9/23/04

The Effects of Acculturation on Contraceptive Use among Mexican Immigrants

Introduction

The Hispanic population is now the largest minority population in the United States, with 13% of the total population. A large proportion of Hispanics are immigrants: nearly 40% of the Hispanic population was born outside the U.S. Given the importance of this immigration flow, considerable research attention has focused on the process of acculturation among Hispanics, that is, their adaptation to life in the U.S. over time and across generations. Although numerous studies have addressed the relationship between acculturation and a wide range of health behaviors and outcomes, little research to date has explored the effects of acculturation on contraceptive use.

Acculturation has been defined as "Culture change that is initiated by the conjuncture of two or more autonomous cultural systems" (Social Science Research Council Summer Seminar on Acculturation, 1954). Migration thus initiates a process of acculturation among immigrants by bringing them into contact with new cultural systems. And because culture is transmitted from one generation to the next (Matsumoto, 1997), the process of acculturation continues among later generations as they receive the (already-modified) culture transmitted by their parents and continue to change and adapt in response to their environment.

While much of the public health literature treats acculturation as a process that is both linear and uniform, research on acculturation suggests that individual preferences and contextual environment may produce significant variation in the process (Berry, 2003; Negy & Woods, 1992a). In addition, culture consists of a wide range of behaviors, attitudes and beliefs, some of which may be more susceptible to change than others (Ward, 1996. A comparison of behaviors, attitudes, values and beliefs across generations of migration would therefore shed light on which cultural traits are prone to change with acculturation and which are more persistent.

Contraception is women's primary means to avoid unintended pregnancies, but little is known about the effects of migration and acculturation on contraceptive use. Contraceptive use is determined by a combination of the exposure to risk of a pregnancy (i.e., sexual activity), women's and their partner's fertility preferences (which determines the demand for contraception), and potential barriers to contraceptive use (which affect women's willingness and ability to use contraception given their demand). Acculturation may therefore affect contraceptive use by altering the likelihood that women are sexually active, their fertility preferences, or the barriers to contraceptive use. Although little research has explored the relationship between acculturation and either sexual activity or fertility preferences, some studies suggest that Hispanic women born in the U.S. may be more likely to be sexually active (at least in adolescence) (Aneshensel, Fielder, & Becerra, 1989) and desire fewer children (Sorenson, 1985; Unger & Molina, 1997) than those born in Mexico. Both of these factors would tend to increase contraceptive use among later generations. More evidence exists related to potential barriers to contraceptive use. In general, Mexican immigrants face substantial barriers to contraceptive use, including limited access to health care (Canto & Shankar, 2000; Chavez, Cornelius, & Jones, 1985; Chavez, Flores, & Lopez-Garza, 1992; Derose, 2000; Farr & Wilson-Figueroa, 1997; Hubbell, Waitzkin, Mishra, Dombrink, & Chavez, 1991; Lara, Allen, & Lange,

1999; Solis, Marks, Garcia, & Shelton, 1990), low levels of contraceptive knowledge (Farr & Wilson-Figueroa, 1997; [Becerra, 1984 #38]), and negative attitudes toward contraception, in particular a fear of side effects (Farr & Wilson-Figueroa, 1997; Hirsch & Nathanson, 2001). A reduction of these barriers in later generations would also tend to increase the likelihood of contraceptive use.

Increased demand and reduced barriers to contraception among later generations may or may not translate into increased contraceptive use, however. While one study found in bivariate analysis that unmet need for contraception was slightly higher for Spanish-speaking than English-speaking Hispanic women (20.8% vs. 17.0%) (Holck, Morris, & Rochat, 1982), several studies have found that when other factors are controlled, English-speaking Hispanic women are actually *less* likely to use contraception than Spanish-speaking Hispanic women (Unger & Molina, 1998; Becerra & Anda, 1984; Romo, Berenson, & Segars, 2003). Similarly, Guendelman et al. found that many of the Mexican-Americans in their sample experienced unplanned pregnancies despite knowledge of the availability of contraception (Guendelman, Malin, Herr-Harthorn, & Vargas, 2001). Because these studies used small, localized samples, however, and none were focused primarily on acculturation, both the relationship between acculturation and contraceptive use and the mechanisms through which acculturation may effect change remain unclear.

