



## Nativity Differences in Mothers' Health Behaviors

### Background

There are striking advantages in birth outcomes and infant health among children of foreign-born mothers compared to children of mothers born in the United States. Foreign-born mothers, and Latina mothers in particular, are more likely to give birth to infants of normal weight and fully immunize their children than native-born mothers. Healthier behaviors among foreign-born mothers, despite a greater likelihood of low education and low economic resources, are often referred to as an “immigrant health paradox.”

This research brief examines whether the immigrant paradox observed among Latina mothers extends to other immigrants in the US and to immigrant mothers in the United Kingdom from very different countries of origin. It also examines whether the advantage persists beyond infancy. Revealing the origins of inequality in the health environments of immigrants and native-born families is an important step toward identifying periods when investments in children, and immigrant children in particular, are most likely to pay off.

### Data and Methods

United States data come from the Fragile Families and Child Wellbeing Study, which follows a cohort of nearly 5,000 children born between 1998 and 2000. Births were sampled from 75 hospitals in 20 large US cities. Interviews with both mothers and fathers took place in the hospital soon after the birth, with additional interviews conducted when the child was one, three, five, and nine years old. United Kingdom data come from the Millennium Cohort Study, which follows a cohort of approximately 18,800 children born between 2000 and 2002. The initial interview took place when children were 9 months old, with follow-up interviews when children were three, five, seven, and eleven years old. Both data sources provide information on sociodemographic characteristics, parents' health, relationships, parenting, and child well-being. All children in both datasets are born in the United States or

the United Kingdom, while their mothers may be either native-born or foreign-born.

Immigrant mothers in the United States were classified as Hispanic (Mexican, Puerto Rican, Cuban, and other Hispanic ethnicities) and non-Hispanic (Asian, American Indian, Black, White, and other non-Hispanic ethnicities). Immigrant mothers in the United Kingdom were classified as South Asian (Indian, Pakistani, Bangladeshi), Black (African, Caribbean), White (mothers of European origin), and other (including Chinese immigrants and other small groups). Native-born mothers were also classified according to their ethnic origins. Mothers' health behaviors were examined around the time of the child's birth and between birth and age five. Outcomes included whether the mother smoked across waves, received early prenatal care (first trimester) and breastfed. Control variables included maternal education, family income, family structure, mother's age at birth, and child's sex. Additional controls, such as language spoken at home and mothers' social support, did not change the substantive findings about immigrant/native differences, and therefore were not included in the final models. Parameter estimates from binary logistic regression models were used to compute the predicted probability of engaging in a particular health behavior. Growth curve modeling was used to examine the persistence of nativity differences in mothers' smoking throughout early childhood.

### Results

Table 1 presents weighted descriptive statistics for maternal health behaviors by nativity status. These results indicate that the immigrant advantage in mothers' health behavior extends to other immigrant mothers in the US and to mothers in the United Kingdom. In the United States, 18 percent of native-born mothers smoke during pregnancy, compared to 4 percent and 1 percent of non-Hispanic and Hispanic immigrant mothers, respectively. In the United States, all immigrant

**Table 1: Weighted Percentage of Maternal Health Behaviors by Nativity and Race/Ethnicity**

	Prenatal Smoking	Early Prenatal Care	Breastfed	Smoked Around Child at Age 5
<b>United States (FFS)</b>				
Foreign-born Non-Hispanic	4%	83%	89%	3%
Foreign-born Hispanic	1%	82%	80%	1%
U.S.-born	18%	79%	60%	14%
<b>Total</b>	<b>14%</b>	<b>80%</b>	<b>66%</b>	<b>11%</b>
<b>United Kingdom (MCS)</b>				
Foreign-born White	17%	81%	88%	10%
Foreign-born South Asian	3%	76%	95%	6%
Foreign-born Black	1%	73%	82%	2%
Foreign-born Other	4%	78%	96%	3%
UK-Born	22%	78%	72%	13%
<b>Total</b>	<b>22%</b>	<b>77%</b>	<b>73%</b>	<b>12%</b>

Source: Fragile Families Study (FFS) for United States; Millennium Cohort Study (MCS) for United Kingdom.

mothers are more likely than U.S.-born mothers to breastfeed their child and less likely to smoke. In the United Kingdom, South Asian, Black, and other immigrant mothers are less likely to smoke during pregnancy, less likely to smoke around their child, and more likely to breastfeed than native-born mothers. White immigrant mothers in the UK, although more likely to have breastfed, have only slightly lower levels of prenatal smoking than native-born mothers. Additional descriptive results (not shown) indicate that nativity groups vary dramatically in their levels of education and family income. In the United States, Hispanic immigrants have below-average levels, whereas non-Hispanic immigrants have above-average levels. In the United Kingdom, White immigrants have above-average levels of education whereas South Asian immigrants have below-average levels of education.

