Educational Attainment of 1.5 Generation Immigrants and Divergence in the Timing of Childbearing

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Abstract

As the proportion of Hispanics in the overall population has increased, the fertility of Hispanic immigrants has received a lot of attention in the U.S. It is well known that the fertility of Hispanic immigrants converges into that of non-Hispanic Whites, as the length of stay in the U.S. increases. However, comparatively little is known about the relation between educational attainment and the fertility level of immigrants through the assimilation process. With recently released data sets, the Current Population Survey and the National Survey of Family Growth 2006–2010, this study examines whether immigrant fertility has similar assimilation patterns across social status in the U.S. Utilizing the fertility of 1.5 generation immigrant Hispanic women helps to alleviate migration-related issues. Focusing on educational attainment, this study analyzes the time to first birth. To be specific, the analytical models test whether educational attainment accelerates or delays the timing of childbearing, and whether the effect of education varies with ethnicity and nativity. The results of this study provide that the effect of educational attainment on timing of childbearing varies with ethnicity and nativity. In particular, the negative relation of education with fertility timing is the strongest among women of the most disadvantaged group, which is the 1.5 generation of Hispanic immigrants. Given the diversified immigration flows in the U.S. and Europe, the results of this study provide empirical evidence for variations in the assimilation process of immigrant fertility.

Introduction

The foreign-born population in the U.S. has rapidly increased from 9.6 million in 1970 to 38.5milion in 2009 (U.S. Census Bureau 2010). As the proportion of the foreign-born population in the overall population has increased, the fertility of immigrants, particularly Hispanic immigrants, has been receiving lots of attention in the U.S. (Bean et al. 2000; Carter 2000; Frank and Heuveline 2005; Hamilton et al. 2003; Stephen and Bean 1992; Swicegood et al. 1988). Understanding the immigrant fertility and assimilation process is important for alleviating disparities and promoting social integration as well as immigrants' well-being. Given the higher proportion of immigrants in the overall population in the U.S., it is also critical to estimate population projections (Johnsson and Randall 2004).

Research on immigrant fertility focuses on assimilation of volume and fluctuation of timing through the migration process. A body of literature demonstrates that immigrant fertility approximates the level of the destination country according to the extent of the immigrants' assimilation (Alba and Nee 1997; Parrado and Morgan 2008). This pattern is demonstrated by intergenerational differences in immigrant fertility (Parrado and Morgan 2008). Due to the dynamic process of migration, immigrants also show unique patterns in terms of the timing of childbearing: the fertility rates of immigrants tend to decline before migration and to rise after migration (Lindstrom and Giorguli Saucedo 2007). However, the relation between education and the fertility of Hispanic immigrants it is less well understood, even though fertility differentials by education are referred to as one of the most persistent fertility differences in the U.S. (Rindfuss et al. 1988; Rindfuss and Sweet 1977; Rindfuss, Morgan, and Offutt 1996). Moreover, immigrants who were children at arrival in the U.S. are often ignored or regarded as just first- or second-generation immigrants in empirical studies. This study utilizes the 1.5 generation immigrant women, which indicates women who immigrated at early adolescence (Rumbaut

2004), to study the fertility of immigrant Hispanic women in the U.S. As socioeconomic status and individual resources affect fertility preference and fertility outcome, the fertility of Hispanic immigrants may differ from that of U.S.-born women. Given the higher social mobility of immigrants, educational attainment is a good measure reflecting different social status and social gains.

In this paper, I provide evidence that the effect of educational attainment on timing of childbearing can vary with migration status and ethnicity. Focusing on educational attainment, this study examines whether the fertility behavior of immigrant Hispanic women differs from that of U.S.-born women, the extent to which educational attainment makes difference in the timing of childbearing, and whether the education effect on fertility varies with ethnicity and migration status.

