



Health Disparities Among Children of Immigrants

Proceedings of the
National Children's Study Symposium

December 15–16, 2011
Natcher Conference Center
National Institutes of Health
Bethesda, Maryland

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
National Institutes of Health
Centers for Disease Control and Prevention
U.S. ENVIRONMENTAL PROTECTION AGENCY



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Chapter 1: Introduction and Meeting Agenda

Introduction

The National Children’s Study Symposium, *Health Disparities Among Children of Immigrants*, was convened in December 2011 to help develop a framework for the Study to acquire information on the children of immigrants.

Mandated by Congress in the Children’s Health Act of 2000, the National Children’s Study is a national longitudinal study to examine the relationships between environmental exposures and genetics and their impact on the growth, development, and health of children. The objective of the symposium was to discuss with subject matter experts those immigration issues relevant to the Study—including recent research findings, potential research questions, data collection issues and possible measurement strategies—as well as how to address the health and developmental trajectories of children of immigrants with the Study..

Researchers presented the findings from numerous studies related to immigrants in the United States and made a number of important suggestions about how the National Children’s Study could better capture information on immigrants and their children. Studies on a wide variety of topics relevant to child health were presented, including research on health of immigrant children; the “immigrant paradox” (i.e., good health despite disadvantaged socioeconomic status) in children; health issues related to specific immigrant ethnic groups; issues related to undocumented status; and measurement of cultural factors.

These proceedings provide a summary of key findings organized into four topic areas:

- Migration and Health Disparities in Childhood
- Maternal and Child Health: Understanding Race, Ethnicity, and Immigration Status
- Measuring Migration and Immigration in Studies of Child Health
- Measuring Social and Cultural Dimensions of Child Health

Following the summary of key findings are a number of important ideas from symposium presenters about how the National Children’s Study could better capture information on the health of immigrants and their children. These ideas focus on three areas: conceptual issues, the study design and data collection strategies, and data or measures to be collected.

These proceedings also include a summary of the symposium, followed by a list of participants in the Appendix.

The National Children’s Study

Steven Hirschfeld, M.D., Ph.D.

Captain, U.S. Public Health Service

Director, National Children’s Study, *Eunice Kennedy Shriver* National Institute of Child Health and Human Development (NICHD), National Institutes of Health (NIH), Bethesda, MD

Dr. Hirschfeld defined “immigration” as moving from one home to another and, based on that inclusive definition, noted that everyone is an immigrant. Children are often the bridge from the former home to a new home and from the past to the future. The purpose of the symposium is to develop a framework acquiring information on children of immigrants within the context of the National Children’s Study.

Congress mandated the Study in the Children’s Health Act of 2000. The Study is an integrated system of activities to examine the relationships between environmental exposures and genetics and their impact on growth, development, and health. Environment is broadly defined to include factors such as air, water, soil, dust, noise, diet, social and cultural settings, access to health care, socioeconomic status (SES), and learning.

The Children’s Health Act describes the requirements for the Study, which include:

- Performing complete assessments
- Gathering data on environmental influences and outcomes on diverse populations of children, which may include the consideration of prenatal exposures
- Considering health disparities among children, which may include the consideration of prenatal exposures

Study implementation is data driven, evidence based, and community and participant informed.

Dr. Hirschfeld discussed examples of exposure and outcome areas of interest. He explained that the Study does not seek to address distinct hypotheses but rather to create a resource that can be used to answer future questions. The Study is interested in the history and health of children, but “health” needs to be defined.

Dr. Hirschfeld defined the Study as including the Vanguard Study, the Main Study, substudies, and formative research. The Vanguard Study is evaluating the feasibility, acceptability, and cost of Study recruitment; logistics and operations; and Study visits and visit assessments. Collaborations with other large cohort studies are being developed to share data about uncommon conditions of interest.

The Study does not ask about immigrant status—information about immigrant status is either inferred from sociodemographic characteristics or volunteered by participants.