The aim of this study is to explore the effects of acculturation on the likelihood that women of Mexican origin in the U.S. use contraception and to identify mediating variables through which acculturation effects these changes. Among Mexican-Americans, acculturation is associated with substantial increases in education, income, and labor force participation and decreases in marriage and Catholic religiosity (Derose, 2000; Guendelman, Gould, Hudes, & Eskenazi, 1990; Zambrana, Schrimshaw, Collins, & Dunkel-Schetter, 1997; Pew Hispanic Center/Kaiser Family Foundation, 2002; Scribner & Dwyer, 1989; Wells, Golding, Hough, Burnam, & Karno, 1989; Romo, Berenson, & Segars, 2003; Zambrana, Silva-Palacios, & Powell, 1992), all of which may significantly affect contraceptive use (Abma, Chandra, Mosher, Peterson, & Piccinino, 1997; Forrest, 1994; Institute of Medicine, 1995; Mosher, Johnson, & Horn, 1986). Some researchers have argued that studies of acculturation have confused differences in socioeconomic status with acculturation (Negy & Woods, 1992b; Suarez & Pulley, 1995). Culture and socioeconomic status are inextricably linked, however—increased levels of education and income inevitably affect individuals' lifestyles and ways of thinking (i.e., their culture). For this reason, in this study I will first assess differences across generations of migration without controlling for socioeconomic factors, and then include socioeconomic and other mediating variables to determine to what extent they explain any differences found.

I hypothesize that 1) the likelihood that women are sexually active increases with acculturation, 2) the likelihood of contraceptive use increases with acculturation, and 3) the effect of acculturation on contraceptive use is mediated in part by its effects on sexual activity, education, marital status, income, work and Catholic religiosity.

An understanding of the relationship between migration and acculturation and contraceptive use among Mexican origin women can help to identify those segments of the population who may be least likely to use contraception, thus allowing for more effective targeting of family planning

program efforts. It can also help to clarify to what extent low levels of contraceptive use are due to low levels of exposure to risk, high fertility preferences, or barriers to contraception. Identifying the mediating variables that explain differences between the generations of migration may also help to identify factors that contribute to low levels of contraception and suggest potential intervention points.

In addition, an enhanced understanding of the ways in which Hispanic immigrants' attitudes, beliefs and practices in relation to contraception change in time and across generations may improve our conceptual understanding of the process of acculturation. Given the large numbers of Hispanic immigrants to the United States, providing effective health services to them and their children will require an understanding of the process of cultural change, the aspects of culture that are likely to change and which are resistant to change, and the factors that influence change.

Methods and Data

Data are from the National Survey of Family Growth Cycle 5: 1995 (NSFG). A national probability sample of 10,847 civilian noninstitutionalized women were interviewed in person by trained female interviewers between January and October of 1995. The purpose of the NSFG was to study family formation, including fertility and adoption, contraception and infertility. Analysis for this paper was limited to 924 women who were either born in Mexico or who were born in the United States but identified as being Hispanic of Mexican origin. More than half (61%) were born in the United States, and the remainder were born in Mexico (10% migrated to the United States before the age of 13 and 29% migrated at age 13 or older).

Dependent variables

Dependent variables are sexual activity, desired family size, and contraceptive use. Sexual activity and contraceptive use use woman-months as the unit of analysis for all months during the four years previous to the interview. Sexual activity is a dummy variable coded 1 if woman *i* was sexually active in month *j* and 0 if she was not, and contraceptive use is a dummy variable coded 1 if woman *i* used a contraceptive method in month *j* and 0 if she did not. The variables were created based on women's reports of the start and end dates of periods of sexual activity and the start and end dates of periods of contraceptive use. The variable for desired family size uses women as the unit of analysis. It is a continuous variable based on the woman's report at the time of the interview of the ideal number of children she would like to have.