Assimilation, Fertility of Hispanics, and the 1.5 Generation

In general, immigrant fertility gradually gets close to the level of the dominant group in the destination country (Parrado and Morgan 2008). In the U.S., this assimilation perspective has been supported by strong evidence of intergenerational fertility decline (Parrado and Morgan 2008). In the past couple of decades, nevertheless, Hispanics/Mexicans have retained higher fertility levels than those of non-Hispanics, and this has been considered to be a clue to segmented assimilation in fertility behavior (Frank and Heuveline 2005; Johnsson and Randall 2004). Segmented assimilation indicates that immigrants adapt to different segments of the dominant society in diverse areas (Boyd 2002; Portes & Zhou 1993; Zhou 1997). For example, Hispanic immigrants may maintain their original fertility norm or adjust it differently in accordance with the resources they have, while assimilating into a dominant society in other areas such as language and education. In the same manner, the differentiated fertility pattern of

recent immigrants might imply their discrimination condition or segmented assimilation by socioeconomic status (Abbasi-Shavazi & McDonald 2000; Afable-Munsuz and Brindis 2006; Sutton and Mathews, 2006).

The possibility of segmented assimilation on fertility has been refuted by recent studies with strong evidence (Parrado and Morgan 2008; Parrado 2011). Analyzing the intergenerational fertility of Hispanics, Parrado and Morgan (2008) find that during the last century the fertility level of Hispanic immigrants has continuously converged toward that of non-Hispanic White women in the U.S. In particular, supporting the assimilation hypothesis, they show that the fertility gap between Hispanics and non-Hispanics has disappeared among more than third-generation immigrants (Parrado and Morgan 2008). Parrado (2011) also demonstrates that the recent higher fertility of Hispanic women in the U.S. may be the result of biased data and the distinct characteristics of immigrant fertility. Immigrants tend to accelerate childbearing soon after migration, and this tendency leads to inflated total fertility rates that we frequently use for contrasting fertility levels between immigrant and non-immigrant women. As a result, it seems undeniable that the fertility level of Hispanic immigrants follows the assimilation theory in the long-term.

Despite these findings, the question still remains whether immigrant fertility diverges by social status factors like educational achievement. Even though immigrant Hispanic women have generally lower education than do U.S.-born Hispanic women, recent data show considerable improvement in educational attainment for both U.S.-born and foreign-born Hispanic women (Larsen 2004; Parrdo 2011). In this light, there has been too little research thus far on fertility differentials by education among immigrant Hispanics.

This study utilizes the 1.5 generation of Hispanic women to understand the dynamic of fertility behavior within a generation. As mentioned before, the 1.5 immigrant generation indicates the first generation immigrants who came to the U.S. in early adolescence (Rumbaut 1994). In the U.S., the 1.5 generation of immigrants shows distinctive patterns in several aspects, such as educational attainment, language ability, and the extent of assimilation (Boyd 2002; Rumbaut 1994). Having a strong desire for social mobility, immigrants are more likely to motivate their children to have higher education and obtain better jobs than they themselves have. Using the 1.5 generation has several advantages for this study. First of all, this generation excludes the temporal fluctuation of fertility levels before and after migration due to dissolution of union before migration and catch-up of childbearing soon after migration. Second, to some degree it also alleviates the selection effect of migration. Difference between immigrant and native Hispanic women in age and marital composition, which results from selective migration process, often inflates period fertility rates of immigrant women (Parrado 2011), but using 1.5−generation women can moderate this issue. Given their age at arrival in the U.S., the 1.5 generation is less likely to be selected in diverse backgrounds than is the first-generation. Third, since the 1.5 generation arrived in the U.S. before their reproductive age, it makes clear the issues on causal relation among migration, childbearing, and other life-course events. Finally, at a practical level, identifying the 1.5 generation is easier than identifying second or third generation. Distinguishing second or third generation requires more information on birth places and nationalities for both the respondent and her parents.

