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Hispanic Assimilation and Fertility in New Destinations

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Abstract

This paper evaluates comparative patterns of fertility in new Hispanic destinations and established gateways using pooled cross-sectional data from the 2005–2009 microdata files of the *American Community Survey*. Changing Hispanic fertility provides a useful indicator of cultural incorporation. Analyses show that high fertility among Hispanics has been driven in part by the Mexican-origin and other new immigrant populations (e.g., noncitizens, those with poor English language skills, etc.). However, high fertility rates among Hispanics – and Mexican-origin Hispanics in particular – cannot be explained entirely by socio-demographic characteristics that place them at higher risk of fertility. For 2005–2009, Hispanic fertility rates were 48 percent higher than fertility among whites; they were roughly 25 percent higher after accounting for differences in key social characteristics, such as age, nativity, county of origin, and education. Contrary to most previous findings of spatial assimilation among in-migrants, fertility rates among Hispanics in new destinations exceeded fertility in established gateways by 18 percent. In the multivariate analyses, Hispanics in new destinations were roughly 10 percent more likely to have had a child in the past year than those living in established gateways. Results are consistent with sub-cultural explanations of Hispanic fertility and raise new questions about the spatial patterning of assimilation and the formation of ethnic enclaves outside traditional settlement areas.

The post-1990 period ushered in a new pattern of population redistribution among the nation's Hispanics (Massey 2008a; Kandel and Cromartie 2004). In 1990, almost 90 percent of Hispanics lived in just 10 states (U.S. Census Bureau 1993). Since then, the centrifugal drift of Hispanics has been both dramatic and unprecedented – in several ways. The Hispanic population has spread geographically from traditional gateway states to new destinations, especially in the South and Midwest (Leach and Bean 2008; McConnell 2008). Hispanic population growth has shifted down the urban size-of-place scale; many small and medium-sized metropolitan areas are now magnets for new immigrants (Kandel and Cromartie 2004; Singer 2004). The post-1990 period also has been marked by substantial Hispanic suburbanization and new growth in rural communities (Donato et al. 2007; Lichter and Johnson 2006). The spatial diffusion of the Hispanic population to new destinations has been fueled both by immigration from Mexico and other parts of Latin American and by domestic migration from established Hispanic gateways (Lichter and Johnson 2009).

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The current focus on new immigration and the geographic spread of the nation's Hispanic population is understandable, but it deflects attention from the other major source of Hispanic population growth – fertility. High fertility is a significant but often underappreciated second-order effect of rapid Hispanic immigration (Johnson and Lichter 2008; Jonsson and Rendall 2004). Indeed, Hispanic natural increase (fueled by high fertility and low mortality rates) now accounts for more than one-half of Hispanic population growth nationally. Between 2000 and 2005, for example, natural increase accounted for 58 percent of the Hispanic population growth in nonmetro areas and 55 percent in metro areas (Johnson and Lichter 2008). Yet, despite its clear demographic significance, the literature on the spatial patterning of Hispanic fertility – which fuels spatial differences in natural increase – is surprisingly small and underdeveloped.[1]

In this paper, we evaluate comparative patterns of Hispanic and non-Hispanic fertility in new destinations and established gateways. We concatenate annual data from the 2005 through 2009 microdata files of the *American Community Survey* (ACS) to address three specific objectives. First, we provide up-to-date estimates of period Hispanic fertility rates, illustrating the usefulness of the new fertility question (i.e., whether women had a birth in the past 12 months) now available annually on the ACS.[2] Second, we evaluate whether high fertility, as an indicator of (low) assimilation, is observed disproportionately among economically-disadvantaged Hispanic groups (e.g., new immigrants). Third, we address whether patterns of differential fertility (e.g., by immigrant status, education, etc.) are consistent with new theoretical models of Hispanic assimilation and cultural incorporation (Parrado and Morgan 2008). Specifically, we estimate logistic regression models that account for differences in observed rates of Hispanic fertility (vis-à-vis other racial minorities and non-Hispanic whites). In so doing, we address the question of whether differential fertility is located in the demographic makeup of Latinas (i.e., social characteristics hypothesis), in the spatial context of Hispanic settlement in new receiving areas (i.e., immigrant and ethnic composition), or in some combination of the two.

The Spatial Patterning of Hispanic Fertility

Historically, U.S. Hispanics have had much higher rates of fertility, teen childbearing, and out-of-wedlock fertility than native-born whites, a fact that both reflects and reinforces the pace of cultural and economic incorporation in America (Bean and Tienda 1987; Landale and Oropesa 2007; Tienda and Mitchell 2006). Indeed, recent nationally-representative fertility estimates from the National Center for Health Statistics reveal significantly higher fertility among Hispanic women (Martin et al. 2007). The total fertility rate (TFR) among Hispanics was 2.89 in 2005, compared with 1.84 among non-Hispanic whites. Childbearing begins much earlier among Hispanics; the average age at first birth was 23.1 and 26.2 among Latina and white women, respectively. Earlier childbearing is also reflected in the fact that 14.1 percent of Hispanic births occur to teens compared with only 7.3 percent among non-Hispanic whites. The nonmarital fertility ratio (i.e., the percentage of births to unmarried women) is much higher (48.0 percent) among Hispanics than whites (25.3 percent), and has recently ticked upward. Fertility rates are particularly high among foreign-born Hispanics (DeLeone, Lichter, and Strawderman 2009).

[1]Between 2000 and 2005, there were 6.4 births for every death in the nonmetro Hispanic population. This ratio was even higher in metro areas—7.8 births per death. This ratio contrasts sharply with the overall US birth-to-death ratio of 1.1 in nonmetro areas and 1.5 in metro areas (Johnson and Lichter 2008).

[2]Detailed information about childbearing (e.g., by generation, residence, or national origin) is unavailable from birth registration system and the National Center for Health Statistics (NCHS). Birth certificates include only a limited amount of social and demographic information about the child, mother, and father. Moreover, the NCHS does not provide a comparison group of women who did not give birth during the year, which is important in estimating behavioral models of fertility.