Independent variables

The main independent variable of interest is generation of migration. Women who identify as Hispanic of Mexican origin but were born in the United States are classified as second or later generation. Women who were born in Mexico are categorized as generation 1.5 if they migrated as children (before age 13) and as first generation immigrants if they migrated to the United States as adults (at age 13 or older). Age 13 was chosen as the cutoff age between generation 1.5 and first generation because 99% of the women were not yet sexually active before age 13 and so those who migrated before age 13 began their reproductive lives in the U.S., while most of the women who migrated at age 13 or older had begun their reproductive lives in Mexico.

Other variables in the models are age (as a control variable), and marital status, education, level of poverty, work and Catholic religiosity (as mediating variables). Parity is also incuded as a control variable in models with contraceptive use as the dependent variable. Ssexual activity and whether or not women want any more children are also included as mediating variables in some contraceptive use models. Catholic religiosity is a dummy variable coded as 1 if the respondent identified as Catholic and said that religion was very important in her daily life and 0 otherwise. Previous analyses have shown that Catholic affiliation alone may not affect fertility and fertility preferences, but a strong degree of Catholic religiosity does (Mosher, Johnson, & Horn, 1986; [Amaro, 1988 #347]). Whether or not women want more children is a dummy variable coded 1 if a woman's parity is less than her ideal number of children and 0 otherwise. In the sexual activity models and the contraceptive use models, which use women-months as the unit of analysis, age, parity, marital status, work, sexual activity and wanting more children are all time-varying measures, while education, level of poverty, and Catholic religiosity are fixed at the time of the interview. In the desired family size models, which use women as the unit of analysis, all variables are fixed at the time of the interview.

Statistical analysis

For the analysis of monthly sexual activity and contraceptive use, I employ logit techniques analogous to discrete-time hazard models as described by Allison (Allison, 1984). I use binary logit models to assess the effect of generation of migration on the likelihood that a) women are sexually active and b) that they are using a contraceptive method. The unit of analysis for these models is woman-months during the four years previous to the interview. Four years or 49 observations are thus possible for each of the 924 women, for a total of 45,276. Out of this number, 4,174 months where the woman was already pregnant at the start of the month and therefore not at risk of conception were excluded from the analysis, so the final number of woman-months in the analysis is 41,105. Post-sterilization observation months are included in the analysis to avoid selection bias.

To assess the effect of acculturation on sexual activity, I ran a preliminary model including only generation of migration to assess overall differences across generations. I then ran a second model controlling for age to determine if any differences were attributable to underlying differences in age across the generations. Finally, I ran a third model controlling for age as well as the mediating variables to assess the extent to which the effects of acculturation on sexual activity are attributable to changes in these mediating variables. I used similar models to assess the effect of acculturation on contraceptive use; the only differences are that I added

parity as a control variable in the second model, and I ran additional models with sexual activity and wanting more children as mediating variables.

I use linear regression models to assess the effect of acculturation on women's desired family size. Women are the unit of analysis, so there are 924 observations in these models (one for each woman). Similar to the sexual activity models, I ran three models: the first model included only generation of migration, the second model controlled for age, and the third model controlled for age as well as the mediating variables.

Stata 8.2 is used for all analyses. All analyses were adjusted for population weights and clustering. Huber clustered standard errors were used to correct for non-independence within primary sampling units, which also corrects for repeated observations on the same women over time.