Educational Attainment, Fertility, and Heterogeneity of Education Effect

With a few exceptions (e.g., Jejeebhoy 1995), in most cases women's education has an inverse relation with fertility. During the first demographic transition, the inverse relation between

women's education and fertility is one of the clear empirical findings that is easily observed. Education has been used as a proxy for socioeconomic status as well as income in many empirical studies. Women's education lowers fertility through diverse mechanisms. Educated parents are more likely to have white-color jobs that do not require physical labor by children, lowering the demand for children. The higher income of educated women also increases the opportunity cost of time (Becker 1981). The health of infants also can be improved by education through increasing maternal knowledge about nutrition and sanitation. Education usually delays marriage timing, increases knowledge about contraceptives, and facilitates contraceptive use. In the context of low fertility in developed countries, higher education also changes women's values and attitudes toward family and fertility, promoting transition of childbearing to a later age (Lesthaeghe and Meekers 1986).

Though the negative effect of college on education seems clear, its extent varies with social status. Brand and Davis (2011) find that the negative effect of college on fertility is maximized among women from comparatively disadvantaged backgrounds. In contrast, the college effect on fertility becomes weak among women from stable backgrounds for college education. A few studies also find that the college effect on fertility is bigger for African American women than that for White women (Goldscheider and Uhlenberg 1969; Musick et al. 2009; Yang and Morgan 2003). The lower the probability individuals have of completing a college education, the more benefit from a college education they get (Brand and Xie 2010). Women from backgrounds in which higher education is commonly expected can go back to college after childbearing without great difficulty. More advantaged social backgrounds enable them to find or pay for quality childcare service. By contrast, college education requires considerably more social expenses for women in socially disadvantaged position. Blocked opportunities, lack of social capital, and the

higher cost of childcare prevent women from returning to college education or previous jobs they had before childbearing. Invisible barriers and discrimination toward minorities in job markets can prompt immigrant women with a college degree to have a small family size, especially in situations in which more competition is required. For women in disadvantaged groups, childbearing and motherhood provide social identity and achievement as a life goal in the context of blocked opportunities, implying earlier childbearing and higher fertility (Edin and Kefalas 2005). Social status also differentiates between marriage and fertility. Highly educated women postpone marriage and parenthood, while disadvantaged women often forgo or postpone marriage and have childbearing at an earlier age (Furstenberg 2003; Lundberg and Pollack 2007). Recent nonmarital births in the U.S. actually are concentrated among more disadvantaged women (Edin and Kefalas 2005; Ellwood and Jencks 2004).

These complex patterns of the education effect on fertility can be directly applied to Hispanic fertility. Parrado and Morgan (2008) find that the negative effect of education on the number of children ever born (CEB) is significantly stronger among third-generation Hispanic/Mexican women as compared with White women, while the fertility level is commonly lower among educated women. This result is partially inconsistent with the assimilation hypothesis, implying heterogeneity of the education effect on fertility across ethnicity and migration status. Indeed, the fertility of Hispanic immigrants is twofold: ethnic minority group and immigrant group. Both minority and immigrant statuses may aggravate situations for childbearing. Minority status in the segmented labor market in the U.S. may affect disproportionately the assimilation process in fertility behavior in response to individual socioeconomic status (Boyd 2002; Goldscheider and Uhlenberg 1969; McDaniel 1996). Strong aspiration for social mobility among immigrants may also contribute to the heterogeneity of educational difference in fertility. For example, immigrant

women with higher education may restrict their desires for children to achieve social mobility more than do White women at the same educational level.

Data and Methods

Analytic Strategy

This study investigates the fertility of immigrant women in the U.S. by focusing on educational attainment. The study concentrates on first births of the 1.5 immigrant generation of Hispanic women in order to understand the dynamic of fertility behavior within a generation. In fact, fertility is composed of volume and timing: lifetime births and timing of childbearing. As observed in the first demographic transition, changes in family size often happen over some years or several decades. In contrast, change in birth timing is more responsive, and modifying the timing of childbearing is much easier for individuals to control in response to rapidly changing situations, as opposed to changing preferred family size. Immigrant Hispanic women are more likely to delay childbearing if they feel that there is severe competition and/or invisible barriers in the job market. For immigrant women, the timing of childbearing can be more sensitive to the social barriers and the different situations they encounter. In addition, given the fact that the TFRs for immigrants are often biased due to the underestimated immigrant population (Parrado 2011), the hazard of childbearing is a useful way to detect fertility differentials by social status.