Table 2 reports the predicted probability of each health behavior, holding social and demographic characteristics constant at their means. In the United States, non-Hispanic and Hispanic immigrant mothers are 75 and 99 percent, respectively, less likely than U.S.-born White mothers to smoke while pregnant. The magnitude of these differences is smaller, but still sizable, when immigrant mothers are

compared to their native-born ethnic peers. Similarly, the predicted probability of breastfeeding in the United States is about 40 percent higher among both Hispanic and non-Hispanic immigrant mothers as compared with native-born Whites. These results suggest that healthier behaviors among the foreign-born are not limited to Hispanic mothers, as there are also large differences between non-Hispanic immigrant mothers (most of whom are Asian or “other”) and non-Hispanic, native-born whites. Differences are also found between non-Hispanic White immigrant mothers and their U.S. born peers, despite the higher average levels of education and family income available to those born in the U.S. This finding adds to existing U.S. evidence that has produced mixed results with regard to a health advantage among non-Hispanic foreign-born mothers.

Extending analysis to the United Kingdom, Table 2 also demonstrates an “immigrant advantage” among foreign-born mothers. Overall, patterns at birth are more varied among White immigrant mothers, who are the most socioeconomically advantaged of the foreign-born groups. These mothers are more likely to breastfeed than their UK-born peers but no less likely to smoke while pregnant. In contrast, South

**Table 2: Predicted Probability of Maternal Health Behaviors on Nativity and Race/Ethnicity**

	Prenatal Smoking	Early Prenatal Care	Breastfed	Smoked Around Child at Age 5
<b>United States (FFS)</b>				
U.S.-born non-Hispanic white	.398	.828	.583	.224
U.S.-born non-Hispanic	.258	.820	.527	.187
Foreign-born Non-Hispanic	.096	.784	.815	.071
U.S.-born Hispanic	.059	.787	.503	.047
Foreign-born Hispanic	.004	.858	.867	.009
<b>United Kingdom (MCS)</b>				
UK-born white	.212	.781	.674	.120
Foreign-born white	.239	.791	.812	.126
UK-born South Asian	.039	.758	.883	.032
Foreign-born South Asian	.006	.771	.900	.034
UK-born black	.141	.756	.940	.013
Foreign-born black	.014	.777	.971	.014
UK-born other	.202	.685	.928	.022
Foreign-born other	.022	.798	.955	.023

*Source: FFS for United States. MCS for United Kingdom. Probabilities computed from parameters of logistic regression models (not shown). Covariates include mother's education, family income, marital status, mother's age at birth, and child sex.*

Asian, Black, and other immigrant mothers are more likely to breastfeed and less likely to smoke than their native born counterparts. Although the foreign-born advantage is strongest among the most socioeconomically disadvantaged groups, it is not limited to these mothers.

Finally, in order to test whether the behavioral advantage of foreign-born mothers persists beyond infancy, trajectories in mothers' smoking behavior were examined (not shown). The results of this analysis suggest that disparities between nativity groups are fairly stable over time.

## Conclusions and Policy Implications

Our findings suggest a “universality” of healthier behaviors among foreign-born mothers. Generally speaking, immigrant mothers are less likely to smoke during pregnancy and childhood, and more likely to breastfeed than native-born

mothers. Early prenatal care is common among all mothers in both countries, suggesting that the United States largely succeeds at providing health care access to pregnant immigrant mothers, despite having a less universal coverage system than the United Kingdom.

Examining immigrant/native differences in the two countries provides an extension of the analytic lens beyond the United States, which has informed much of our understanding about mothers' health behaviors in the context of immigration. Given the large number of first- and second-generation parents and children in the United States and the United Kingdom, it is increasingly important to understand the evolution of health trajectories among this diverse group of families and children. If immigrant families practice healthier behaviors, the challenge lies in maintaining healthy environments over time, as well as finding ways to extend those benefits to the broader population.