Results

Sample description

Considering all women-months where women are not already pregnant at the start of the month, women of generation 1.5 and those born in the U.S. are significantly younger, have lower levels of parity and higher levels of education than first generation women (Table 1). They are also less likely to be married, less likely to be sexually active, less likely to be living in poverty and more likely to be working. Women born in the U.S. want fewer children overall than first generation immigrants, but both women of generation 1.5 and women born in the U.S. are more likely than first generation immigrants to want more children than they already have (primarily due to the fact that they are younger and have lower parity). Women born in the U.S. are less likely to say that they are Catholic and that their religion is important in their daily life than either women of generation 1.5 or first generation women. Women born in the U.S. are generally similar to women of generation 1.5 except for their lower levels of Catholic religiosity and greater age.

Sexual activity

Women of generation 1.5 and women born in the U.S. are less likely to be sexually active than first generation women (Table 2, col. 1), even when age differences are controlled (Table 2, col. 2). When mediating variables are added to the model, we can see that the decrease in sexual activity among later generations is primarily due to the decrease in the likelihood that they are married (Table 2, col. 3).

Fertility preferences

Women born in the U.S. want fewer children than first generation immigrants (Table 3, col. 1), even when age differences are controlled (Table 3, col. 2); women of generation 1.5 do not significantly differ from first generation immigrants. When mediating variables are added to the model, we can see that a larger desired family size is positively associated with marriage, Catholic religiosity, and poverty, and negatively associated with education. When these mediating variables are controlled, the desired family size of women born in the U.S. no longer significantly smaller than that of first generation immigrants: in fact, women born in the U.S. and women of generation 1.5 want significantly larger families than do first generation

immigrants once the mediating variables are taken into account. Thus, the smaller desired family size of women born in the U.S. appears to be explained by their higher rates of marriage and education and lower rates of poverty and Catholic religiosity.

Likelihood of contraceptive use

Without controlling for other factors, women of generation 1.5 are significantly less likely to be using a contraceptive method than either first generation immigrants (p=.01) or women born in the U.S. (p=.06) (Table 4, col. 1). The likelihood of contraceptive use does not significantly differ between women born in the U.S. and first generation immigrants. When age and parity are controlled, however, women born in the U.S. are significantly more likely to use contraception than either first generation immigrants (p=.001) or women of generation 1.5 (p=.06), (Table 4, col. 2). Women of generation 1.5 are not significantly more likely to use contraception than first generation immigrants when age and parity are controlled, but this is due to the decreased likelihood that they are sexually active: when differences in sexual activity are also controlled, women of generation 1.5 are also significantly more likely to use contraception than first generation immigrants (Table 4, col. 3). However, women born in the U.S. remain significantly more likely to use contraception than women of generation 1.5 (p=.07). When whether or not women want any more children is added to the model, it significantly predicts contraceptive use, but the relationship between the other variables and contraceptive use remains unchanged (analysis not shown).

Including the mediators in the model explains little of the difference in contraceptive use between women born in the U.S. and women of generation 1.5 (Table 4, col. 4) because the two groups have very similar levels of marriage, education, poverty and work; the only mediating variable in which they differ is Catholic religiosity, but Catholic religiosity has no significant effect on contraceptive use. The addition of the mediating variables does explain some of the difference in contraceptive use between women born in the U.S. and first generation immigrants, however. When the mediators are added to the model, the odds ratio for contraceptive use among women born in the U.S. compared to first generation women decreases from 1.91 to 1.53, but it remains significantly different from first generation women at p<.10. The mediating variables of education, income, and working outside the home for pay are all positively associated with contraceptive use, so the increases in these indicators among women born in the U.S. compared to first generation women partially explain their increased use of contraception. At the same time, however, sexual activity is also positively associated with contraceptive use, and women born in the U.S. are less likely to be sexually active compared to first generation immigrants. Thus, the decrease in sexual activity among women born in the U.S. would tend to decrease the likelihood that they use contraception, even while the increases in education, income, and work tend to increase contraceptive use.