Considering nativity and educational attainment, I compare the disparity in childbearing timing with that in completed fertility. To simplify the study design, I create three categories for nativity and race-ethnicity: U.S.-born White, U.S.-born Hispanic, and 1.5 generation Hispanic. The 1.5 generation Hispanic category includes Hispanic immigrant women who arrived before age 14. This group is the main interest, while U.S.-born White women are a comparable group reflecting

the mainstream of the U.S. The U.S.-born Hispanic women are included to identify whether fertility differentials of 1.5 immigrants are due to migration status or racial-ethnic factors.

The analysis of this study consists of two parts. In the first part, I examine differences in completed fertility by educational attainment. Completed fertility by education is computed from a set of Current Population Survey data. The second part estimates the hazard of first births with a national survey on family and fertility. Event-history analysis is often utilized, modeling duration data when some of cases are right-censored. A discrete-time hazard model is employed because it can easily incorporate multiple time-varying covariates into an analytic model (Allison 1995). Utilizing this method makes clear the order of the incident between some successive life-course events such as high school graduation, completing higher education, marriage, and having a first birth. A person-year becomes a unit of analysis.

The first part examines the volume of fertility, while the latter part examines the timing of fertility. The following hypotheses are tested in each part, and the results are discussed.

> **H1:** The fertility level of U.S.-born Hispanic women is located somewhere between those of U.S.-born Whites and 1.5 generation Hispanic women.
>
> **H2**: Educational attainment has an inverse relation to fertility.
>
> **H3**: The effect of educational attainment on fertility varies with ethnicity and migration status.

Data

I use the 2004–2008 June Supplement of the Current Population Survey (CPS) and the National Survey of Family Growth (NSFG) 2006–2010. In the first part, women aged 40–44 in each CPS are used for completed fertility. For 1.5 generation Hispanic women, I use the question about the entry year into the U.S. to identify the time of immigration. The CPS uses multiple time spans

for the question on entry year, which are mainly composed of two-year intervals, rather than asking respondents the exact entry year to the U.S. Only Hispanic women whose entry is clearly before age 15 are included for computing completed fertility. These data are used for several reasons: the 2004, 2006, and 2008 CPS June Supplement reflects the recent pattern of fertility; the birth cohort (1960–1968) is partly overlapped with the analytic sample in the second part of the analysis; finally, identifying completed fertility is critical for interpreting the differential in childbearing timing by educational attainment.

In the second part, the NSFG 2006–2010 is used. The NSFG is a national sample of adults aged 15–44 living in households in the U.S. This cross-sectional survey has been repeated irregularly for 3- to 7-year intervals in the past, but it has employed a continuous survey design since 2006. Because the timing of completing higher education is only available in Cycle 7 (2006–2010), this study uses 2006–2010 NSFG data set among NSFG series. Of a total of 12,279 females, I use only 7,838 females that include U.S.-born White women, U.S.-born Hispanic women, and foreign-born Hispanic women who entered to the U.S. before age 15. After excluding missing on dependent and independent variables (41 cases), a total of 7,797 cases are analyzed in the final analysis.

The timing of first birth is the main interest of this study. The timing of first birth influences not only the number of children but also the timing of subsequent births.. It also reflects the tempo of fertility. For example, the timings of first birth for U.S.-born women and foreign-born women may vary even though completed fertility rates remain similar. The dependent variable is whether or not a respondent has first birth, and the years from age 14 to first birth becomes the duration to be analyzed. It is coded 0 until the year of women's first birth. Once a woman has first birth, the dependent variable is coded 1, and the respondent does not contribute person-years

any more. Women who do not give birth in the observed period contribute person-years until they are censored.

For an independent variable, educational attainment is included as a time-varying variable. High school graduation (or equivalent degree) and completing a bachelor's degree are reflected as a set of dummy variables and lagged by one year so that past educational attainment predicts the transition to first birth in the analytic model. The effect of educational attainment on the timing of first birth and its differentials between U.S.-born and foreign-born Hispanic women are analyzed. As a control variable, marital status is also included. To facilitate the analytic procedure, this study only considers whether or not a respondent ever married. "Ever-married" is dichotomized as a time-varying variable. Descriptive statistics are reported in Table 1.

