language brokering contributed to higher standardized test scores (Dorner, Orellana, and Li-Grining 2007). Finally, few studies of immigrant fertility use the segmented assimilation framework (although the body of literature is growing) and none that I know of have incorporated concepts of parent-child dynamics within the segmented assimilation framework.

The concept of intergenerational disjunctures is extremely difficult to operationalize with cross-sectional data and nearly impossible within the available CPS data I have (I will propose an ideal data set in the conclusion and provide additional discussion). However, one area where we may be able see a sign for this mechanism of action is through the composition of the parents’ nativity of second generation women. By definition, second generation women can have two foreign-born parents, a foreign-born father with U.S.-born mother, or a foreign-born mother with U.S.-born father (the 1.5 generation, which is included here, will typically have both parents foreign born as they migrate by the age of 5). In this analysis, this means two Mexico- or Central American born parents, or one Mexico- or Central American born parent and one U.S. born parent.

First, composition of parents’ nativity could support an intergenerational disjunctures hypothesis via cultural ties to the origin country which the second generation does not share. When both parents are foreign born, their shared experiences of immigration, shared foreign language, shared habitus create a sense of ‘otherness’ or alienation in their children as they navigate life without the same history. Depending on the context of the community in which they live, two foreign-born parents may require their second generation children to take family roles most native born individuals do not encounter; such as serving as interpreter. One could

hypothesize that these sites of conflict, especially in a context of structural barriers to integration, would result in downward mobility and would be largely consonant with higher fertility in a segmented assimilation framework. However, as mentioned earlier, they could also be benign or beneficial in other contexts, possibly contributing to upward mobility. Alternatively, in families with two foreign born parents, immigrant parents and their children may willingly encourage intergenerational disjunctures themselves by pushing their children to strive for those very things they immigrated for—and thus to ultimately encourage their children to educationally, economically and socially differentiate themselves to attempt upward mobility. These actions of striving, especially in the face of structural barriers or negative context of reception could very well work in a similar direction hypothesized by the minority group status concept, in which women would have fewer children to achieve their mobility goals.

An intergenerational disjuncture hypothesis may suggest a weaker link to outcomes for children with one foreign-born parent, as the very presence of one U.S.-born parent may indicate that the foreign-born parent has already assimilated to some extent to U.S. society, and fewer opportunities exist for intergenerational disjunctures. Upon initial thought, one may expect lower fertility of women with only one foreign born parent, as we have expected that some amount of assimilation has occurred due to marriage to a native-born individual. However, in a segmented assimilation framework we must think about the educational and economic characteristics of the U.S.-born spouse. Thus, the direction of fertility outcomes in second generation women with one foreign-born parent, relative to third generation women, is unclear.

4.3.2 Observed Characteristics of Hispanic-origin women

In the observed characteristics of all generation and origin groups (Table 4.1) I showed that all generations of Hispanic-origin women have lower income and educational attainment relative to non-Hispanic white women. However, as noted previously, there are also many differences in demographic and socioeconomic characteristics *between* generations of Hispanic-origin women. Many of these differences are most likely associated with the observed pattern of Hispanic fertility in the United States. Table 4.3 extends the comparison of characteristics across all origin groups shown in Table 4.1 to further characterize Hispanic-origin women only.

Second generation women are approximately three years younger than their first and third generation counterparts. A greater percentage of these women are in the 20-24 and 25-29 age categories than the other generations, which are nearly evenly distributed in each age group. Associated with their young age is their marital status. Less than 46 percent of second generation women are married compared with 50 percent of the third generation and nearly 70 percent of the first generation. Almost 43 percent of second generation women have never married, more than the other generations.

There are some important differences in state of residence by generation, although all generations are concentrated in the west and the south. All Hispanic women are most likely to live in the west, which includes states like California, which has traditionally been a primary destination for Mexican immigrants. In contrast, 10 percent or less of each generation lives in the Midwest with the smallest percentage of each generation living in the northeast. It is in California and Texas where the population is centered; 67.5 percent of third (and higher)

generation women live in California, compared with 68.4 percent of the second generation and 56 percent of the first generation. The difference in composition of state residence can largely be attributed to the long history of migration to these states. Texas has a higher percentage of third generation women, at nearly 38 percent; whereas 44 percent of second and 37 percent of first generation women live in California. The larger share of first generation women residing in states *other* than California, Texas, and Arizona (12-13% more than the second and third generations) reflects the changing geography of immigration to “non-gateway” states since 1990 (Massey 2010; Zuniga and Hernandez-Leon 2006).

Although second generation Hispanic women are slightly younger than the other cohorts, they still have the highest levels of educational attainment. Nearly half of these women have attended at least some college, a difference of 5 percent with the third generation, and a stark 33 percent difference with the first generation. And among women age 20-24, 27.1 percent of second generation women are currently enrolled in high school or college, compared with only 17.7 percent of third generation women and 6.5 percent of the first generation. Earlier in the chapter, we saw that first generation Hispanic women had a clear educational disadvantage compared with first generation women of Asian and European origin. This disadvantage is just as evident within generations of Hispanic women. Nearly 58 percent of first generation women have less than a high school education, compared with less than 20 percent of second and third generation women.

It appears that the low educational attainment of first generation women is associated with relative income disadvantage as well, whereas the second and third generations have similar distributions. Nearly half of first generation women live in households with incomes less than \$30,000, 15.8 percentage points more than the second generation, and 13.1 percentage points more than the third generation. Whereas approximately 16 percent of the third generation and 13.8 percent of the second generation are at the top of the income distribution with household incomes over \$75,000, only 5.7 percent of first generation women have household incomes over this amount. An important limitation to note here is that income is missing for approximately 14 percent of first and third generation women, and for 11 percent of second generation women (see Chapter 3 for variable description).

In addition to the demographic and socioeconomic factors, there are other factors that operationalize structural assimilation. Documentation status has clear implications for how opportunity is structured for these women—in terms of employment and access to social welfare benefits. Clearly, the first generation has not been born in the U.S. In turn only 17 percent are U.S. citizens. As we would expect, 100 percent of the third generation and 91 percent of second generation women are U.S. citizens²⁰. Perhaps as a result of citizenship status and low education levels, first generation women have a lower employment rate and are much more likely to be out of the labor force than are the other generations.

The context of the women’s communities, as operationalized by the composition of the population in the counties (or if county information was missing, states) in which these women reside may exert cultural and economic opportunity influence. There are minimal differences

²⁰ Recall that the second generation includes women who were born outside of the United States, but immigrated to the U.S. by age 5.

across generational cohorts in the percent in the county that live at the poverty level, but larger differences in percent of foreign born and percent that speak Spanish at home. Although the magnitude of the differences are not large, on average, second generation women live in counties with a higher percentage of persons that speak Spanish in the home and in counties with the more foreign born persons relative to the other generations.

The composition of parent nativity was discussed at length in the section above as a possible proxy measure by which to test the intergenerational disjuncture hypothesis. By artifact of the generation definitions, 100 percent of first generation Hispanic women had foreign born parents, and all third generation Hispanic women had U.S. born parents. Second generation women, by definition, could have one or both parents foreign born, with at least one parent born in Mexico/Central America. In the second generation, approximately 70 percent of women had two foreign parents, and in the remaining 30 percent with one foreign born parent, 16.9 percent of women had a foreign born father and a 13.0 percent had a foreign born mother.

Whether these factors influence fertility differentials among the three generations of Hispanic-origin women is explored with multivariate regression analysis in the following section.