Although marital status has no significant effect on contraceptive use for the sample overall when sexual activity is controlled, tests for interactions reveal that marriage does have a significant effect on the likelihood of contraceptive use among first generation women (Figure 1). For women of generation 1.5 and those born in the U.S., once sexual activity is controlled, married and unmarried women do not significantly differ in the likelihood that they use contraception. Among 1st generation women, however, unmarried women are significantly less

likely to use contraception compared to married women, even after controlling for sexual activity. The interaction between marriage and generation of migration also affects the interpretation of the relationship between generation of migration and contraceptive use. Among married women, generation of migration has no significant effect on contraceptive use once mediating variables and sexual activity are taken into account. However, among unmarried women, women born in the U.S. are significantly more likely to use contraception compared to 1st generation women.

Discussion

Acculturation may affect the likelihood of contraceptive use either by affecting the risk of a pregnancy (sexual activity), fertility preferences, or barriers to contraception. I explored the relationship between acculturation and two of these three factors: sexual activity and fertility preferences. I had hypothesized that sexual activity would increase with acculturation, that fertility preferences would decrease, and that these changes would be partially mediated by education, income, marriage, Catholic religiosity and work. Controlling for underlying age differences in the subsamples, I found (contrary to my hypothesis) that the likelihood of sexual activity actually decreases with acculturation—due primarily to the decreased likelihood that women of later generations are married. As for fertility preferences, I found support for the hypothesis that desired family size decreases with acculturation, due to decreases in marriage, poverty, and Catholic religiosity and increases in education among women of later generations.

Overall, I had hypothesized that given the hypothesized increases in sexual activity, decreases in desired family size, and decreases in barriers to contraceptive use the likelihood of contraceptive use would increase among later generations. Even though I found that sexual activity decreases rather than increases with acculturation, the hypothesis is supported that contraceptive use increases with generation of migration: women of generation 1.5 are significantly more likely to use contraception than first generation immigrants, and women born in the U.S. are significantly more likely to use contraception than women of generation 1.5. This finding is contrary to some previous studies that had suggested that contraceptive use may decrease with acculturation (Unger & Molina, 1998; Becerra & Anda, 1984; Romo, Berenson, & Segars, 2003). The fact that controlling for women's desire for more children has no effect on the relationship between generation of migration and contraceptive use suggests that the lower rates of contraceptive use among first generation immigrants may be due more to greater barriers to use rather than to a lower demand for contraception. The fact that first generation women remain less likely to use contraception than women of generation 1.5 or women born in the U.S. even when sexual activity and desire for more children are controlled, further suggests that first generation immigrants not only have the lowest levels of contraceptive use, they also have the highest levels of unmet need for contraception, followed by women of generation 1.5.

Some of the effect of acculturation on contraceptive use appears to be attributable to increases in income, education, and the likelihood that women are working outside the home for pay that occur with acculturation. Increased income and education may act in part through their effect on reducing women's fertility preferences (thus increasing their motivation to use contraception), but when the desire for more children is controlled the effects of income, education and work on

contraceptive use remain essentially unchanged. Thus, it may be that income, education and work affect contraceptive use by reducing barriers such as limited access, lack of knowledge about contraceptive methods, and lack of contraceptive self efficacy. The only mediating variable that had no significant effect on contraceptive use was Catholic religiosity (despite the fact that it does significantly predict a larger desired family size).

Of the mediating variables, marriage has the most complicated relationship to contraceptive use. I had hypothesized that the decrease in marriage among later generations would be another factor contributing to their increased contraceptive use, because women would be more likely to want to avoid pregnancy outside of marriage. I found, however, that marriage has no significant effect overall on the likelihood of contraceptive use when sexual activity is controlled. The relationship between marriage and contraceptive use significantly varied by generation of migration, however: marriage had no significant effect on contraceptive use among women of generation 1.5 and women born in the U.S., but among first generation women, women who were not married were actually *less* likely to use contraception compared to women who were married. Conceivably, even though unmarried first generation women may face greater motivation to avoid a pregnancy than married women, the fact that they are not married may increase the barriers to contraceptive use. First generation women may be less likely to receive information related to contraception or connect with a health care provider until they are married. Alternatively, women without a husband could have greater difficulty in accessing services, as many first generation women may rely more on their partners to drive them to a clinic, or even to find out where a clinic is. Finally, first generation women may not feel that sex outside marriage is sanctioned, so they may hesitate to seek family planning services.