Many scholars argue that high but declining fertility rates observed among Hispanics are linked in fundamental ways to acculturation and intergenerational mobility (Santelli et al. 2009; Oropesa and Landale 2004; Wilson 2008). For example, a recent study of Hispanic immigrant fertility by Parrado and Morgan (2008) reported much higher estimates of “children ever born” among Hispanics immigrants (especially Mexicans) than whites, but more importantly, significant declines in fertility across generations. Cultural explanations of high fertility typically emphasize familism as a “core element of Hispanic culture” (Landale and Oropesa 2007:396). Familism, as measured by fertility and family formation, is arguably the linchpin of changing cultural patterns and assimilation among most Hispanic groups, including Mexicans (Bean et al. 2000; Landale and Oropesa 2007; Wildsmith 2004). Cultural assimilation presumably is marked by shifts from familism (e.g., early marriage, prenatal norms, extended kin relations and co-residence, and traditional gender roles) to individualism, which is expressed behaviorally in declining Hispanic fertility rates. Parrado and Morgan (2008) argue that convergence between the fertility patterns of Hispanics and non-Hispanics provides direct evidence of cultural assimilation.

Of course, trends and differentials in Hispanic fertility ultimately are played out in different local community settings. Historically, traditional gateways have buffered the social and economic impacts associated with Hispanic immigration in America (Massey 2008b). Local institutions have developed over time to serve new arrivals (e.g. bilingual classrooms, immigrant or culturally-sensitive health clinics, reproductive health and family planning services, ethnic churches, social and political clubs). Anti-immigrant sentiment is also muted in established gateways, where natives are accustomed to interacting with culturally-diverse populations that often speak a different language and have different customs. The implication is that behavioral expressions of familism, such as high fertility, are supported or perhaps even amplified in traditional gateways. Under these circumstances, fertility rates are expected to be very high in established Hispanic gateways.

The institutional context of Hispanic reception is much different in new destinations (Marrow 2011; Waters and Jiménez 2005). To be sure, Hispanic migration to new destinations can be boundary spanning, stitching together origin and receiving Hispanic populations, while engendering divergent patterns of acculturation and structural assimilation (Jiménez 2007; Lee and Bean 2007). For example, new Hispanic arrivals, especially immigrants, may differ from acculturated co-ethnics who are long-time residents. Differences between them and native-born Anglos and Hispanics may take decades or generations to eliminate. At the same time, the migration process itself, partly because of its selective nature (i.e., migrants are positively selected) and partly because of adaptation or assimilation (e.g., upward mobility in the new destination), may also be associated with growing social and cultural distance from the origin community. Assimilation implies that differences between natives and new in-migrants in the destination will narrow over time and generation, while differences between natives and out-migrants from the origin or sending communities may grow over time.

Our conceptual framework is focused on spatial differences in period fertility rates of Hispanics and other ethnoracial groups. The so-called “social characteristics hypothesis” attributes high fertility rates among Hispanics to their demographic risk profile (e.g., age, low education, or immigrant status)(Bean and Tienda 1987; Westoff and Marshall 2010). For example, native/foreign-born differences in fertility presumably reflect differences in the selectivity of immigration and migration (e.g., selectivity of young people in their reproductive prime). High Hispanic fertility also may reflect incomplete structural assimilation in this country, i.e., fertility remains high (vis-à-vis natives) because of persistent inequality (e.g., education, occupation, residence patterns, etc.). The substantive implication is that fertility differences between Hispanics and non-Hispanic whites may be "explained" in large part by differences in social characteristics. Simply stated, the statistical association between Hispanicity and fertility will be attenuated or eliminated if these differences are taken into account (i.e., controlled in a multivariate analysis).

The alternative or "sub-cultural hypothesis" locates higher Hispanic fertility in familism, which emphasizes the traditionally pronatalistic family values and gender roles found in origin countries (e.g., Mexico and other parts of Latin America) (Landale and Oropesa 2007).[3] Specifically, Hispanics – both in established and new destinations – are expected to have higher rates of fertility than other racial and ethnic groups. This will be the case even after controlling for observed social and economic characteristics (e.g., education) associated with fertility. This is essentially a residual explanation.[4] A subcultural perspective also implies that Hispanic fertility will be higher among immigrants than among Hispanic natives, especially if cultural and structural assimilation proceed from greater exposure to majority values and behavior (Wilson 2008).

A sub-cultural perspective, however, does not provide unambiguous hypotheses about comparative Hispanic fertility in new destinations and established gateways. On the one hand, Hispanic fertility levels may be lower in new destinations than in traditional Hispanic gateways. From a cultural perspective, Hispanics in new destinations may assume the childbearing norms of receiving areas (i.e., the local or majority population) while rejecting the higher fertility typically associated with fertility norms in traditional Hispanic enclaves or the origin country. On the other hand, fertility may be shaped by the cultural context of receiving communities, i.e., the size and composition of the Hispanic population. The emergence of locally-concentrated Hispanic populations may reinforce higher Hispanic fertility, regardless of social characteristics. Indeed, the in-migration of Hispanics (especially foreign-born Hispanics) presumably "replenishes" the Hispanic population, promotes in-group exposure and social interaction, and reinforces cultural expressions of "Hispanicity" and ethnic solidarity (Jiménez 2007).

Although our working hypotheses can be applied broadly to Hispanics, some important distinctions exist between Hispanics in traditional gateways and new destinations. For example, if migration into new destinations is highly selective of upwardly mobile or native-born Hispanics – those with good education, language skills, and job skills – then fertility rates may be both low (vis-à-vis Hispanics in established areas) and similar to the non-Hispanic populations in the communities they join. Social characteristics may thus "explain" less of the higher Hispanic fertility in new destinations than in established areas. Previous studies also have documented the so-called *disruption effect* (i.e., migration is disruptive, which affects family formation, sexual activity, and conception) on fertility (Lindstrom and Saucedo 2007). It therefore is important to separate the influence of social characteristics on fertility in new destinations from the disruptive effects of migration. An alternative hypothesis, of course, is that new Hispanic destinations may represent the formation of new ethnic enclaves (Lichter et al. 2010). By definition, they are comprised of high percentages of Hispanic in-migrants (both of native-born and foreign-born) that may reinforce both economic inequality and traditional Hispanic cultural repertoires and, perhaps, high rates of fertility (for recent discussion, see Xie and Gough 2011).