Table 4.3. Characteristics of Hispanic women age 20-44 by immigrant generation status, June Fertility Supplement, 2000-2008 CPS

Generation Status	3rd+ Gen	2nd Gen	1st Gen
<i>Characteristic</i>			
<i>Number of Observations</i>	2,734	2,365	6,047
<i>Mean Number of Children (CEB)</i>	1.71	1.35	2.04
<i>Mean Age</i>	31.3	28.6	32.3
<i>Age Categories (%)</i>			
20-24	22.8	34.6	15.2
25-29	22.3	29.3	21.3
30-34	22.6	26.1	21.8
35-39	18.3	17.6	23.6
40-44	18.8	12.5	21.6
<i>Region of Residence (%)</i>			
Northeast	1.8	3.0	6.1
Midwest	10.0	8.3	9.6
South	42.6	31.1	33.7
West	45.6	57.6	50.6
<i>Lives in State (%)</i>			
Arizona	5.5	5.6	4.7
California	29.8	44.0	37.2
Illinois	2.9	4.6	5.0
Texas	37.7	24.4	18.8
Other	24.1	21.4	34.3
<i>Marital Status (%)</i>			
Married	50.0	45.7	69.7
Widowed, divorced or separated	15.9	11.4	10.1
Never-married	34.0	42.9	20.2

Generation Status	3rd+ Gen	2nd Gen	1st Gen
<i>Characteristic</i>			
<i>Currently enrolled in HS/College</i> (% of women ages 20-24)	17.7	27.1	6.5
<i>Education (%)</i>			
Less than high school	19.1	18.0	57.5
High school or GED	36.3	32.7	25.4
Some college	30.8	34.9	11.1
BA or higher	13.8	14.4	6.0
<i>Employment (%)</i>			
Employed	68.2	68.6	52.4
Unemployed	5.5	4.2	3.8
Not in labor force	26.2	27.2	43.8
<i>Household Income (%)</i>			
< \$15,000	15.2	11.5	18.9
\$15-29,999	18.9	19.9	28.3
\$30-59,999	28.4	32.8	28.7
\$60-74,999	8.1	8.7	4.1
\$75,000+	15.9	15.8	5.7
Missing	13.5	11.3	14.4
<i>In U.S. 5 years or less (%)</i>	--	--	29.3
<i>U.S. Citizen</i>	100.0	90.7	17.0
<i>Parent Composition</i>			
Both parents US born	100.0	--	--
Both parents foreign born	--	70.1	100.0
Mother foreign born	--	13.0	--
Father foreign born	--	16.9	--
<i>County / State Contextual Variables (Mean)</i>			
% in county/state that speak Spanish at home	27.5	29.9	24.1
% in county/state that are foreign born	17.8	21.7	20.3
% in county/state in poverty	15.7	16.0	14.5

Note: Pooled data from 2000, 2002, 2004, 2006, and 2008 June CPS with Fertility supplement for civilian women 15-44. Women or parents born in Puerto Rico or U.S. outlying areas are excluded

1st generation: Birthplace of woman is Mexico/C. Am.

2nd generation: Birthplace of at least one parent is Mexico/C. Am. and woman's birthplace US; also includes women born Mexico/C. Am but immigrated to the U.S. by age 5

3rd generation: Birthplace of both parents U.S. and woman self-identified as Mexican, Mexican American, Mexicana, Chicano/-a or Central American to origin/descent question

Mexico/C. Am: Belize, Costa Rica, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Central Am.

4.3.3 Multivariate Analysis of Fertility across Hispanic Generations

One of the most striking findings in Table 4.3 is that the characteristics associated with structural assimilation, or incorporation into economic and social life in the U.S., generally do not linearly improve over the three generations. First generation women are highly disadvantaged in income and education relative to both the second and third generations. While this education

disadvantage greatly shrinks for the second generation, it increases again from the second to the third generation; household income is largely unchanged from the second to the third generation. Differentials in the observed characteristics offer clues as to how these factors may influence or mediate cumulative fertility. Can the pattern of Hispanic fertility be explained by differences in background factors, or will they persist? In this section, I use a series of multivariate regression models (see Table 4.4) to test the conceptual framework I laid out in Chapter 2. Because we are most interested in the difference in fertility between second and third generation women that creates the unique curvilinear pattern of Hispanic fertility, I include only second and third generation women in this analysis. I first describe the models and results, and follow with a more in-depth interpretation.

Model 1 starts with a basic model with slight modification from the generation / origin analysis earlier in the chapter, testing whether the socioeconomic factors identifying structural assimilation account for the fertility differentials second and third generations of Hispanic-origin women. Model 2 includes the composition of second generation parent nativity. As I described above, this measure is used as a measure of intergenerational disjunctures. Model 3 adds additional factors related to intergenerational disjunctures and segmented assimilation theories by incorporating state and survey year (for context of reception). Finally, Model 4 more fully develops the segmented assimilation framework from Model 3, assuming that the contextual variables for percent in community that speak Spanish at home is a better measure of context of reception than simple state variables.

I include the basic demographic control variables in all models which are among the most important predictors of fertility. Table 4.4 shows that age and marital status are important predictors of children ever born, in the expected direction. In each model, the linear and square terms on age demonstrate that as age increases, CEB also increases, but at a slightly decreasing rate. As expected, being ever married (currently married or widowed, divorced or separated) are associated with higher fertility.

The series of regression models also show that socioeconomic factors associated with structural assimilation account for a large part of the generational differences in children ever born. Years of education, employment status and income are strong predictors of fertility in the expected direction. Income categories were used in the analysis, as previous research in the U.S. has shown that at the highest income levels, the effect of income on fertility appears to be mitigated to some extent. (Descriptive results by income categories, not shown here, followed this pattern as well in women with household income of \geq \$100,000, but due to relatively small sample sizes of this category I have maintained the income category of \geq \$75,000 in the analyses). Each additional year of school is associated with lower fertility. Being employed also predicts that a woman will have fewer children.

When these characteristics are held constant, second generation women still have 0.11 fewer children than their third generation peers ($p < 0.01$; Model 1; Table 4.4) although the differences are moderated from the unadjusted -0.36 differential (Table 4.3).²¹ Model 1 serves to

²¹ The difference in CEB between the two cohorts varies by .01 to the model of all generation / origin groups in Table 4.2 due to the exclusion of the citizenship variable in this model (100 percent of third generation Hispanic women and 90.7 percent of second generation women are citizens) as well as the reclassification in this model of the

again demonstrate the salience of second generation status as a statistically significant predictor of lower fertility, before we move into an examination of why this difference persists.

Model 2 includes the measure of parent nativity composition. As described above, I reclassified the second generation as three categories, second generation women with a foreign born mother, second generation women with a foreign born father, and second generation women with two foreign born parents, with the third generation remaining as the reference category. After rejecting the null hypothesis that the coefficients for categories of parent nativity composition are simultaneously zero (model not shown; $F_{3, 5095} = 23.65$; $p < 0.001$), I modeled the composition of second generation parent nativity in addition to the socioeconomic predictors from Model 1.

In Model 2, parent composition does indeed have a statistically significant effect. Second generation women with both parents foreign-born have 0.13 fewer children than third generation women, when demographic and structural factors are held constant ($p < 0.01$; Model 2; Table 4.4). Yet the effect is not present for women with only one foreign born parent. That is, when all of the socioeconomic characteristics are held constant, the cumulative fertility of second generation women with one foreign born parent is statistically indistinguishable from the third. (However, it should be noted that the direction of the point estimates is negative, and the effect of foreign born mother just misses statistical significant at the 0.1 level.). I will return to this interpretation below.

In Model 3, I included survey year variables to control for any differences due to period changes across the survey years (with 2000 as the reference year). I also included the dummy variables for California and Texas (the reference is all other states). Given the long history of immigration to California and Texas, and the fact that these states have the greatest concentration of Mexican / Central American-origin population, in a segmented assimilation framework we might expect that they would have a favorable context of reception for immigrants, and thus may provide added explanation for CEB outcomes in second and third generation women. In addition, California has relatively favorable institutional support for both documented and undocumented immigrants compared to nearly all other states, which may support higher fertility; perhaps this will partly explain the differential. While I did not expect survey year to have an effect given the relatively narrow window of time, surprisingly, the state variables added no explanatory power to the model.