THE NATIONAL CHILDREN'S STUDY

- Congressionally mandated by Children's Health Act of 2000
- An integrated system of activities to examine the relationships between environmental exposures and genetics on growth, development, and health.
- Environment is broadly defined to include factors such as air, water, soil, dust, noise, diet, social and cultural setting, access to health care, socioeconomic status, and learning.

1.

WHAT THE LAW SAYS

"(1) Plan, develop, and implement a prospective cohort study, from birth to adulthood, to evaluate the effects of both chronic and intermittent exposures on child health and human development;
and
(2) Investigate basic mechanisms of developmental disorders and environmental factors, both risk and protective, that influence health and developmental processes."

2.

WHAT THE LAW SAYS

The Study is required to:

"(1) Incorporate behavioral, emotional, educational, and contextual consequences to enable a complete assessment of the physical, chemical, biological, and psychosocial environmental influences on children's well-being;
(2) Gather data on environmental influences and outcomes on diverse populations of children, which may include the consideration of prenatal exposures; and
(3) Consider health disparities among children, which may include the consideration of prenatal exposures."

3.

THE NATIONAL CHILDREN'S STUDY'S PRINCIPLES

- Data driven
- Evidence based
- Community and participant informed

4.

EXAMPLES OF EXPOSURE AREAS OF INTEREST

- Exposure to industrial chemicals and byproducts in the air, water, soil, and commercial products
- Exposure to natural products in the air, water, soil, and commercial products
- Exposure to pharmaceuticals used for therapy and in the environment
- Radiation exposure
- Effects of proximity to manufacturing, transportation, and processing facilities

5.

EXAMPLES OF EXPOSURE AREAS OF INTEREST

- Living with animals, insects, and plants
- Media and electronic device exposure and noise
- Access to routine and specialty health care
- Learning opportunities that are structured and unstructured
- Diet and exercise
- Family and social network dynamics in cultural and geographic context

6.

EXAMPLES OF OUTCOME AREAS OF INTEREST

- Interpersonal relationships and bonding
- Inflammatory processes including allergies, asthma, and infections
- Genetic and epigenetic status
- Epilepsy and other neurologic disorders
- Cardiovascular screening and function
- Childhood cancer
- Multidisciplinary multidimensional aspects of sensory input, learning, and behavior
- Precursors and early signs of chronic diseases such as obesity, asthma, hypertension, and diabetes

7.

PREVALENCE OF CONDITIONS OF POTENTIAL INTEREST

- Of 100,000 children, an estimated
 - 30,000 will be overweight; 17,000 with obesity
 - 5,000 with learning disorders
 - 5,000 with asthma
 - 1,000 to 3,000 with autism spectrum disorders
 - 750 with congenital heart disease
 - 320 with childhood cancers
 - 125 with Down syndrome
 - 50 with Fragile X syndrome

8.

THE NATIONAL CHILDREN'S STUDY STRUCTURE

- The NCS is an integrated system of activities.
- All components and phases together form the NCS.
- Current major components are the:
 - NCS Vanguard Study—pilot phase for methods—runs for 21 years—started in 2009 with 7 centers; expanded in 2010 with 30 additional centers
 - NCS Main Study—exposure response phase—runs for 21 years about 3 years time shifted from Vanguard Study—planned start in 2012
 - NCS Substudies—studies within studies
 - Formative Research—short-term limited studies, often methods development, to support and inform the Vanguard and Main Studies

9.

NATIONAL CHILDREN'S STUDY'S VANGUARD STUDY GOALS

- Vanguard Study designed to evaluate:
 - Feasibility (technical performance)
 - Acceptability (impact on participants, study personnel, and infrastructure)
 - Cost (personnel, time, effort, money)
- of
 - Study recruitment
 - Logistics and operations
 - Study visits and study visit assessments

10.