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[3]This is also sometimes referred to as the "minority group hypothesis", i.e., higher or lower fertility is viewed as a cultural adaptation to minority group status (and associated discrimination or lack of opportunities for entry into the economic mainstream (for discussion, see Westoff and Marshall 2010).

[4]The ACS lacks the specific measures necessary for definitive test of subcultural explanations. Residual explanations nevertheless suggest the need to identify factors, including cultural ones, that may explain the excess Hispanic fertility that are unaccounted by traditional predictors of fertility.

Data and Methods

Data

Data come from the pooled 2005–2009 microdata files of the ACS, which is nationally representative of the U.S. population. Our primary units of analysis are females of reproductive age (defined by the Census Bureau as ages 15–50). We also used the ACS in combination with the 1990 and 2000 decennial Censuses to identify new Hispanic destinations. The ACS also allows us to examine the recent volume and timing migration flows into new destinations, including Hispanic immigration from Mexico and Latin America, and the socioeconomic and demographic characteristics of Hispanics, including fertility during the past year. The ACS has replaced the long form of the U.S. decennial census.

Identifying New Hispanic Destinations

Previous studies have identified new destinations at many different levels of geography: regions (Saenz 2004; Crowley et al. 2006), states (Massey and Capoferro 2008; Leach and Bean 2008), metropolitan and nonmetropolitan areas (Lichter and Johnson 2006; Stamps and Bohon 2006); suburban areas (Singer 2004), counties (Kandel and Cromartie 2004; Donato et al. 2007), and places (Lichter, et al. 2010). For our purposes, we define new and established Hispanic areas using the Consolidated Public Use Microdata Areas (C-PUMAs) developed at the Minnesota Population Studies Center (see Lichter and Johnson 2009). These C-PUMAS are identified using the 1990 and 2000 Public Use Microdata file with longitudinally consistent geographic boundaries (Ruggles et al 2008). The 542 C-PUMAs represent combinations of smaller Public Use Microdata areas (PUMAs) from the 1990 and 2000 Censuses.

We define three kinds of C-PUMAs. *Established* C-PUMAs (n = 83) include those with Hispanic populations of 10 percent or more in both 1990 and 2000. Not surprisingly, nearly 70 percent of Hispanics in our sample live in these C-PUMAs (see Table 1). *High growth* C-PUMAs (n = 67) – our new Hispanic destinations – include those that do not meet the criteria for established Hispanic areas but nevertheless experienced exceptional Hispanic growth over the 1990s. This includes C-PUMAs that (1) experienced a 100 percent Hispanic population gain between 1990 and 2000 and (1) were at least 5 percent Hispanic in 2000. The 392 C-PUMAs that do not meet these criteria are identified as *Other* C-PUMAs. Our classification of Hispanic C-PUMAs is based on previous work (Lichter and Johnson 2009; Kritz et al. 2011) adapted from widely-used county classification schemes (see Kandel and Cromartie 2004; Johnson and Lichter 2008).

Measurement and Analytical Strategy

To measure recent fertility, the ACS asks women between the ages of 15 and 50 the following question: “Has this person given birth to any children in the past 12 months?” For the 2005-to-2009 period, 7.75 percent of Latina had a childbirth in the past year, compared with 5.37 percent of non-Hispanics (see Table 1). These data allow us to estimate the average annual fertility over the 2005-to-2009 period, and to calculate fertility rates that approximate incidence rates available from the birth certificate data released by the National Center for Health Statistics. Here we present General Fertility Rates (GFR), which are estimated as (births/females, aged 15–50) * 1000. [5] The GFR measures the quantum of fertility in *Established, High Growth*, and *Other* Hispanic C-PUMAs.[6] Our descriptive analyses will show significant geographic variation (across types of destinations) in fertility for different ethnoracial groups. Here we distinguish between Hispanics, non-Hispanic whites, non-Hispanic blacks, Asians, and others. We also identify four Hispanic subgroups, based on country of origin: Mexicans, Puerto Ricans, Cubans, and other Hispanics.

We also consider Hispanic fertility across several indicators that reflect incorporation in American society, including nativity status, recent immigration status from abroad, arrival time in the U.S., citizenship status, and English language use. Descriptive statistics for these variables are reported in Table 1. Nativity is defined on the basis of whether respondents are born within or outside of the 50 American states and District of Columbia.[7] Immigrant status is based on the one-year retrospective migration question in the ACS, i.e., whether they moved to the United States from a foreign country within the past year. The foreign-born population is further distinguished by the time period during which they came to reside in the United States (before 1990before 1990–1999–2000 and after). Citizenship is represented by three binary variables: U.S. citizen by birth (i.e. born in the U.S. or abroad to American parents), naturalized citizen, and non-citizen. English speaking ability is captured by whether respondents reported (1) conversing only in English at home, or (2) spoke another language besides English at home, which was further disaggregated by proficiency: ability to speak the language “very well”, “well”, “not well”, and “not at all” (i.e., the reference category).

In addition to the aforementioned variables, our multivariate logistic regression models of women’s past-year fertility include several additional variables. Age dummies are included to control for differences in the age distributions of the female population across ethnoracial groups and places of residence. Age variation is captured with three dummy variables (less than 20 years old; 20–24; 25–34); those aged 35 and older serve as the reference category in the multivariate models. The age-gradient of GRF is expected to be inverted U shaped. Marital status is represented by a variable coded 1 if the woman was married but not separated at the time of the survey. Parity is estimated as the number of the respondent’s own children then living in the household minus 1 if a child was born to her in the past year. Educational attainment is measured by two dummy variables, one indicating whether the respondent had graduated from high school but had not obtained at least a year of post-secondary schooling and the other whether she completed at least one year of college; high school dropouts are the reference group. A respondent is coded as living in poverty if family income over the 12 months prior to the interview was below the officially-defined poverty income threshold.