The measurable effects in Model 3 remain largely unchanged in Model 4, when I replaced the California and Texas state dummy variables with the quartiles of percent in county that speak Spanish at home as a better measure with which to test a segmented assimilation theory. Percent foreign born and percent in poverty were originally evaluated for inclusion in the model (results not shown) because they were not highly correlated in the full CPS sample. However, in a Hispanic immigrant generations sample, the three variables were highly correlated. I chose to include the variable that had most relevance for a segmented assimilation framework.

two dummy variables married and widowed/separated/divorced into one ever married variable (reference is never married).

Communities with a higher percentage of Spanish speakers could indicate that Hispanic sociocultural norms are stronger; from a cultural norms model of immigrant fertility stronger cultural norms and values could be hypothesized to influence fertility toward maintenance of patterns of the origin country. If the co-ethnic community is sufficiently sized with strong institutions, Portes and Rumbaut contend that this can have a protective effect in a segmented assimilation framework, allowing for selected acculturation that provides greater opportunity for upward mobility (2001). But the same measure could indicate that these communities are more likely to contain individuals who are linguistically isolated. From a segmented assimilation perspective, linguistic isolation can also be the source of intergenerational conflict when immigrant generation parents and second generation children experience differing rates of acculturation or dissonant acculturation (Foner and Dreby 2011; Portes and Rumbaut 2001; Smokowski, Rose, and Bacallao 2008; Suarez Orozco and Suarez Orozco 2001; Zhou 1997) . The effect on the direction of fertility outcomes is less clear.

Even though previous studies have shown that contextual variables can have modest effects on outcomes in studies of immigrant fertility (Hill and Johnson 2004), here they have little effect in this model. It is likely that measures at a lower level of geographic specificity, such as census tract, would be more meaningful than the levels available for use. One exception is that with their inclusion, the parent nativity variable for (second generation's) mother foreign-born becomes statistically significant. It is not surprising that what is captured by the foreign born mother variable co-varies to some extent with geographic concentration of Spanish speaking persons in the U.S.

Table 4.4 OLS regression of children ever born of 2nd and 3rd generation Hispanic women ages 20-44, June Fertility Supplement, 2000-2008 CPS

Model <i>Characteristic</i>	Model 1 Coef (Robust SE)	Model 2 Coef (Robust SE)	Model 3 Coef (Robust SE)	Model 4 Coef (Robust SE)
<i>Years from age 30</i>	0.063 (0.003)***	0.063 (0.003)***	0.063 (0.003)***	0.062 (0.002)***
<i>(Years from age 30)²</i>	-0.003 (0.000)***	-0.003 (0.000)***	-0.003 (0.000)***	-0.003 (0.000)***
<i>Ever Married</i>	0.923 (0.044)***	0.924 (0.044)***	0.929 (0.044)***	0.924 (0.047)***
<i>Years of Education</i>	-0.131 (0.009)***	-0.132 (0.009)***	-0.132 (0.009)***	-0.131 (0.009)***
<i>Employed</i>	-0.202 (0.042)***	-0.202 (0.042)***	-0.201 (0.042)***	-0.201 (0.039)***
<i>Income (ref is <\$15,000)</i>				
\$15,000 - <\$30,000	-0.246 (0.074)***	-0.243 (0.074)**	-0.243 (0.074)**	-0.243 (0.088)**
\$30,000 - <\$60,000	-0.402 (0.070)***	-0.399 (0.070)***	-0.402 (0.070)***	-0.400 (0.088)***
\$60,000 - <\$75,000	-0.404 (0.085)***	-0.401 (0.085)***	-0.410 (0.086)***	-0.401 (0.057)***
≥ \$75,000	-0.513	-0.511	-0.521	-0.510

Model <i>Characteristic</i>	Model 1 Coef (Robust SE)	Model 2 Coef (Robust SE)	Model 3 Coef (Robust SE)	Model 4 Coef (Robust SE)
	(0.075)***	(0.075)***	(0.077)***	(0.062)***
Missing	-0.437	-0.433	-0.437	-0.431
	(0.085)***	(0.085)***	(0.085)***	(0.065)***
<i>2nd Generation (ref is 3rd Gen)</i>	-0.109			
	(0.037)**			
<i>2nd Generation by parent nativity (ref is 3rd Gen)</i>				
Both parents foreign-born		-0.127	-0.138	-0.126
		(0.040)**	(0.041)***	(0.032)***
Mother foreign-born		-0.114	-0.115	-0.114
		(0.073)	(0.074)	(0.055)*
Father foreign-born		-0.032	-0.034	-0.028
		(0.071)	(0.071)	(0.046)
<i>Survey Year (ref is 2000)</i>				
2002			-0.027	-0.029
			(0.061)	(0.068)
2004			-0.024	-0.024
			(0.063)	(0.103)
2006			-0.022	-0.022
			(0.058)	(0.079)
2008			-0.024	-0.024
			(0.057)	(0.070)
<i>Lives in California</i>			0.027	
			(0.044)	
<i>Lives in Texas</i>			-0.044	
			(0.044)	
<i>% in county speak Spanish at home (Quartiles, ref is Q4)</i>				
Q1. <10%				-0.030
				(0.068)
Q2. 10% - <22%				0.021
				(0.076)
Q3. 22 - <33.2%				0.025
				(0.061)
<i>Constant</i>	3.351	3.353	3.388	3.357
	(0.151)***	(0.151)***	(0.158)***	(0.194)***
Observations	5,099	5,099	5,099	5,099
Adjusted R ²	0.33	0.33	0.33	0.33

Robust standard errors in parentheses; * p<0.05; ** p<0.01; *** p<0.001

Across Models 2 through 4, the coefficient on two foreign born parents remains stable and statistically significant. It seems that the intergenerational disjunctures hypothesis here could

offer a feasible explanation for what we observe in the data. Second generation women may have fewer children to achieve their mobility goals in the face of structural barriers that are more likely to be present when growing up with two foreign born parents.

We must interrogate this interpretation further by examining other potential reasons why two foreign born parents would be statistically significant in the model while one foreign born parent does not have explanatory power. As described in Chapter 3, the second generation is constructed to include women who immigrated to the U.S. by age 5. All of these women would have two foreign born parents. Perhaps there are meaningful but unobservable differences between this cohort and the larger cohort of second generation Hispanic women that would drive fertility of second generation women with two foreign born parents downward. Therefore, I run all models again removing these women from the analyses. The results are presented in Table 4.5, and they are basically unchanged. After removing these women, second generation women with both parents foreign-born still have 0.13 fewer children than third generation women, when demographic and structural factors are held constant ($p < 0.001$; Models 2 and 4; Table 4.5). The inclusion of women who immigrated to the U.S. by age 5 in the second generation cohort is not influencing the results.

Table 4.5 OLS regression of children ever born of 2nd and 3rd generation Hispanic women ages 20-44 excluding immigrated age ≤ 5 , June Fertility Supplement, 2000-2008 CPS

Model <i>Characteristic</i>	Model 1 Coef (Robust SE)	Model 2 Coef (Robust SE)	Model 3 Coef (Robust SE)	Model 4 Coef (Robust SE)
<i>Years from age 30</i>	0.062 (0.003)***	0.062 (0.003)***	0.062 (0.003)***	0.062 (0.003)***
<i>(Years from age 30)²</i>	-0.003 (0.000)***	-0.003 (0.000)***	-0.003 (0.000)***	-0.003 (0.000)***
<i>Ever Married</i>	0.941 (0.046)***	0.942 (0.046)***	0.949 (0.046)***	0.944 (0.042)***
<i>Years of Education</i>	-0.135 (0.010)***	-0.135 (0.010)***	-0.136 (0.010)***	-0.135 (0.010)***
<i>Employed</i>	-0.209 (0.044)***	-0.208 (0.044)***	-0.208 (0.044)***	-0.208 (0.038)***
<i>Income (ref is <\$15,000)</i>	-0.293 (0.077)***	-0.290 (0.077)***	-0.289 (0.077)***	-0.290 (0.074)***
\$15,000 - <\$30,000	-0.436 (0.072)***	-0.434 (0.072)***	-0.436 (0.073)***	-0.434 (0.072)***
\$30,000 - <\$60,000	-0.474 (0.088)***	-0.471 (0.088)***	-0.481 (0.089)***	-0.471 (0.055)***
\$60,000 - <\$75,000	-0.553 (0.078)***	-0.551 (0.078)***	-0.560 (0.080)***	-0.549 (0.050)***
\geq \$75,000	-0.467 (0.089)***	-0.463 (0.089)***	-0.468 (0.089)***	-0.462 (0.067)***
Missing	0.062 (0.038)**	0.062 (0.038)**	0.062 (0.038)**	0.062 (0.038)**
<i>2nd Generation (ref is 3rd Gen)</i>	-0.103 (0.038)**	-0.103 (0.038)**	-0.103 (0.038)**	-0.103 (0.038)**