Table 1 about here

Results

Completed fertility by educational attainment is presented in Table 2 and Fig. 1. Based on the pooled data of the 2004, 2006, and 2008 CPS June Supplement, the average number of children ever born (CEB) is computed. Overall, U.S.-born Whites have the lowest completed fertility (1.80) among the three groups, showing a below-replacement-level of fertility. U.S.-born Hispanics and 1.5 generation Hispanics are 2.05 and 2.32, respectively. This order in fertility levels across the three groups is replicated in both the less-than-high-school and high-school-diploma categories. For women with higher education, however, U.S.-born Hispanics have the lowest level of completed fertility compared with the other two groups. This suggests that despite the higher fertility norm of Hispanics, for some reason Hispanic college graduates choose smaller family size than do White graduates. This is not the case for 1.5 generation Hispanics: among college graduates, 1.5 generation Hispanics have the highest completed fertility (1.98).

One possible explanation is their minority-group status. For Hispanic women, obtaining higher education is not as easy as for White women. The lower probability of college completion increases the opportunity cost of women's time and may force Hispanic women to have a lower level of fertility preference. For the 1.5 generation Hispanics, the fertility norm they maintain from the origin country can alleviate the motivation to control family size. Except for the lower completed fertility of U.S.-born Hispanics among college graduates, the overall completed fertilities in Table 2 present a general pattern of the relation between education and fertility. As women's educational attainment increases, the level of fertility declines.

Table 2 is about here

Figure 1 is about here

The results of the discrete-time hazard model are presented in Table 3. In Model I, three analytic groups and educational attainment are included. Then, marital status and interactions between the three groups and educational attainment are added to the model in Models II and III, respectively. Note that both educational attainment and marital status are time-varying variables and lagged one year. The coefficients in Table 3 are odds ratios that are the anti-logs of logistic regression coefficients. A coefficient greater than 1 indicates a positive effect that increases or accelerates the rate of childbearing, while a coefficient less than 1 represents a negative effect that decreases or delays the rate of childbearing. Though the dependent variable is the rate of first births, conceptually it can be interpreted as timing of first births.

Table 3 is about here

In Model 1, there are positive effects of being a U.S.-born Hispanic and a 1.5 generation Hispanic on the rate of first birth. The rates of first birth for U.S.-born Hispanics and 1.5

generation Hispanics are 1.62 and 1.87 times higher than that for U.S.-born White women, respectively, controlling for educational attainment. On average Hispanic women have higher fertility than non-Hispanic women, and 1.5 generation Hispanic women show a slightly higher level of fertility than U.S.-born Hispanic women. Model 1 represents this very well, as expected. In the same model, having high school diploma or bachelor's degree delays first childbearing, but the effects of those achievements on rate of first birth are not different from each other, which suggests that the timing of childbearing for high school graduates is not much different from that for highly educated women when we exclude other covariates.

In Model 2, ever-married variable is added into the previous model. Marital status is used here as a control variable because marital composition is often pointed out as cause of higher fertility for Hispanic immigrant women (Parrado 2011). The effect of ever-married has a strong positive effect on rate of childbearing (5.70), demonstrating that marriage is an important intermediate variable in research on Hispanic fertility. By adding ever-married into the model, the effects of nativity and educational attainment on the rate of childbearing are changed in Model 2. The odds ratio of U.S.-born Hispanic women increases from 1.62 in Model 1 to 1.89 in Model 2, while that of 1.5 generation Hispanic women declines from 1.87 to 1.78. This change of odds ratios may be partially due to the marital composition of U.S.-born Hispanic women. Of the sample used here, only 38.4% of U.S.-born Hispanic women ever married before, and this proportion is significantly lower than those for U.S.-born White women and 1.5 generation Hispanic women (57.5% and 51.2%, respectively, not shown here). In Model 2, having a bachelor's degree delays childbearing more than in Model 1, while the effect of a high school diploma is similar.