Our multivariate analyses of women’s past-year fertility also take into account the geographic context of Hispanic fertility, i.e., whether women of reproductive age lived in an *Established*, *High Growth*, and *Other* Hispanic C-PUMAs (as defined above). A dummy variable also indicates residence in nonmetro areas, as defined by the Office of Management and Budget on the basis of the 2000 Census results. We expect fertility to be higher in nonmetro areas (Synder 2006). Finally, because fertility levels may reflect local fertility norms and the cultural context of receiving areas, our analyses also includes a dummy variable identifying local areas (within C-PUMAs) with high concentrations of Hispanics (Hispanic Enclave). For our purposes, we used the 2,041 Public Use Microdata Areas

[5]A limitation of the ACS is that sample sizes for some new destinations are of insufficient size to yield precise estimates of local-area fertility. Alternative measures of fertility, such as the Total Fertility Rate, requires past-year data on childbearing for 5-year age groups for subpopulations of Hispanics that simple lack the precision needed for our descriptive analyses. The use of the GFR diminishes the problem of small N’s. From a theoretical standpoint, the GFR also serves our descriptive goals by highlighting variation in the volume of fertility in established and new destinations (see Bongaarts and Griffin 1998) We recognize that the volume of childbearing is partly a function of the size of the female population most at risk of childbearing, a question that we accommodate in our multivariate analysis by controlling for the age distribution of women. In the end, our descriptive and multivariate results of the GFR reveal a similar conclusion, i.e., Hispanic fertility rates are higher in new destinations than in established areas.

[6]In some additional analyses, we compared state fertility patterns (for all women aged 15–50) using the GFR and TFR (which takes into account age differences between states). Using states as the unit of analysis, we estimated a correlation of .954 between state GFRs and TFRs, a result that provides additional assurance that the GFR adequately reflects comparative patterns of fertility across spatial units. The correlation between the TFR and GFR is .963 for Hispanics and .952 for non-Hispanics.

[7]See Parrado (2011) for excellent discussion of substantive and technical aspects of interpreting period and timing effects associated with fertility among native and immigrant Hispanics.

(PUMAs) defined by the Census Bureau. Among these, we identified 691 "Hispanic PUMAs" that were at least 10 percent Hispanic in 2000. We then created a dummy variable to identify these Hispanic enclaves (proxied by PUMAs) in *Established*, *High Growth*, and *Other* C-PUMAs, which we used in our multivariate models of fertility. A map of C-PUMAs and Hispanic PUMAs (i.e., those with high percentages of Hispanics) are shown in Figure 1.

Findings

Hispanic/Non-Hispanic Fertility Differentials

We begin with a general discussion of ethnoracial and spatial differences in fertility. Figure 2 provides GFR's for Hispanics and other racial and ethnic groups for 2005–2009. These data reveal characteristically high rates of fertility among Hispanics (see Parrado and Morgan 2008). For Hispanics, the average annual GFR for 2005–2009 was 77 births per 1,000 women, with higher GFRs among the foreign born (84) than native-born (71) Hispanic population. The GFR's for other groups were much lower, ranging from 52 among non-Hispanic whites to 66 among "other groups." Our analyses also indicate a 2005–2009 GFR of 58 for all women (aged 15–50). The National Center for Health Statistics reports a GFR of 68.5 for women aged 15–44 in 2006 (Martin et al. 2009).[8]

Table 2 provides fertility rates by race/ethnicity and metropolitan status. Consistent with previous research, fertility in rural areas exceeds that in urban areas for each ethnoracial group. Moreover, rural-urban differentials in fertility are much larger for Hispanics (92 vs. 76) than non-Hispanics (58 vs. 53), a finding that presumably speaks to the spatial patterning of Hispanic incorporation. Yet, high rates of fertility among Hispanics may be largely compositional. For example, they may reflect the demographic behaviors of Mexican-origin rather than other Hispanics (Donato et al. 2007). Indeed, the GFR for Mexican-origin Hispanics is 85, compared with 48 among Cubans, 64 among Puerto Ricans, and 66 among other Hispanics (Table 2). Fertility rates among Mexican-origin Hispanics are especially high in America's rural areas.

Hispanic/Non-Hispanic Fertility in New Destinations

The data in Figure 3 indicates that Hispanic fertility rates are higher in non-traditional destinations – both *High Growth* C-PUMAs (GFR = 87) and *Other* Hispanic destinations (GFR = 84) – than in *Established* Hispanic areas (GFR = 74). Among non-Hispanics, GFR's vary little across different Hispanic settlement areas. High GRFs in nontraditional destinations clearly suggest a large second-order effect of Hispanic in-migration on population growth (see Johnson and Lichter 2008). Moreover, our results differ from previous studies, which typically view out-migration as suggestive of economic and spatial assimilation (i.e., geographic mobility is selective of assimilated groups). Our estimates provide little indication that new Hispanic dispersal is associated with cultural assimilation, if measured by low or declining fertility.

Our results also reveal exceptionally high fertility rates among foreign-born Hispanics, both in *High Growth* areas (GFR = 94) and *Other* areas (GFR = 95). Fertility among native-born Hispanics reveals much less spatial variation, a fact that suggests that much (but not all) of the higher fertility in new destinations is driven by differences in shares of foreign-born and

[8]NCHS data are not strictly comparable to ACS data. Our data include women 45–49 which has the effect of depressing the GFR vis-à-vis a rate calculated for women 15–44. The NCHS data use denominators based on the population of women on July 1, 2006. The ACS denominators are defined *after* the birth, at the time of the ACS survey. It may also be the case that some births will not be counted in the ACS if births are followed by emigration. Of course, it is also the case the immigration can occur after the birth of a child, which would mean that the newborn would be counted inappropriately as a U.S. birth.

native-born Hispanics in new and established Hispanic destinations. That is, the high rates of fertility in new destinations reflect the influence of fertility patterns among the large share of foreign-born Hispanics.

Another potential explanation for the differential fertility patterns evident in the three types of Hispanic areas would be differential age structures among Hispanic women of child-bearing age. If Latinas residing in new destinations are younger (in their reproductive prime) than those in established Hispanic areas, this might account for their higher fertility rates, as measured by the GFR. Indeed, analysis of the age distribution of Latinas of childbearing age revealed modest age differences across the three C-PUMA types. The proportion of Latina in their prime child-bearing years (20–39) is very similar across the three residence types (data not shown). The lowest percentage of women, aged 20–39, is in *Established* C-PUMAs, where it is 58.3 percent. In *High Growth* areas, the figure is only slightly higher at 61.7 percent. These small differences might explain some of the fertility differential across places, but other factors also are clearly at work.