Model <i>Characteristic</i>	Model 1 Coef (Robust SE)	Model 2 Coef (Robust SE)	Model 3 Coef (Robust SE)	Model 4 Coef (Robust SE)
<i>2nd Generation by parent nativity (ref is 3rd Gen)</i>				
Both parents foreign-born		-0.132 (0.042)**	-0.140 (0.043)**	-0.134 (0.034)***
Mother foreign-born		-0.088 (0.076)	-0.088 (0.076)	-0.088 (0.053)
Father foreign-born		-0.026 (0.073)	-0.027 (0.073)	-0.023 (0.047)
<i>Survey Year (ref is 2000)</i>				
2002			-0.032 (0.063)	-0.034 (0.053)
2004			0.005 (0.066)	0.005 (0.088)
2006			-0.023 (0.061)	-0.025 (0.081)
2008			-0.027 (0.059)	-0.029 (0.067)
<i>Lives in California</i>			0.034 (0.047)	
<i>Lives in Texas</i>			-0.033 (0.046)	
<i>% in county speak Spanish at home (Quartiles, ref is Q4)</i>				
Q1. <10%				-0.061 (0.071)
Q2. 10% - <22%				-0.001 (0.078)
Q3. 22 - <33.2%				0.006 (0.062)
<i>Constant</i>	3.426 (0.159)***	3.426 (0.159)***	3.449 (0.166)***	3.442 (0.198)***
Observations	4,636	4,636	4,636	4,636
Adjusted R ²	0.33	0.33	0.33	0.33

Robust standard errors in parentheses; * p<0.05; ** p<0.01; *** p<0.001

Next I examine the interpretation of parent composition further, by turning for a moment to second generation women with one foreign born parent. As I discussed above, an intergenerational disjunctures hypothesis may suggest a weak mechanism of outcomes for children with one foreign-born parent, as the very presence of one U.S.-born parent may indicate that the foreign-born parent has already assimilated to some extent to U.S. society, and fewer sites exist for intergenerational disjunctures. For example, role reversal is less likely with one

native born parent; second generation children are less needed to fill the roles of language and cultural brokers. However, the mechanisms by which fertility would be influenced up or down in this context are unclear.

If the composition of parent nativity is largely a proxy for the second generation's parental characteristics, it could also be an indicator of assimilation trajectories. In women with only one foreign born parent, we could hypothesize that the mechanism acting on that parent's marriage to a native-born individual could also affect the outcomes for children. At first blush, marriage to a U.S.-born individual by a foreign-born person of Mexican/Central American would appear to indicate upward mobility, which is typically associated with fertility decline. But we must also consider the social and economic capital immigrants bring with them and the marriage market available to them among U.S. born persons. Unfortunately, no parent information is available in the CPS outside of parent nativity. Earlier analyses showed that first generation Hispanic women have the lowest levels of educational attainment and household income among all immigrant / origin groups analyzed. If they marry persons with similar educational and economic capital, then we may expect a downward assimilation trajectory. Unfortunately, without parent data in which to test this hypothesis, this line of inquiry must be an area of future research.

Given that 69.7 percent, 45.7 percent, and 50 percent of first, second, and third generation Hispanic women, respectively, are married, an initial examination of spouse characteristics may provide some hypothesis generating ideas about whether assimilation trajectories can be observed. The spouse characteristics are provided in Table 4.6. The composition of education of the immigrant generation spouses is very similar to that of the women generations, with the exception of the second. Over 60 percent of male spouses have a high school degree or less, nearly ten percentage points more than second generation women. This difference is reduced to five percentage points in the third generation in this unadjusted data due almost completely to the female education advantage reversing. Weak as this pattern is, can it be an indication of a selection effect? Are women who could be claiming themselves of Hispanic descent self-selecting out of this identity by the third generation? Within a segmented assimilation framework, individuals who have overcome structural barriers to achieve educational and/or economic assimilation to a mainstream population may experience their identity as a site of intergeneration disjuncture. I conclude this chapter with a brief analysis of Hispanic identity in second generation women.

Table 4.6 Spouse characteristics of married Hispanic women age 20-44 by immigrant generation status, June Fertility Supplement, 2000-2008 CPS

Generation Status	3rd+ Gen	2nd Gen	1st Gen
<i>Spouse Characteristic</i>			
<i>Number of Observations</i>	1,334	1,074	4,077
<i>Mean Age</i>	35.6	33.3	35.6
<i>Age Categories (%)</i>			
<20	0.3	1.2	0.2
20-24	6.9	7.7	5.1
25-29	22.3	29.3	21.3
30-34	17.4	26.4	17.9
35-39	22.4	25.3	23.6
40-44	22.6	18.7	23.7
45+	17.1	12.7	17.8
<i>Hispanic (%)</i>	69.2	79.3	93.9
<i>Education (%)</i>			
Less than high school	19.1	30.1	57.8
High school or GED	41.8	30.4	25.2
Some college	24.5	25.2	10.2
BA or higher	14.6	14.3	6.8
<i>Employment (%)</i>			
Armed Forces	1.6	1.8	0.4
Employed	88.3	89.6	92.2
Unemployed	3.8	3.3	3.3
Not in labor force	6.4	5.2	4.1
<i>Born U.S.</i>	87.6	54.2	9.7
<i>U.S. Citizen (%)</i>	93.3	70.7	30.0
<i>Parent Composition (of spouse, %)</i>			
Both parents US born	77.1	28.5	5.5
Both parents foreign born	16.3	62.8	92.5
Mother foreign born	2.6	4.2	1.0
Father foreign born	4.0	4.5	1.0

Note: Pooled data from 2000, 2002, 2004, 2006, and 2008 June CPS with Fertility supplement for civilian women 15-44.

Married Hispanic women only (n=6,485), excluding n=228 for missing spouse characteristics

Women or parents born in Puerto Rico or U.S. outlying areas are excluded

1st generation: Birthplace of woman is Mexico/C. Am.

2nd generation: Birthplace of at least one parent is Mexico/C. Am. and woman's birthplace U.S.; also includes women born Mexico/C. Am but immigrated to the U.S. by age 5

3rd generation: Birthplace of both parents US and woman self-identified as Mexican, Mexican American, Mexicana, Chicano/-a or Central American to origin/descent question

Mexico/C. Am: Belize, Costa Rica, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Central Am.

4.4 HISPANIC IDENTITY

In the previous descriptive analysis of spouse characteristics of Hispanic immigrant generations, a wide female education advantage (relative to spouses of married women) in the second generation reduced by half in the third generation, due almost completely to a reversal in the rates of higher education in women. Although the pattern is weak, it may indicate selection out of Hispanic identity in third generation women who have assimilated to a mainstream reference population via the mechanism of education.