The significance of the interaction between marriage and generation of migration also has implications for our understanding of the relationship between generation of migration and contraceptive use. Overall, the primary hypothesis that the likelihood of contraceptive use increases with acculturation is supported. However, among married women, the mediating variables of education, income and work explain all of the increase in contraceptive use, while among unmarried women, women born in the U.S. remain significantly more likely to use contraception than first generation women even when the mediating variables are taken into account. Future research would be needed to determine exactly what barriers may be preventing unmarried first generation women from using contraception and thus to develop strategies to overcome those barriers.

An important strength of this paper is that women who migrated as adults (first generation immigrants) are considered separately from those who migrated as children (generation 1.5). Women of generation 1.5 were more similar to women born in the U.S. on nearly all characteristics than they were to first generation immigrants, so combining generation 1.5 with first generation immigrants in a general "foreign born" category would tend to obscure any differences between first generation immigrants and those born in the U.S. The distinctions between first generation and generation 1.5 also provide an idea about how quickly different traits change with acculturation: for example, the decline in desired family size does not begin until the second generation, but the decrease in sexual activity and increase in contraceptive use have already begun in generation 1.5. A limitation of the study was the inability to distinguish between women who are second generation and those who are third generation or later. If this

distinction were possible with the data, we would be able to assess whether the general effects of acculturation continue among later generations.

Conclusion

In conclusion, I find that first generation immigrants are more likely to be sexually active than women of later generations (because they are more likely to be married). They also generally desire larger families than women born in the U.S., but because they have higher parity, they are more likely to have already achieved or surpassed their desired family size. Finally, although first generation women are overall more likely to be using contraception that women of later generations, when underlying differences in age and parity are taken into account they are actually *less* likely to use contraception. This discrepancy is not due to differences in exposure to the risk of pregnancy or in fertility preferences, so it would seem that they have greatest unmet need for contraception.

Table 1: Sample characteristics, by generation of migration

All women-months				
	Total (n=41,105 woman-months, 924 women)	**First generation** (n=11,882 woman-months, 273 women)	**Generation 1.5** (n=4,343 woman-months, 98 women)	**Born in U.S.** (n=24,880 woman-months, 553 women)
Dependent variables				
Sexually active [a,b]	75.0	82.8	66.5	69.9
Ideal family size (mean # of children) [a]	3.0	3.3	3.1	2.8
Contraceptive use	56	61	46	55
Independent variables				
Age				
Teens [a,b]	24.4	4.9	35.7	31.6
Twenties [c]	35.2	36.0	42.2	33.5
Thirty or older [a,b,c]	40.5	59.1	22.1	34.8
Parity				
0 [a,b]	39.8	15.2	50.3	49.6
1	15.2	15.9	18.5	14.3
2 or more [a,b]	45.0	68.9	31.1	36.1
Married [a,b]	45.7	61.2	39.1	34.4
Education (mean years) [a,b]	10.6	8.3	11.6	11.6
Level of poverty				
<100% [a,b]	28.8	40.4	21.2	24.7
100-200% [a]	29.3	38.9	28.2	25.1
>200% [a,b]	41.8	20.7	50.7	50.2
Working [a]	49.5	43.2	52.4	51.9
Catholic and very religious [a,c]	38.7	47.1	49.9	32.9
Want more children [a,b]	73.8	60.8	82.9	78.4

[a] Born in U.S. is significantly different from 1st generation at the .05 level.
[b] Generation 1.5 is significantly different from 1st generation at the .05 level.
[c] Born in U.S. is significantly different from Generation 1.5 at the .05 level.