Much of the growth in new Hispanic destinations is located in nonmetro areas, a fact that may also contribute to the higher fertility in new destinations. Table 3 disaggregates fertility rates in new Hispanic destinations into its metropolitan and nonmetropolitan components. We also separate Mexican-origin Hispanics from all other Hispanics. These data indicate that Hispanic fertility is higher in new destinations than established gateways, both in metropolitan (87 vs. 74) and nonmetro (97 vs. 85) areas. The higher fertility in new destinations clearly is not due solely to being located in nonmetropolitan areas (where fertility is typically high). Moreover, the GFR is 101 among Mexican-origin Hispanics in new destinations, compared with only 69 among non-Mexican Hispanics and 55 among non-Hispanics. High rates of Mexican-origin fertility are similarly evident in both metro (101) and nonmetro (102) new destinations. These rates greatly exceed those observed in established Hispanic gateways – especially metropolitan gateways (80). From a demographic perspective, Mexican-origin Hispanics – a historically disadvantaged population – are primarily responsible for the much higher fertility in new Hispanic destinations.

Assimilation and Fertility in New Destinations

The much higher fertility rates among Hispanics in new destinations seemingly signal the lack of cultural assimilation/incorporation among Hispanics (especially Mexicans) living in them. Indeed, high fertility may reflect disproportionately large shares of foreign-born Hispanics who have recently arrived in the United States or who have by-passed traditional gateways before arriving in new destinations. On the other hand, immigration is often highly disruptive of family life and is sometimes associated with lower fertility rates (Lindstrom and Saucedo 2007). Fertility rates among Hispanics also may reflect differences in citizenship status (which measures aspirations for Americanization and is sometimes considered a proxy for length of residence in the country) or even English language ability.

Table 4 provides GFRs for Hispanics in new and other destinations, but disaggregated by the aforementioned indicators of assimilation (e.g., English language ability). Recent Hispanic immigrants to new destinations – those who arrived in the United States in the past year – have much lower rates of fertility (GFR = 46) than native-born Hispanics (GFR =76) or those who have been in the United States for longer periods of time. The disruptive effects of recent immigration were especially large in new destinations. On the other hand, GFR's are exceptionally high among Hispanics who arrived in the United States between 1 and 4 years ago, both in new destinations (GFR = 134) and established areas (GFR = 130). It seems that any disruptive effects associated with immigration are "made up" with higher fertility later.

Our results also show that fertility rates are especially high among non-citizens (a result that is reinforced in the multivariate results). The GFR for Hispanic non-citizens is 109 and 90 in new destinations and established areas, respectively. These compare with a fertility rate of about 70 among U.S.-born Hispanic citizens. The GFR's are especially low among naturalized citizens, but this likely reflects their older ages in comparison to native-born Hispanics. Simply put, it can be a lengthy and time-consuming process to become a naturalized citizen, a fact that ultimately shifts Latinas into another life cycle stage (from family building to childrearing).

Finally, English language ability is useful proxy of cultural assimilation (Bean and Tienda 1987). The ability to speak English well obviously reflects length of time in the country. But it also may reflect past enrollment in primary and secondary schools, especially for Hispanics who came to the United States as children. And it suggests greater "exposure" to non-Hispanic natives outside of ethnic enclaves – in the workplace and elsewhere. As revealed in Table 4, Hispanics who "do not speak English" have much higher fertility rates than those who speak only English (probably third generation Hispanics). In new destinations, the GFR is 131 among Hispanics who do not speak English; this rate is more than twice as high as the fertility rate among Hispanics who speak only English. Bilingual Hispanics, as expected, have fertility rates that are intermediate between Hispanics who only speak English and those who do not speak English.

Modeling Fertility in New Hispanic Destinations

In this section, we describe behavioral models of fertility using the 2005–2009 ACS microdata files. Table 5 presents the results from a logistic regression model of all women of reproductive age (column 1). The goal here is to evaluate the "social characteristics hypothesis" by providing estimates of racial and ethnic differences in past-year fertility, net of key social characteristics that are typically associated with high fertility and distributed unevenly across the Hispanic and non-Hispanic population. We then fit a similar logistic regression model (column 2), but limit our analysis to Hispanics while identifying different national origin groups (e.g., Mexicans).

In the model for all women (Table 5, column1), the results show that the relative risk of past-year fertility among Latinas is 1.253 times greater than among non-Hispanic white women. These results suggest a straightforward but significant conclusion: The higher Hispanic GFR's (reported in Figure 3) cannot be explained or accounted for by differences in age, social characteristics (e.g., low education, poverty), or residence patterns typically linked to higher rates of fertility.[9] Such results instead may argue for the "subcultural hypothesis," although our residual approach to this question provides a weak test in the absence of specific cultural indicators. The larger point nevertheless remains: High rates of Hispanic fertility cannot be reduced to conventional demographic or compositional arguments (i.e., the "social characteristics hypothesis").

This model also includes dummies representing *High Growth* and *Other* Hispanic areas types (with *Established* C-PUMAs serving as the reference category). These data reveal the highest fertility in new destination or other non-traditional destinations. Interestingly enough, women living in new Hispanic destinations have higher rates of fertility that are not entirely compositional in nature, i.e., due to the higher percentages of Hispanics living in them. One possible interpretation, of course, is that pro-natal attitudes and behavior of Hispanic population growth affects the fertility norms of other racial and ethnic groups in

[9]In a preliminary model that included only the ethnoracial dummy variables, the odds ratio for Latinas was 1.57. When only the age dummies were added to the model, the Latina dummy dropped in size (but not significance) to 1.398. Fertility differences between Latinas and whites are not due to age differences alone.

the area, including the fertility of non-Hispanic whites. In this case, cultural influences (on fertility) may be symmetrical rather than asymmetrical (as implied by straight line assimilation theory).[10]

We turn next to the results reported in column 2 (Table 4), which provides model estimates for Hispanics only. Our results again document the exceptionally high rates of recent fertility among Mexican-origin Hispanics compared with other Hispanic populations. Among Cuban Americans, for example, the relative risk of past-year fertility among Cuban women was nearly one-third lower (OR = .709) than Mexican women. The odds of fertility among Puerto Ricans and other Hispanics were about 10 and 15 percent lower than Mexican-origin women, net of the variables included in our models.