Previous research has hinted that a selection effect with respect to ethnic identification may be taking place with third generation Hispanic women (Bean, Swicegood, and Berg 2000; Hill and Johnson 2004), but it has not been tested in any studies I know of. Ideally I would want to know: Are third generation and higher women selecting an ethnic status that takes them out of my sample? In generational research, we are limited to defining our third generation and higher samples through the combination of parent's nativity and Hispanic ethnicity variables. Thus, if a woman's parents' were born in the U.S. and she identifies as being of Mexican or Central American origin, she is considered third generation of Hispanic origin. However, it would be best to identify a woman as third generation through her grandparents' nativity. This way, a woman with a grandparent born in Mexico or Central America and with both parents born in the U.S. would be considered third generation, even if she answered on a survey that she was "non-Hispanic". Unfortunately, no publicly available surveys of women in the U.S. include grandparent nativity²², so in most research this woman would not be included among the Hispanic third generation. Most likely, she would be classified as non-Hispanic white.

Although I cannot directly test this hypothesis with CPS data, I test it indirectly by examining ethnic identification patterns of second generation women to see if the idea warrants further study. Table 4.7 compares characteristics of second generation Hispanic-origin women (classified as such by their parents' and their own nativity) who self-identify as non-Hispanic and Hispanic. That is, women who report at least one parent of Mexican / Central American nativity but identify as non-Hispanic (women who have "discordant" identities) comprise 6.4 percent of the cohort (n=151). They are measurably different from the women who self-identify as Hispanic, on most of the characteristics I compare. Most notably, the socioeconomic differentials are large. The household income of discordant identity women is over \$57,000, which is \$10,000 greater than non-discordant women. Over 25 percent of the discordant identity women have bachelor's degrees or higher, compared with fewer than 14 percent of the women who identify as Hispanic. The parent composition differs greatly as well—only 36.4 percent of discordant identity women have two foreign born parents compared with 72.3 percent of self-identified Hispanics. They also live in counties (or states) where the population has a lower percentage of the population that speaks Spanish in the home, a lower percentage of foreign born persons, and a lower percentage of the population living in poverty.

Overall, the women with discordant identities look more similar to third generation, non-Hispanic white population than they do the second generation cohort overall. My findings appear

²² Although the General Social Survey (GSS) includes a question on how many grandparents were born outside of the United States, the parent nativity variable does not ask country of nativity; thus the two in combination are not specified to the extent that one can construct variables of immigration generation based on country of nativity.

consistent with studies that have found that Hispanic-origin persons who do not speak Spanish (i.e. assimilated to a mainstream reference group) are more likely to change or inconsistently report Hispanic identity (Eschbach and Gomez 1998; Fernandez et al. 2017). I argue that this is strong evidence that within a structural assimilation framework, some women who achieve assimilation to the mainstream are opting out of Hispanic identity by the third generation, and the pattern of higher third generation Hispanic fertility that we observe can at least partly be attributed to this selection effect.

Table 4.7 Characteristics of 2nd generation women ages 20-44, by identification as Hispanic, June Fertility Supplement, 2000–2008 CPS

Identity Status	Non-Hispanic Identity	Hispanic Identity	p-value
<i>Characteristic</i>			
<i>Number of Observations</i>	151	2,213	
<i>% of Observations</i>	6.4	93.6	
<i>Mean Age</i>	30.2	28.5	0.010
<i>Ever married (%)</i>	61.1	56.9	0.362
<i>Mean Number of Children (CEB)</i>	1.4	1.3	0.661
<i>Education (%)</i>			0.001
Less than high school	9.4	18.6	
High school or GED	32.7	32.7	
Some college	32.6	35.0	
BA or higher	25.3	13.7	
<i>Mean Household Income[^]</i>	\$57,011	\$46,951	0.009
<i>Parent Composition (%)</i>			
Both parents foreign born	36.4	72.3	<0.001
One parent foreign born	63.6	27.7	
Mother foreign born (% of above)	43.1	43.7	0.918
Father foreign born (% of above)	56.9	56.3	
<i>Region of Residence (%)</i>			
Northeast	9.0	2.6	<0.001
Midwest	12.7	8.0	
South	28.8	31.2	
West	49.5	58.2	
<i>County / State Contextual Variables</i>			
% in county/state that speak Spanish at home	20.3	30.5	<0.001
% in county/state that are foreign born	18.5	21.9	<0.001
% in county/state in poverty	14.0	16.1	<0.001

Note: Pooled data from 2000, 2002, 2004, 2006, and 2008 June CPS with Fertility supplement for civilian women 15-44. Women or parents born in Puerto Rico or U.S. outlying areas are excluded; n=2,364 (one individual excluded for missing Hispanic identity)

2nd generation: Birthplace of at least one parent is Mexico/C. Am. and woman's birthplace U.S.; also includes women born Mexico/C. Am but immigrated to the U.S. by age 5

Mexico/C. Am: Belize, Costa Rica, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Central Am.

^ n=260 women missing household income (6.0% non-Hispanic identity; 11.3% Hispanic identity; p=0.043)

CONCLUSION

The data analysis in this chapter leads to important conclusions about the pattern of fertility among generation and origin groups, and generations of Hispanic women in particular. Overall, Hispanic women are educationally and economically disadvantaged relative to their peers. First generation Hispanic women are starkly so, even compared to their second and third generation Hispanic peers. All generations of Hispanic-origin women exhibit higher fertility than their Asian, European and non-Hispanic white peers. When socioeconomic factors are held constant, most of the significant differentials disappear between each generation of Asian and European women and (third generation) non-Hispanic whites. In contrast, the fertility of second and third generation women of Hispanic-origin remains significantly different than that of non-Hispanic white women. The observed U-shape of Hispanic fertility remains.

The puzzle of Hispanic fertility cannot be explained with prevailing theories of immigrant fertility and requires the inclusion of a theory of segmented assimilation into an analytic framework. Segmented assimilation posits that structural and contextual factors differentially create barriers to employment and other opportunities for immigrant groups, and create distinct trajectories for immigrant assimilation that may look like straight-line assimilation or upward mobility, uneven assimilation, stagnation or downward mobility to a marginalized, often racialized, group at the bottom.

I hypothesized that “intergenerational disjunctures” together with segmented assimilation theory may provide additional explanatory power for outcomes including family formation. Intergenerational disjunctures occur when parent-child dynamics operating in relation to structural and contextual factors (and unique to first and second generation immigrants) create particular loci for action. Using the composition of parent nativity to test the intergenerational disjunctures hypothesis, I compared fertility of second to third generation Hispanic women in the multivariate models and found that socioeconomic factors explain a large part of the fertility differential between these groups. However, across the models, the coefficient on two foreign born parents remains stable and statistically significant.

The intergenerational disjunctures hypothesis may offer a feasible explanation for what we observe in the data, where second generation women may reduce fertility to achieve their mobility goals in the face of structural barriers that are more likely to be present when growing up with two foreign born parents. However, the composition of parent nativity could be an indicator of assimilation trajectories if it is acting as a proxy for parent socioeconomic capital. Unfortunately, the CPS is limited in the variables I can construct to fully test a segmented assimilation theory with the added hypothesis.

The CPS data reveal another possible explanation for the pattern of fertility. In a brief descriptive analysis of spouse characteristics of Hispanic immigrant generations, a wide female education advantage (relative to spouses of married women) in the second generation reduced by half in the third generation, due almost completely to a reduction in the rate of women’s higher educational attainment. Third generation Hispanic women may be selecting out of an ethnic

identity that leaves them unobserved (or wrongly classified) in analyses of the spouse characteristics. The same mechanisms that act on selection of a marriage partner would likely act upon fertility outcomes, contributing not so much to lower rates of fertility in second generation women, but rather to the higher rates observed in third generation Hispanic women. Some women who *can do so* are opting out of Hispanic identity by the third generation. Women who are fully assimilated to a mainstream population no longer contribute data to this group.