In Model 3, there are significant interaction effects on rate of first births between the three groups and educational attainment. As expected, the effect of educational attainment on rate of

childbearing varies by ethnicity and nativity. In the model, the independent impacts of education on timing of first births represent clear negative association. However, when we take the interaction terms into consideration, the relation between educational attainment and first birth becomes complicated. Starting with U.S.-born Hispanic women, high school graduation delays their childbearing 28% more than it does for U.S.-born White women (1–0.72 = 0.28). Moreover, having a bachelor's degree has a much more negative effect on childbearing, delaying it about 64% more than it does for U.S.-born Whites. These effects of educational attainment on first births get worse among 1.5 generation Hispanic immigrants. According to the result, if 1.5 generation Hispanic women graduate from high school, the rate of first birth would decrease by 48% compared with U.S.-born White women with the same educational level. Surprisingly, for a bachelor's degree, 1.5 generation Hispanic women have and 88% lower rate of first birth than U.S.-born White women. This heterogeneity of education effect on having first birth across the three groups is much stronger than was expected.

Based on the results of Model 3, the odds ratios of each group by educational attainment are re-illustrated in Fig. 2 in order to help with understanding the results. Each value on the bar graph indicates odds ratios of having first birth for each group with each educational level. Here, the reference group is U.S.-born White women without any academic degree and is set as 1.00, implying null effects on the rate of first birth. For example, compared with U.S.-born Whites with less than a high school education, 1.5 generation Hispanic women with bachelor's degrees—the green bar on the far right side: 0.19—have an 81% lower rate of having first birth (1-0.19 = 0.81), after controlling other covariates. For women with less than a high school education, the levels of fertility are in the following order: 1.5 generation Hispanics, U.S.-born Hispanics, and U.S.-born Whites. This order is disrupted among high school graduates and is

reversed among university graduates. Contrasting Fig. 2 to Fig. 1, the distinct pattern between education and fertility timing stands out even more. Interestingly, the negative gradient of education on timing of first childbearing for each group seems to reflect the situations they face. For example, the difference of odds ratios by education shows a gentle slope for U.S.-born White women, while it is a steep slope for 1.5 generation Hispanics. For the Hispanic minority group, the relation between educational attainment and the rate of first birth becomes more negative. These results confirm that 1.5 generation Hispanic women have first childbearing earlier than do the other groups. At the same time, however, both Hispanic groups tend to delay their first childbearing as they achieve higher education more than do Whites. It also implies that there must be unfavorable conditions to childbearing of immigrant Hispanic women in venues higher education is required.

Figure 2 about here

Conclusion

The aim of this paper was to examine how the education effect on fertility varies with ethnicity and migration status. The research population is divided into three groups: U.S.-born White, U.S.-born Hispanic, and 1.5 generation Hispanic immigrants. The analysis leads to four conclusions.

First, the general pattern of fertility with the extent of assimilation is reversed among highly educated women when we analyzed birth timing. Compared with U.S.-born women, the 1.5 generation shows the latest transition to parenthood, when they have bachelor's degree. This finding demonstrates not only higher social mobility of immigrants but also limited the opportunities and social barriers for the Hispanic minority overall. Indeed, the significantly lower rate of childbearing among educated immigrants partly hides the large gap between Hispanic and

non-Hispanic fertilities. Second, the negative gradient of education on fertility appears much stronger among the more disadvantaged groups—immigrants and the minority—than among other groups. The childbearing-delaying effect of college completion is significantly higher among 1.5 generation of Hispanic women. This finding is consistent with a previous study that found a larger fertility differential by education among women from disadvantaged backgrounds (Brand and Davis 2011), suggesting considerable social inequality. Finally, a significant gap is found between completed fertility and timing of childbearing among both Hispanic groups. As change in timing of first births leads to subsequent changes in other aspects of fertility, a significant delay in transition to parenthood can make considerable changes in completed fertility.