Our results also indicate significantly higher fertility rates among Hispanics who do not speak English (independent of other social and economic characteristics). Our results show that the relative risk of past-year fertility is especially low among recently-arrived Hispanic immigrants (OR = .505), a finding that suggests a disruption effect (Lindstrom and Saucedo 2007). Not surprisingly, past-year fertility is highest among married women (OR = 3.163), poor women (OR = 2.397), and those who have not attended college. The relative risk of childbearing in the past year also declines significantly with parity (OR = .784).

It also is the case that Hispanic fertility is highest in areas outside traditional Hispanic gateways. For example, Latinas in new and other nontraditional destinations are roughly 10 percent more likely to have a child in the past year than Hispanic women living in established gateways. The odds of fertility also is significantly higher in nonmetro (OR = 1.051) than metro areas. Although the diffusion from metropolitan ethnic enclaves (i.e., established areas in the Southwest) to peripheral or rural areas is clearly associated with higher rates of fertility, there is little evidence that fertility is higher in new destinations with large Hispanic populations (as a percentage of the overall population) (OR = 1.013).

Discussion and Conclusion

Much of the burgeoning new research on emerging Hispanic destinations has centered on Hispanic in-migrants – both natives and the foreign-born – and their social and economic incorporation in communities without much previous experience with racial or ethnic minority populations (Massey 2008a; Zúñiga Hernández-León 2005; Crowley and and Lichter 2009). Our paper shifts the focus from immigration to the second-order demographic implications of high Hispanic fertility, which accounted for most Hispanic population growth over the post-2000 period (Johnson and Lichter 2008, 2010). This is the first paper to compare Hispanic fertility across new and established immigrant destinations. We argued that changing fertility is a useful indicator of incorporation (Parrado and Morgan 2008) and that Hispanic fertility rates are shaped by the institutional context of receiving communities, i.e., established gateways and new Hispanic destinations (Marrow 2009). Our paper also served the didactic goal if illustrating the potential uses of the new fertility question in the annual ACS microdata files.

Our empirical analyses highlighted the exceptionally high fertility rates among Hispanics in the United States compared with other racial and ethnic groups, including whites. We also showed that high fertility among Hispanics has been driven partly by the Mexican-origin population and the new immigrant population (e.g., noncitizens, those with poor English

[10]Additional analysis (not shown) reveals that Hispanics in established and new destinations are 1.283 and 1.242 times more likely, respectively, to have borne a child in the past year than non-Hispanic whites. These results mirror those for the entire sample of women. The high fertility of Hispanics cannot be explained by the objective social characteristics included in our models, a fact which suggests the need to identify other explanations, including cultural ones."

language skills, etc.). Significantly, high recent fertility rates among Hispanics – and Mexican-origin Hispanics in particular – could not be explained entirely by sociodemographic characteristics that place them at higher risk of fertility. Instead, results were mostly consistent with a sub-cultural explanations of Hispanic fertility, e.g., that high rates of Hispanic fertility may be rooted in familism (Bean et al. 2000), religion (Westoff and Marshall 2010), or other cultural dimensions. For the 2005-to-2009 period, Hispanic fertility rates were roughly 30 percent higher than fertility among whites, even after controlling for Hispanic/non-Hispanic white differences in many demographic, social, and economic characteristics. It is difficult to reduce exceptionally high Hispanic fertility rates to simple compositional or demographic arguments.

Most previous research (e.g., Lindstrom and Saucedo 2007) suggests that new immigrants (e.g., rural to urban migrants) have fertility rates that are intermediate between the origin and destination. In our analyses, however, fertility rates among Hispanics in new destinations (GFR = 85) exceeded fertility in established gateways (GFR = 74) and perhaps even from Mexico or other Latin American counties. Moreover, in the multivariate analyses, Latinas in new destinations were roughly 10 percent more likely to have had a child in the past year than those living in established gateways.

The higher Hispanic fertility rates found in new destinations is perhaps surprising. Most voluntary migration is highly selective of socioeconomic groups (e.g., those with the most education) that typically have lower-than-average fertility rates. Spatial assimilation also usually occurs in tandem with upward social mobility and cultural and economic incorporation (e.g., leaving the ethnic enclave). Migration of any kind also is typically viewed as having “disruptive” effects on fertility (which we also find here). Our results nevertheless are seemingly at odds with the fact that fertility rates in Mexico, for example, have declined rapidly over the recent past (Frank and Heuveline 2005). The Total Fertility Rate now stands at 2.29. Although this is a topic for another paper, our results seemingly suggest that recent Hispanic immigration to the U.S. – and perhaps to new destinations – is associated with family formation and high fertility aspirations. Evidence for subcultural explanations, including familism (expressed in higher fertility), clearly has many possible sources, including selective migration.

A limitation of our results is that we are unable to provide a direct test of sub-cultural theories of fertility. Our results showing higher Hispanic fertility in new destinations nevertheless raises important questions about the possible appearance of new ethnic enclaves in emerging Hispanic destinations, where Hispanicity is reinforced rather than lost. One argument is that immigration and Hispanic growth in some new destinations has replenished cultural expressions of Hispanicity, including its characteristically high fertility (Jiménez 2008; Morgan 1996). The quantity and tempo of fertility in new Hispanic destinations may depend on the volume and characteristics of new Hispanic in-migrants, who replenish cultural repertoires and contribute to temporal and spatial variation in Hispanic fertility. This conceptual lens is especially important during the current period when Hispanic fertility has become a major demographic force for cultural, social, and economic change in new Hispanic destinations (Crowley and Lichter 2009). Although additional evidence is required, it also suggests Hispanic ghettoization in new places and the possibility of growing geographical balkanization of racial and cultural groups in America.