Although I could not directly test this hypothesis with the available data, I tested it with second generation women to see if the idea merited further study. Indeed, second generation women of Hispanic origin (identified as such through the nativity of their parents) who did *not* self-identify as Hispanic, were measurably different from their peers who identified as Hispanic on almost all socioeconomic, and intergenerational disjuncture factors and contextual variables. The women with discordant identities nearly mirrored non-Hispanic white women in educational attainment and household income and also were much less likely to have two foreign born parents or live in states with a high percentage of foreign born. The discordant women are clearly a distinct group, and the explanation for this may be tightly linked to segmented assimilation theory, where selective identity occurs at the site of conflict between structural assimilation and cultural factors. Thus, when applied to an analysis of vital events, a theory of segmented assimilation will help explain the widening fertility differential from the second to the third generations of Hispanic women, away from the American “mainstream”.

Taken together, the findings are striking, and point to an assimilation process in which Hispanic immigrants become racialized and sent back to the underclass. While second generation Hispanic women are characterized by much higher educational achievement, employment, and household income relative to their first generation peers, the trend stagnates or reverses by the third generation. Hope for upward mobility, and steps taken toward it builds up with the second generation, and even legitimates some sacrifices, as exemplified by fewer children. But these immigrants and their children learn that educational achievement in the U.S. does not translate into long term gains, at least *for them*. Perhaps in relation to their home country reference point, their children have achieved. By U.S. standards, they have become the new poor. And by the third generation, they know it, too.

CHAPTER 5

CONCLUSION

At the beginning of this dissertation, we saw the formulation of fertility intentions in the words of a second generation Hispanic woman living in the United States. Notably, Maricela's intentions were articulated in relation to her immigrant parents and in relation to her non-immigrant peers. This story unfolded in the fertility data from the 2000 – 2008 June Fertility Supplements of the Current Population Survey. A puzzling pattern of fertility decline from the first to the second generation, and then reversal from the second to the third generation of Hispanic women in the United States has endured across studies using data from earlier periods (Bean, Swicegood, and Berg 2000; Frank and Heuveline 2005). This pattern contradicts some of the prevailing assumptions about incorporation of immigrant groups in the United States, yet it has been curiously understudied.

The objective of this dissertation was to examine and explain this pattern. I argued that, to date, most research on immigrant fertility has drawn predominantly upon classic assimilation theory as well as theories of selectivity and disruption to explain the fertility outcomes of immigrant women in the United States, with mixed explanatory power in empirical studies.

I contended that the puzzle of Hispanic fertility, especially, cannot be explained with prevailing theories of immigrant fertility and requires the more recently explicated theory of segmented assimilation as our analytic framework. In a segmented assimilation framework, structural and contextual factors create barriers to employment and other opportunities differentially for immigrant groups, effectively creating distinct trajectories for immigrant assimilation, which may be upward, stagnant or downward, or could be oppositional or selective. I argued that, when applied to an analysis of vital events, a theory of segmented assimilation will help explain the widening fertility differential from the second to the third generations of Hispanic women, away from the American "mainstream".

Finally, I argued that the second generation occupies a unique space in society where structural, cultural, and period factors interact with family dynamics in a way not generally experienced by U.S. born children of U.S. born adults. The sites of "intergenerational disjunctures" are where parent-child dynamics meet structural or contextual factors, for example, when a child acts as a language broker for her parent at a community health clinic.

5.1 AN IDEAL DATA SET

The concept of intergenerational disjunctures is extremely difficult to operationalize with cross-sectional data and nearly impossible within the available CPS data I had available for use. On one hand, the CPS has an advantage over other nationally representative, publicly available datasets because it has a unique combination of both fertility outcomes of interest as well questions on the country of mother, father and respondent nativity which allow for the

construction of immigrant generations. Thus I can distinguish the second generation from first generation immigrants, although the third generation cannot be distinguished from higher order generations due to lack of grandparent nativity variables. Immigrant generations have traditionally been used to determine “progress” of migrants and their descendants in the receiving country.

However, there are many limitations to the CPS for this type of study. The CPS is cross-sectional, and it has few variables that can test models of assimilation, such as structure of opportunity in the respondent’s community, parent characteristics and preferences, and questions that can identify intergenerational conflicts between parents and children.

An ideal data set might look very similar to a national, longitudinal study like the National Educational Longitudinal Study (NELS), albeit with data collection in the current period and more waves of follow up. It would contain large oversamples of second generation immigration groups (the Children of Immigrants Longitudinal Study [CILS] is an excellent example). In order to capture sites of intergenerational disjuncture over time, it would ideally start at early adolescence and follow women through the end of their childbearing years.

An ideal set of survey questions would allow for construction of measures of intergenerational relationships, and would include detailed questions about student characteristics, educational and family aspirations, school and community characteristics, family background, educational and family outcomes. It would also have parent interviews at critical periods of time where we would expect multiple loci of intergenerational disjunctures; in early adolescence, late adolescence, and perhaps in young adulthood. Respondent, parent, and grandparent country of origin would be collected. Critically, at each wave, race and ethnicity questions would be asked, unlike in most longitudinal studies. At each wave, questions about period events and their salience to the respondent would be asked. Sexual behavior, fertility, proximate determinants of fertility, fertility intentions, and other family formation questions would be critical, and they would be included in various forms in each wave. Ideally the study sample could be linked to the Area Health Resource File, to allow for multiple measures of contextual variables at the county level—everything from number of pediatricians available to pollution levels. Finally, the survey would include questions that allow for creation of measures of discordance. CILS is probably the gold standard in its questions relating to consonant and dissonant acculturation.

5.2 FUTURE RESEARCH

The current study has the potential for multiple extensions, especially as the current large wave of second generation immigrants moves through adulthood. Future studies of fertility should try to identify data sets that have information on contraceptive use, availability of contraception, and other variables related to proximate determinants. I would also like to see the research questions extend into areas of health research. A study of the Mexican mortality paradox using a segmented assimilation and intergenerational disjunctures hypothesis may garner important insights (and the idea this type of research is very exciting).

Another potentially fruitful avenue for research would be in the sites of intergenerational disjunctures where the second generation experienced a period shock (see, for example, the

example of the drop in applications for student financial aid under the California Dream Act, due to heightened fears of immigration enforcement). Natural experiments would employ a strong research design to assess long term outcomes in the second generation. How do educational trajectories change, and in the longer term, what are the downstream effects on family formation outcomes, including marriage and fertility? Extending this further, would we observe different outcomes if prior to the shock immigrant parents and children had concordant versus discordant goals for education? As with the studies I have described above, even a natural experiment design exploiting a period event would likely require both a longitudinal survey component to assess long-term outcomes and potentially a parent questionnaire.

5.3 CONCLUSION

An analysis of European, Asian, and Hispanic immigrant generations found that fertility change across immigrant generations of European and Asian women is largely consonant with what we would expect from a classic assimilation perspective—also consonant with the upwardly mobile path within a segmented assimilation framework. Although individual level demographic and socioeconomic covariates largely explain the differences between most of the European and Asian immigrant groups and their non-Hispanic white peers, they do not explain the Hispanic fertility differential.

The immigrant fertility literature has been largely rooted in classic assimilation theory to date, but this theory and its variant models are not sufficient to explain the observed pattern of Hispanic fertility. I found that the puzzling U-shaped pattern of Hispanic fertility across immigrant generations remains even after adjusting for demographic and socioeconomic factors. That is, the decline in fertility from the first to the second generation shows convergence to a non-Hispanic white reference population, yet strikingly, fertility decline reverses from the second to the third generation, diverging from the reference population. A segmented assimilation framework offers the most compelling explanation for this Hispanic fertility pattern, but it still lacks some explanatory power; a hypothesis of intergenerational disjunctures accounts for individual agency within the context of segmented assimilation.

In a new contribution to the body of literature on immigrant fertility outcomes, I found that the composition of parent nativity of second generation women is an important predictor of their lower fertility relative to third generation women, even if the exact mechanism of action is still unknown. I theorized a number of ways this mechanism could function, and I argued that this finding is further evidence that fertility change across immigrant generations in the U.S. is best explained within a segmented assimilation framework enriched by an intergenerational disjunctures hypothesis.