These findings do not contradict the assimilation hypothesis on immigrant fertility, which is definitely valid for looking at the big picture of immigrant fertility. The findings of this study require more elaborate explanations for educational difference in the timing of childbearing among Hispanic immigrant women. In this study, the segmented assimilation, minority group status, and comparative advantage hypotheses are more useful for understanding the dynamic of immigrant fertility and educational divergence in the timing of childbearing. Future work should consider the roles of marriage and contraceptive use in determining immigrant fertility in different educational categories.

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Table 1. Descriptive Statistics

Variable	Mean	SE of Mean	Min	Max
Having a child (time-varying)	0.52	0.01	0	1
Age at first birth (if any)	23.59	0.20	15	42
Group				
U.S.-born Whites	0.85	0.02	0	1
U.S.-born Hispanics	0.12	0.01	0	1
1.5-Gen. Hispanics	0.03	0.00	0	1
Education (time-varying)				
High school diploma	0.75	0.01	0	1
Bachelor's degree	0.13	0.01	0	1
Marriage (time-varying)				
Ever-married	0.55	0.01	0	1
Age composition				
Age 15–17	0.10	0.00	0	1
Age 18–19	0.08	0.00	0	1
Age 20–24	0.17	0.01	0	1
Age 25–29	0.17	0.01	0	1
Age 30–34	0.15	0.01	0	1
Age 35–39	0.20	0.01	0	1
Age 40–44	0.13	0.01	0	1
Unweighted N	7,797			

Note: Weighted to account for complex survey design.

Table 2. Completed Fertility by Group and Educational Attainment for Birth Cohort 1960–1968

Group	Educational level			Total
	< HS	HS	BA	
US-born White	2.12	1.85	1.65	1.80
US-born Hispanic	2.52	2.09	1.50	2.05
1.5 Gen. Hispanic	2.58	2.27	1.98	2.32

Note: Women aged 40–44 at the time of each survey.

Source: The 2004, 2006, and 2008 June Supplement Current Population Surveys.

Table 3: Effects of Educational Attainment on Rate of First Birth

Variable	Model 1		Model 2		Model 3	
Group (ref: U.S.-born Non-Hisp. White)						
U.S.-born Hispanic	1.62	***	1.89	***	2.34	***
	(0.08)		(0.08)		(0.10)	
1.5 generation Hispanic	1.87	***	1.78	***	2.43	***
	(0.14)		(0.17)		(0.18)	
Education (ref: No high school diploma) [a]						
High school diploma	0.70	***	0.73	**	0.79	†
	(0.08)		(0.12)		(0.14)	
Bachelor's degree	0.71	**	0.59	***	0.66	*
	(0.11)		(0.15)		(0.17)	
Interaction b/w Group and Education						
U.S.-born Hispanic * High school					0.72	†
					(0.18)	
U.S.-born Hispanic * Bachelor's					0.36	***
					(0.30)	
1.5-Gen. Hispanic * High school					0.52	†
					(0.37)	
1.5-Gen. Hispanic * Bachelor's					0.12	*
					(0.93)	
Marital status (ref: Never-married) [a]						
Ever-married			5.70	***	5.66	***
			(0.07)		(0.07)	
Time (ref: Ages 20–24)						
Ages 15–17	0.18	***	0.37	***	0.37	***
	(0.10)		(0.13)		(0.13)	
Ages 18–19	0.59	***	1.11		1.11	
	(0.08)		(0.10)		(0.10)	
Ages 25–29	1.45	***	1.01		1.01	
	(0.10)		(0.09)		(0.09)	
Ages 30–34	1.37	*	0.81		0.82	
	(0.14)		(0.14)		(0.14)	
Ages 35–39	0.57	†	0.31	***	0.31	***
	(0.31)		(0.30)		(0.30)	
Ages 40–44	0.00	***	0.00	***	0.00	***
	(0.17)		(0.17)		(0.18)	
-2LL	170010000		169750000		158840000	
N (Person-years)	73,940		73,940		73,940	

Note: Weighted to account for complex survey design; age at 14 is a baseline.