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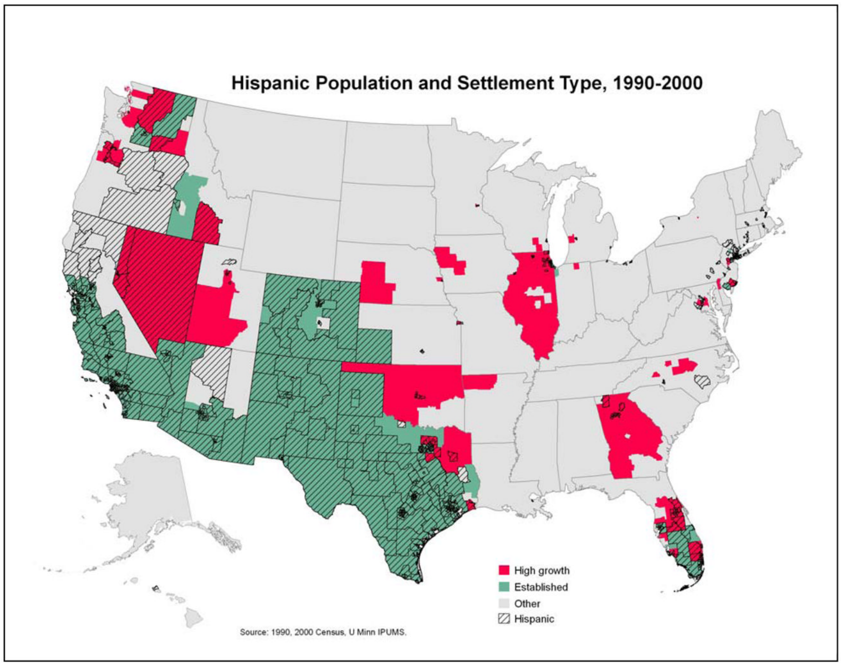

Figure 1.
Hispanic Population and Settlement Type, 1990–2000

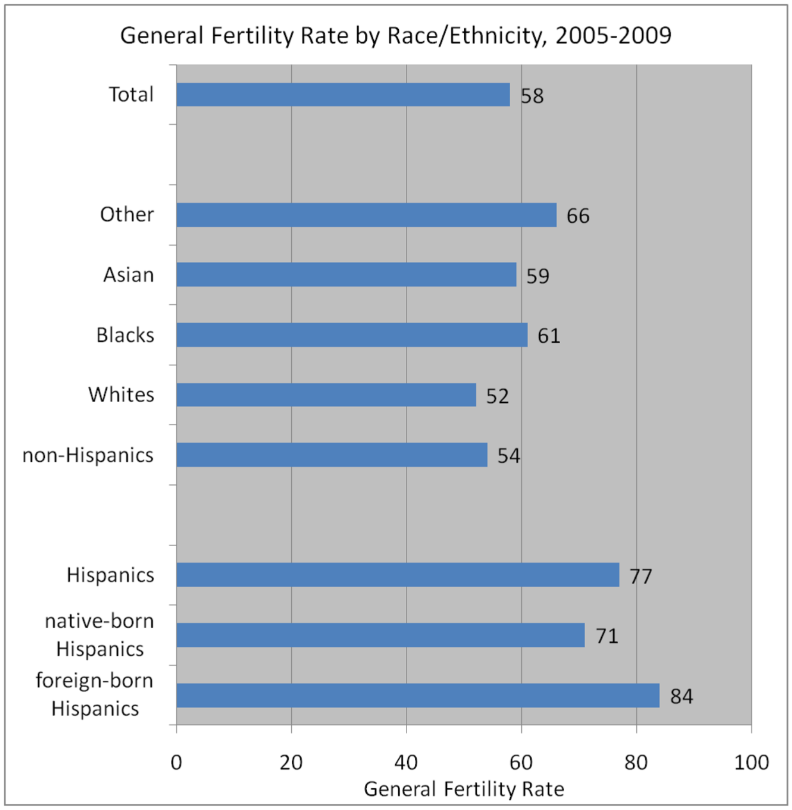

Figure 2.