Another intriguing pattern was discovered in the CPS data. A female education advantage (relative to spouses of married women) in the second generation was reduced in the third generation, due almost completely to a reduction in the rate of women's higher educational attainment. Could this be a further window into assimilation processes? Are the women who *can do so* opting out of Hispanic identity by the third generation.? The same mechanisms that act on selection of a marriage partner would likely act upon fertility outcomes. What if women who are fully assimilated to a mainstream population no longer contribute data to this group? The higher

fertility rates observed in third generation Hispanic women could be a reflection of a selection effect.

Given the limitations on directly testing this hypothesis in third generation women with available datasets, I tested it with second generation women in the CPS to determine whether this idea merits further study. Indeed, I found that second generation women of Hispanic origin (identified as such through the nativity of their parents) who did *not* self-identify as Hispanic were measurably different from their peers who identified as Hispanic on almost all socioeconomic measures, and intergenerational disjuncture factors and contextual variables. The women with discordant identities are clearly a distinct group, and the explanation for this may be tightly linked to segmented assimilation theory, where selective identity occurs at the site of conflict between structural assimilation and cultural factors. This analysis provides strong evidence that by the third generation, women who have achieved assimilation to a mainstream reference group may choose not to identify themselves as Hispanic. The unique pattern of Hispanic fertility, that is, the higher fertility rates we observe in third generation Hispanic women relative to the second may be due partially to selection out of Hispanic identity.

Taken together, the findings are striking, and point to an assimilation process in which Hispanic immigrants become racialized and sent back to the underclass. While second generation Hispanic women are characterized by much higher educational achievement, employment, and household income relative to their first generation peers, the trend stagnates or reverses by the third generation. Hope builds up with the second generation, and even legitimates some sacrifices, as exemplified by fewer children. But these immigrants and their children learn that educational achievement in the U.S. does not translate into long term gains, at least *for them*.

Although this work sought to explain the puzzle of Hispanic fertility across immigrant generations within a segmented assimilation framework, in the end, we may find that the more theoretically compelling site of inquiry may be found by turning the question on its head. How does the curious pattern of Hispanic fertility across immigrant generations help enrich our theories of immigrant incorporation? A smattering of previous fertility research has hinted that a selection effect with respect to ethnic identification may be taking place with third generation Hispanic women, but no work to date has tested this hypothesis. An analysis here of second generation women finds a selection effect—that is, women who have achieved assimilation on other measures may be opting out of Hispanic identity—and suggests that this process of selection continues into the third generation and beyond. This possibility contributes a new and important modification to the segmented assimilation thesis. The findings from this dissertation demonstrate that analyses of vital events can contribute new and important insights into immigrant incorporation in the U.S.

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APPENDICES

Appendix A. Previous studies examining differential Hispanic fertility across time or generations

Study	Sample	Measures	Hypotheses and Conclusions
Abma and Krivo (1991)	PUMS 1980 Mexican-American Women	Index of three measures: percent foreign born in community, percent immigrated 1970-1980, percent that do not speak English well. Unemployment ratio Size of Hispanic population in the community	Subcultural norms: inconclusive Economic constraints: some support, depending on woman's age and parity
Bean, Swicegood and Berg (2000)	1986 and 1988 CPS Mexican-origin and non-Hispanic white women	Generations	Assimilation: inconclusive -- 2 nd generation women have lower cumulative fertility than 1 st and 3 rd generation
Blau (1992)	1970-1980 Census Immigrant Women and Native-Born Women	Source country variables (TFR, GNP, IMR, distance between country's capital and nearest gateway city, proportion of women in home country with same or higher education than respondent) Length of residence in U.S.	Assimilation: inconclusive Disruption: empirical support Selectivity: empirical support -- Widening differentials between immigrants and natives
Carter (2000)	1995 NSFG Mexican-origin women		Disruption:

Study	Sample	Measures	Hypotheses and Conclusions
Ford (1990)	1970-1980 Census Immigrant Women	Length of residence in the U.S.	Assimilation: mixed empirical support Disruption: empirical support -- Duration of time in U.S. can influence fertility up or down
Frank and Heuveline (2005)	1975-77, 1986-88, 1998-2000 CPS Generation of Mexican-origin Mexican-origin and non-Hispanic white women	Generations, personal characteristics	Assimilation: little support -- 2 nd generation has lowest completed fertility
Glick, Ruf, White, and Goldscheider (2006)	1988 NELS Asian, Mexican, black, Native American, and non- Hispanic white men and women	Generations, parent expectations, standardized test scores, school enrollment	Minority group status: Empirical support across immigrant generations -- 2 nd generation has slowest transition to family formation; partially explained by greater participation in school through adolescence
Hill and Johnson (2004)	1995 and 1998 CPS 1990 Census Women of Mexican and Central American descent	Generations, neighborhood characteristics	Assimilation: little support 2 nd generation has lowest completed fertility, but can mainly be accounted for by assimilation in education

Study	Sample	Measures	Hypotheses and Conclusions
Kahn (1994)	1980 Census and 1986 and 1988 CPS Immigrant, second generation and Native-Born Women	Generations, age at marriage, duration of marriage, length of time in U.S. Fertility expectations	Assimilation: little evidence; except fertility expectations provided strong support Selectivity: little evidence Disruption: empirical support -- Widening differentials between immigrants and natives, but due to more rapid decline in fertility for natives. However, fertility expectations decline across generations and with duration in U.S.
Parrado and Morgan (2008)	1940-1970 Censuses and 1986-2004 June CPS, Hispanic and Mexican-origin women, third-generation whites	Generations, creation of 5-year birth cohorts	Using generation-aligning methods to examine intergenerational change, finds a pattern of convergence in fertility levels across generations and between Hispanic (and Mexican-only) cohorts and white women
Stephen and Bean (1992)	1970 and 1980 Census Ever-married Mexican-origin and non-Hispanic white women		Assimilation: empirical support Disruption: empirical support

Appendix B. Weighted characteristics of women ages 20-44 by 3rd generation non-Hispanic black (NHB) and Caribbean-origin NHB generations compared with 3rd generation non-Hispanic white reference group, June Fertility Supplement, 2000-2008 CPS

<i>Generation/Origin</i>	3rd Gen Non-Hispanic White	3rd Gen Non-Hispanic Black (NHB)	2nd Gen Caribbean NHB*	1st Gen Caribbean NHB*
<i>Characteristic</i>				
<i>Number of Observations</i>	72,599	11,350	199	561
<i>Mean Age</i>	32.7	32.1	27.5	33.6
<i>Lives in State (%)</i>				
California	7.4	6.0	1.8	1.7
Florida	4.6	5.8	26.3	31.0
Illinois	4.5	5.9	.	0.8
New York	5.3	5.0	35.5	34.9
Texas	5.5	7.6	1.7	1.3
<i>Enrolled in HS / College (% of women age 16-24)</i>	23.5	22.4	34.3	36.6
<i>Education (%)</i>				
Less than high school	6.0	12.6	5.0	16.8
BA or higher	31.5	16.6	25.2	21.8
<i>Citizen (%)</i>	100.0	100.0	92.8	40.9
<i>Mean Household Income</i>	\$61,587	\$37,020	\$52,397	\$44,749
<i>Currently Married (%)</i>	57.8	28.7	20.8	38.8
<i>Mean Number of Children</i>	1.31	1.63	0.94	1.50

Note: Pooled data from 2000, 2002, 2004, 2006, and 2008 June CPS with Fertility supplement for civilian women 15-44. Women or parents born in Puerto Rico or U.S. outlying areas are excluded

*Caribbean-origin countries: West Indies, Dominican Republic, Haiti, Jamaica, Bahamas, Barbados, Dominica, Grenada, Trinidad and Tobago, Antigua and Barbuda, St. Kitts-Nevis, St. Lucia, St. Vincent & Grenadines.