# FRAGILE FAMILIES RESEARCH BRIEF

Center for Research on Child Wellbeing

Wallace Hall, 2nd Fl. • Princeton University • Princeton, NJ 08544

## RECENT WORKING PAPERS

The following comprises a list of the most recent Working Papers authored by the Center for Research on Child Wellbeing (CRCW) faculty and research associates. A complete list of Working Papers is also available for viewing and downloading on the CRCW web site: <http://crcw.princeton.edu/publications/publications.asp>.

WP13-17-FF: Colleen Wynn, Lauren McClain “Not Quite Out On The Streets: Housing Insecurity Among Low-Income Urban Fathers”

WP13-16-FF: Kate Choi, Amy Hsin, Sara McLanahan “Asian Children’s Verbal Development: A Comparison of Three Countries”

WP13-15-FF: Anna Haskins “Mass Imprisonment and the Intergenerational Transmission of Disadvantage: Paternal Incarceration and Children’s Cognitive Skill Development”

WP13-14-FF: Marcia Carlson, Alicia VanOrman “Trajectories of Couple Relationship Quality after Childbirth: Does Marriage Matter?”

WP13-13-FF: Natasha Pilkauskas, Irwin Garfinkel, Sara McLanahan “Doubling Up as a Private Safety Net for Families with Children”

WP13-12-FF: Kristin Turney “Liminal Men: Incarceration and Family Instability”

WP13-11-FF: Kate Choi, Sara McLanahan “Multiracial Infants and Low Birth Weight: Evidence from the Fragile Families and Child Wellbeing Study”

WP13-09-FF: Nancy Reichman, Hope Corman, Kelly Noonan “Effects of Mental Health on Couple Relationship Status”

WP13-08-FF: Julia Goldberg, Marcia Carlson “Parents’ Relationship Quality and Children’s Behavior in Married and Cohabiting Families”

WP13-07-FF: Kristin Turney “The Intergenerational Consequences of Mass Incarceration: Implications for Children’s Contact with Grandparents”

WP13-06-FF: Aaron Gottlieb, Natasha Pilkauskas, Irwin Garfinkel “Private Financial Transfers, the Great Recession, and Family Context”

WP13-05-FF: Robynn Cox, Sally Wallace “The Impact of Incarceration on Food Insecurity among Households with Children”

WP13-04-FF: Kei Nomaguchi, Wendi Johnson “Employment, Work-Family Conflict, and Parenting Stress among Economically Disadvantaged Fathers”

WP13-03-FF: Jerrett Jones “Examining the Relationship between Paternal Incarceration, Maternal Stress, and Harsh Parenting Behaviors”

WP13-01-FF: Sangita Pudasainee-Kapri, Rachel Razza “Attachment Security Among Toddlers: The Impacts of Supportive Coparenting and Father Engagement”

WP12-21-FF: Sara McLanahan “Fragile Families and Children’s Opportunities”

WP12-19-FF: Natasha Pilkauskas “Instability in Three-Generation Family Households and Child Wellbeing”

WP12-17-FF: Kristin Turney, Sara McLanahan “The Academic Consequences of Early Childhood Problem Behaviors”

WP12-16-FF: Samara Gunter “Informal Labor Supply in the United States: New Estimates from the Fragile Families Survey”

WP12-15-FF: Laura Tach “Family Complexity, Childbearing, and Parenting Stress: A Comparison of Mothers’ and Fathers’ Experiences”

WP12-14-FF: Christine Baker-Smith “Mind Over Money: How Do Variations in Receipt of Child-Support Affect Home Environments?”

WP12-13-FF: Letitia Kotila, Claire Kamp Dush “The Psychological Wellbeing of Involved, Low Income Fathers”

For more information about the Fragile Families and Child Wellbeing Study, go to [www.fragilefamilies.princeton.edu](http://www.fragilefamilies.princeton.edu). To review public and working papers from the Fragile Families Study, go to <http://crcw.princeton.edu/publications/publications.asp>.

This research brief was adapted from “Nativity Differences in Mothers’ Health Behaviors: A Cross-National and Longitudinal Lens” by Margot Jackson, Sara McLanahan, and Kathleen Kiernan (published in *The ANNALS of the American Academy of Political and Social Science*, 2012, Vol. 643, Issue 1, pgs. 192-218).

A Publication of the Woodrow Wilson School of Public and International Affairs at Princeton University.