General Fertility Rates, by Race/Ethnicity, 2005–2009

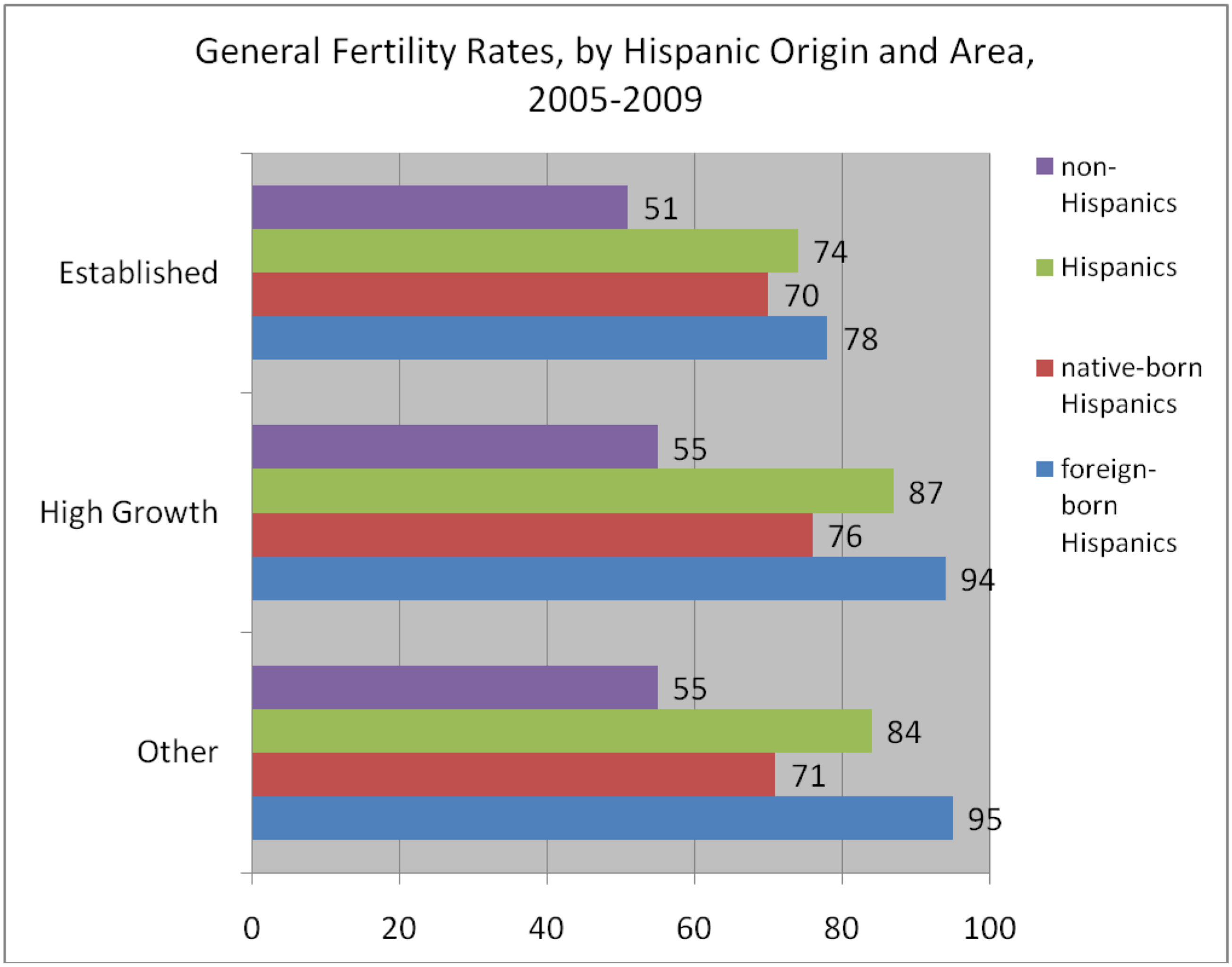

Figure 3.
General Fertility Rates, by Hispanic Origin and Area, 2005–2009

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Table 1

Descriptive Statistics, by Hispanic status

	Hispanics	Non-Hispanics
Gave birth past year	0.0775	0.0537
Age:		
Less than 20	0.1497	0.1265
20–24	0.1439	0.1277
25–34	0.3031	0.2568
35–50	0.4034	0.4890
Nativity:		
Foreign-born, arrived >= 5 yr ago	0.4488	0.0878
Foreign-born, arrived 1–< 5 yr ago	0.0683	0.0158
Foreign-born, arrived <1 yr ago	0.0062	0.0023
Native-born	0.4766	0.8941
English Language ability:		
Speaks only English	0.2143	0.8881
Speaks English very well	0.4025	0.0731
Speaks English well	0.1281	0.0237
Speaks English but not well	0.1541	0.0128
Does not speak English	0.1010	0.0022
Married	0.4599	0.4706
Below poverty line	0.2289	0.1400
Parity	1.1060	0.8901
Education:		
Less than high school	0.3478	0.1414
High school	0.3473	0.3236
More than high school	0.3049	0.5350
Settlement Area:		
Established	0.6994	0.2281
High Growth	0.1235	0.1664
Other	0.1771	0.6055
Hispanic Enclave	0.0714	0.0473
Nonmetro	0.0671	0.1701
N (unweighted)	486,407	2,991,808

Table 2

General Fertility Rates, 2005–2009, by Metro Status and Race/Ethnicity

	Metro	Nonmetro	Total
Hispanic	76	92	77
Mexican	84	95	85
Cuban	48	69	48
Puerto Rican	63	86	64
Other Hispanic	65	82	66
Non-Hispanic	53	58	54
White	50	57	52
Black	60	67	61
Asian	60	57	59
Other	64	72	66
Total	57	61	58

Table 3

General Fertility Rates, 2005–2009, by Destination Type and Ethnicity

Race	Established			High Growth			Other		
	M	**N**	**T**	**M**	**N**	**T**	**M**	**N**	**T**
Hispanic	74	85	74	87	97	87	81	100	84
Mexican	80	86	80	101	102	101	101	107	103
Other	59	81	60	69	76	69	69	84	71
Non-Hispanic	51	58	51	54	61	55	54	58	55
Total	59	67	59	58	63	59	55	59	56

Note: M = Metro; N = Nonmetro; T = Total

Table 4

General Fertility Rates, Hispanics, by Indicators of Assimilation

	Established	High Growth	Other
Nativity:			
Foreign-born	78	94	95
Native-born	70	76	71
Time of Arrival:			
Foreign-born, arrived >=5 yr ago	72	87	87
Foreign-born, arrived 1<5 yr ago	130	134	132
Foreign-born, arrived <1 yr ago	66	46	86
Native born	70	76	71
Citizenship status:			
US citizen by birth	69	74	70
Naturalized citizen	51	58	63
Non-citizen	90	109	113
English language ability:			
Speaks only English	66	68	67
Speaks English “very well”	71	79	77
Speaks English “well”	72	81	85
Does not Speak English well	74	104	107
Does not Speak English	102	131	129

Table 5

Logistic Regression Models of Fertility in Past Year, 2005–2009, Full Sample and Hispanics

	Full sample	Hispanics
Age:		
Lt 20 years old	2.482***	1.956***
20–24	6.586***	5.015***
25–34	5.911***	4.321***
35–50 (reference)		
Race:		
Hispanic	1.253***	
Black	1.492***	
Asian	0.965***	
Other	1.285***	
White (reference)		
Hispanic group:		
Mexican (reference)		
Cuban		0.709***
Puerto Rican		0.903***
Other Hispanic		0.854***
Nativity		
Foreign-born, arrived >=5 yr ago	0.988	1.010
Foreign-born, arrived 1–<5 yr ago	0.965**	1.132***
Foreign-born, arrived <1 yr ago	0.400***	0.505***
Native born (reference)		
Language ability:		
Speaks only English	0.784***	0.818***
Speaks English very well	0.920***	0.933***
Speaks English well	0.946***	0.939***
Speaks English but not well	0.880***	0.890***
Does not speak English (reference)		
Married	4.840***	3.163***
Below poverty line	2.483***	2.397***
Parity	0.824***	0.784***
Education:		
Less than high school (reference)		
High school	1.057***	1.084***
More than high school	1.018*	0.900***
Hispanic Area:		
Established (reference)		

	Full sample	Hispanics
High Growth	1.055 ***	1.104 ***
Other	1.061 ***	1.110 ***
Hispanic + High Growth	0.996	1.013
Nonmetro	0.995	1.051 **
-2loglikelihood	1,309,923.228	237,032.959
Cox & Snell R-squared	0.052	0.054
Nagelkerke R-squared	0.150	0.129

* p <0.10.

** p < 0.05

*** p < 0.01

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