Appendix C. Weighted characteristics of Mexican origin women ages 20-44 by immigrant generation (subset of the Hispanic generations), June Fertility Supplement, 2000-2008 CPS

<i>Generation/Origin</i>	2nd Gen Mexican	1st Gen Mexican
<i>Characteristic</i>		
<i>Number of Observations</i>	2,038	4,805
<i>Mean Age</i>	28.8	32.1
<i>Lives in State (%)</i>		
California	45.3	38.8
Florida	1.3	2.6
Illinois	5.1	6.0
New York	0.3	2.3
Texas	26.7	20.9
<i>Enrolled in HS / College (% of women age 16-24)</i>	26.1	5.5
<i>Education (%)</i>		
Less than high school	19.3	59.7
BA or higher	13.3	5.1
<i>Citizen (%)</i>	91.0	15.6
<i>Mean Household Income</i>	\$46,751	\$32,452
<i>Currently Married (%)</i>	47.6	72.0
<i>Mean Number of Children</i>	1.42	2.09

Note: Pooled data from 2000, 2002, 2004, 2006, and 2008 June CPS with Fertility supplement for civilian women 15-44. Women or parents born in Puerto Rico or U.S. outlying areas are excluded
Hispanic-origin countries: Belize, Costa Rica, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Central America n.s

Appendix C. Weighted characteristics of 2nd generation Asian women ages 20-44 compared with Asian women from specific countries of origin, 2000-2008 CPS June Fertility Supplement

<i>Generation/Origin</i>	2nd Gen Asian	2nd Gen Chinese	2nd Gen Indian	2nd Gen Philippines	2nd Gen Vietnamese
<i>Characteristic</i>					
<i>Number of Observations</i>	1,404	170	161	419	110
<i>Mean Age</i>	28.5	29.8	27.8	28.6	26.1
<i>Lives in State (%)</i>					
California	35.9	42.0	12.9	47.3	40.7
Florida	1.4	0.7	3.8	0.7	1.0
Illinois	3.1	1.0	6.1	2.6	4.2
New York	9.5	24.6	16.6	5.0	2.1
Texas	6.3	2.6	11.2	3.2	16.5
<i>Enrolled in HS / College (% of women age 16-24)</i>	39.2	31.5	56.9	34.3	53.6
<i>Education (%)</i>					
Less than high school	2.0	2.8	1.7	1.5	1.1
BA or higher	46.8	66.9	64.9	38.8	40.7
<i>Citizen (%)</i>	96.0	96.2	96.4	98.4	92.8
<i>Mean Household Income</i>	\$72,298	\$78,327	\$82,492	\$77,932	\$63,479
<i>Currently Married (%)</i>	38.5	41.8	37.1	42.0	33.1
<i>Mean Number of Children</i>	0.77	0.56	0.61	0.94	0.42

Note: Pooled data from 2000, 2002, 2004, 2006, and 2008 June CPS with Fertility supplement for civilian women 15-44. Women or parents born in Puerto Rico or U.S. outlying areas are excluded

Asian-origin countries: Bangladesh, Bhutan, Burma, Cambodia, China, Hong Kong, India, Indonesia, Japan, Korea/South Korea, Laos, Malaysia, Nepal, Philippines, Singapore, Taiwan, Thailand, Vietnam

Appendix C. Weighted characteristics of 1st generation Asian women ages 20-44 compared with Asian women from specific countries of origin, 2000-2008 CPS June Fertility Supplement

<i>Generation/Origin</i>	1st Gen Asian	1st Gen Chinese	1st Gen Indian	1st Gen Philippines	1st Gen Vietnamese
<i>Characteristic</i>					
<i>Number of Observations</i>	3,721	560	689	797	381
<i>Mean Age</i>	33.7	34.1	32.0	35.0	33.2
<i>Lives in State (%)</i>					
California	31.8	28.2	18.1	45.8	37.7
Florida	3.4	1.0	3.8	5.7	3.7
Illinois	4.0	3.7	8.3	3.6	1.3
New York	11.9	23.7	12.0	5.4	1.6
Texas	6.9	4.8	7.4	5.4	15.6
<i>Enrolled in HS / College (% of women age 16-24)</i>	48.9	64.1	33.6	32.6	55.0
<i>Education (%)</i>					
Less than high school	8.2	12.6	3.4	3.5	17.7
BA or higher	54.7	56.5	78.2	52.0	26.1
<i>Citizen (%)</i>	40.5	35.1	28.9	50.4	57.2
<i>Mean Household Income</i>	\$67,329	\$61,367	\$79,520	\$69,767	\$63,820
<i>Currently Married (%)</i>	73.0	77.3	86.0	69.6	68.1
<i>Mean Number of Children</i>	1.21	1.09	1.21	1.32	1.29

Note: Pooled data from 2000, 2002, 2004, 2006, and 2008 June CPS with Fertility supplement for civilian women 15-44. Women or parents born in Puerto Rico or U.S. outlying areas are excluded

Asian-origin countries: Bangladesh, Bhutan, Burma, Cambodia, China, Hong Kong, India, Indonesia, Japan, Korea/South Korea, Laos, Malaysia, Nepal, Philippines, Singapore, Taiwan, Thailand, Vietnam

Appendix D. Sensitivity Analysis - Weighted characteristics of women ages 20-44 by immigrant generation and origin status, June Fertility Supplement, 2000-2008 CPS

<i>Generation/Origin</i>	3rd Gen Non- Hispanic White	3rd Gen Hispanic[^]	3rd Gen Asian	2nd Gen Hispanic	2nd Gen Asian	2nd Gen European	1st Gen Hispanic	1st Gen Asian	1st Gen European
<i>Characteristic</i>									
<i>Number of Observations</i>	72,599	2,734	778	1,902	1,057	2,663	6,477	3,983	1,548
<i>Mean Age</i>	32.7	31.3	32.0	28.7	28.5	33.0	32.0	33.3	33.9
<i>Lives in State (%)</i>									
California	7.4	29.8	32.6	42.7	36.9	12.3	38.2	32.1	12.4
Florida	4.6	1.6	1.2	2.4	1.6	4.6	4.2	3.2	7.5
Illinois	4.5	2.9	1.8	4.4	3.0	4.6	5.1	4.0	9.0
New York	5.3	0.5	3.2	1.9	9.5	12.5	3.1	11.9	13.1
Texas	5.5	37.7	2.8	25.6	6.8	4.1	18.8	6.7	5.0
<i>Enrolled in HS / College (% of women age 16-24)</i>	23.5	17.7	41.5	27.1	43.0	33.4	9.7	45.1	32.8
<i>Education (%)</i>									
Less than high school	6.0	19.1	5.2	15.9	1.9	3.4	55.4	7.9	5.2
BA or higher	31.5	13.8	40.0	15.4	47.7	41.5	6.2	54.0	44.3
<i>Citizen (%)</i>	100.0	100.0	100.0	100.0	100.0	100.0	19.3	43.2	30.8
<i>Mean Household Income</i>	\$61,587	\$46,497	\$68,662	\$48,233	\$72,931	\$70,792	\$34,087	\$67,595	\$70,407
<i>Currently Married (%)</i>	57.8	50.0	50.3	44.3	36.4	56.4	68.5	71.2	67.5
<i>Mean Number of Children</i>	1.31	1.71	1.20	1.32	0.72	1.17	2.00	1.19	1.19

Note: Pooled data from 2000, 2002, 2004, 2006, and 2008 June CPS with Fertility supplement for civilian women 15-44. Women or parents born in Puerto Rico or U.S. outlying areas are excluded

[^] 3rd generation Hispanic women identifiable by Mexico and Central American region

Asia: Bangladesh, Bhutan, Burma, Cambodia, China, Hong Kong, India, Indonesia, Japan, Korea/South Korea, Laos, Malaysia, Nepal, Philippines, Singapore, Taiwan, Thailand, Vietnam

Hispanic: Belize, Costa Rica, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Central America

Europe: Western and Central Europe, Canada, Australia and New Zealand