Table 2: Odds ratios from logistic regression analyses assessing the associations between selected characteristics and the likelihood that women were sexually active

	Model with no controls (1)	Model controlling for age (2)	Model with mediators (3)
Generation of migration			
First generation (reference)	-	-	-
Generation 1.5	0.33**	0.53†	0.80
Born in U.S.	0.42**	0.64†	1.17
Age			
Teens		0.23**	0.48**
Twenties (reference)		-	-
Thirty or older		0.94	0.64*
Married			23.24**
Education			0.91*
Level of poverty			
< 100%			1.02
100-200%			1.25
>200% (reference)			
Work			1.38*
Catholic and very religious			0.88

Observations 41,105 woman-months

† significant at 10% level; * significant at 5% level; ** significant at 1% level

Table 3: Coefficients from linear regression analyses assessing the associations between selected characteristics and women's desired family size

	Model with no controls (1)	Model controlling for age (2)	Model with mediators (3)
Generation of migration			
First generation (reference)	-	-	-
Generation 1.5	-0.226	-0.101	0.403*
Born in U.S.	-0.446**	-0.361**	0.180†
Age			
Teens		-0.068	-0.043
Twenties (reference)		-	
Thirty or older		0.283**	0.284**
Married			0.462**
Education			-0.060**
Level of poverty			
< 100%			0.717**
100-200%			0.360*
>200% (reference)			-
Work			-0.150
Catholic and very religious			0.274**

Observations 922 women

† significant at 10% level; * significant at 5% level; ** significant at 1% level

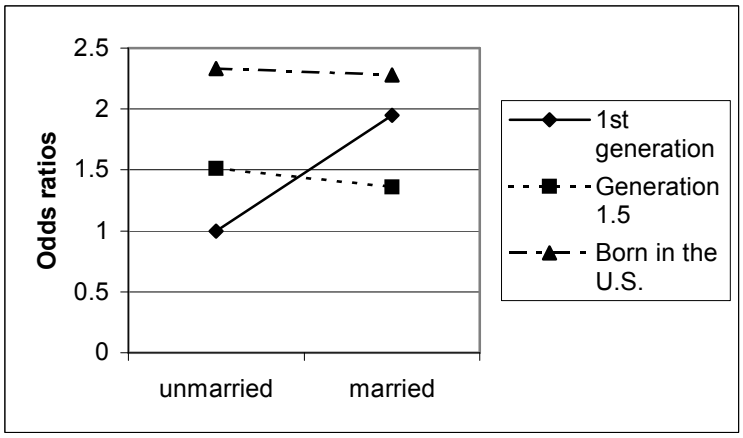
Table 4: Odds ratios from logistic regression analyses assessing the associations between selected characteristics and the likelihood that women were using a contraceptive method (table without interactions)

	Model with no controls	Model with controls	Model with controls and sexual activity	Model with controls, sexual activity and mediators
Generation of migration				
First generation (reference)	-	-		-
Generation 1.5	0.53**	1.25	1.48†	0.95
Born in U.S.	0.76	1.91**	2.20**	1.55†
Age				
Teens		0.25**	0.27**	0.43**
Twenties (reference)		-		
Thirty or older		0.69**	0.82	0.67*
Parity				
0 (reference)		-		
1		3.00**	2.02**	2.44**
2 or higher		5.98**	3.84**	6.49**
Sexually active			10.04**	9.02**
Married				1.24
Education				1.07**
Level of poverty				
< 100%				0.46**
100-200%				0.78
>200% (reference)				
Work				1.30*
Catholic and very religious				0.92

Observations 41,105 woman-months

† significant at 10% level; * significant at 5% level; ** significant at 1% level

Figure 1: Interaction between generation of migration and marital status, controlling for sexual activity



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