† $p < 0.1$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

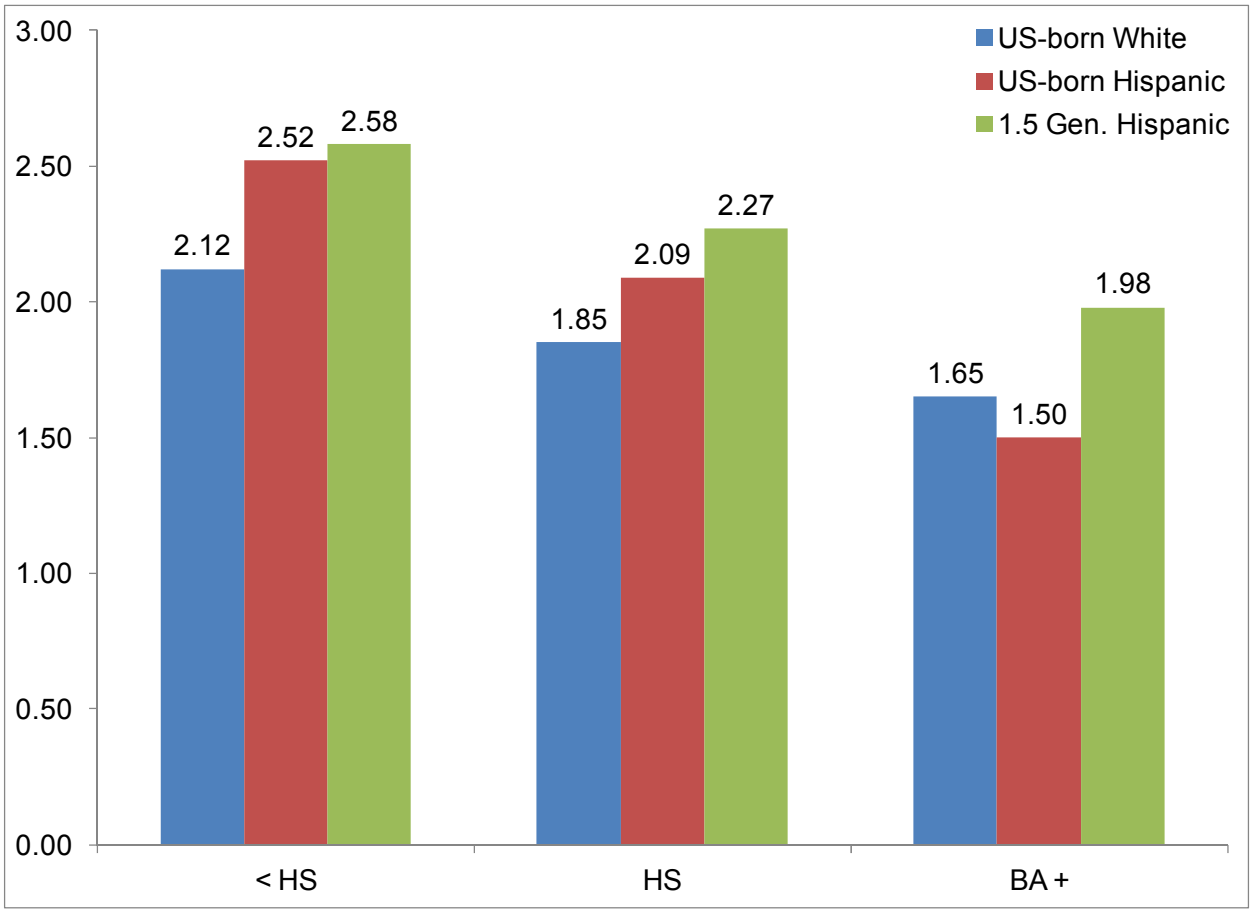

Figure 1. Completed fertility by three groups and educational attainment.

Note: Used only birth cohort 1960–1968 and women aged 40–44 at each survey.

Source: The 2004, 2006, and 2008 June Supplement Current Population Surveys.

Figure 2. Odds ratio of having first birth by migration status and educational attainment.

Note: Weighted to account for complex survey design.

Source: A subsample of NSFG2006-2010.