ALTERNATE RECRUITMENT SUBSTUDY

- NCS Vanguard is now at 37 locations across the country with 30 engaged in new recruitment using one of three different strategies
 - Household-based participants learn about the study through field workers walking through neighborhoods
 - Provider-based participants learn about the study through trusted health care providers with a broad definition of provider including physicians, public health nurses, midwives, etc.
 - Direct-to-the-public participants learn about the study directly through media and community outreach

11.

ALTERNATE RECRUITMENT SUBSTUDY

- The goal is compare strategies to assemble a toolkit for cost-effective, directed recruitment for the Main Study launch
- Both direct data analysis and predictive modeling employed

12.

NATIONAL CHILDREN'S STUDY'S RECRUITMENT STATUS

BASED ON DATA AS OF 11/03/2011

	Provider	Enhanced Household	Direct Outreach	All Alt. Recruitment	Initial Household†	All Vanguard
Locations	10	10	10	30	7	37
Recruitment Duration, months	11	11	11	-	18 full + 13 monitoring	-
Women eligible for contact	3,100	24,500	13,400	41,100	33,600	74,500
Pregnancy Screened	2,750	18,900	13,400	35,000	30,900	65,900
Pregnant or Trying	1,600	2,300	2,050	5,950	3,550	9,500
Women Enrolled	1,300	1,400	1,700	4,400	2,100	6,500
Babies Enrolled	400	350	200 [^]	950	1,050	2,000

NOTE: Estimates are based on preliminary data that are not yet complete.

[^] - Implementation of Birth Visit data collection for Low-Intensity women was delayed due to logistical reasons.

† - Initial Household includes participants from the initial protocol and the minimal visit protocol

13.

SAMPLE SIZE CONSIDERATIONS

- Prevalence of 0.5 to 1% for conditions of interest such as congenital heart disease, childhood cancer, and autism spectrum disorders because they are topics of separate NIH initiatives and congressional mandates and supported by advocacy groups, and are expected to be addressed by the NCS. We have an implied, or in some cases, stated commitment to acquire data about these conditions.
- The NCS is not proposing a threshold of rare disease. The U.S. legal definition of rare disease is a prevalence of about 0.06% or 64 per 100,000 births.

14.

SAMPLE SIZE CONSIDERATIONS

- Boundary between normal variant and clinical condition is ever shifting. We should carefully consider what our rejection level should be because the sum of several uncommon but measurable conditions may be quite informative regarding whatever we may define as normal.

15.

PROPOSED STRATEGY FOR COLLABORATION

- Harmonize with international cohorts regarding data elements
- Share data and perform pooled analyses on uncommon conditions of interest
- Requires ongoing discussion and cooperation with assurances for quality and consistency of data

16.

COST DRIVERS

- Recruitment
- Data Acquisition

17.

SUMMARY

- NCS is congressionally mandated longitudinal birth cohort study beginning prior to or during pregnancy.
- Complex system of activities
- Vanguard recruitment is now in transition to retention
- For further information
 - <http://www.nationalchildrensstudy.gov>
 - ContactNCS@mail.nih.gov

18.

National Children’s Study Symposium: Health Disparities Among Children of Immigrants

Maria Lopez-Class, Ph.D., M.P.H.

Project Officer, National Children’s Study, NICHD, NIH, Bethesda, MD

Dr. Lopez-Class noted that the symposium objective was to discuss immigration issues within the context of health and the Study with subject matter experts. Topics for discussion included potential research questions, processes, and measurement strategies that could inform the Main Study, and how to address the health and developmental trajectories of children of immigrants within the Study.

THE NATIONAL CHILDREN’S STUDY

- Objective: To have a dialogue with subject matter experts on topics related to immigration as it pertains to the NCS.
- Expectation: Subject matter experts will provide comments on:
 - Potential research questions, process, and measurement strategies that could inform NCS Main Study development
 - How the health and developmental trajectories of children of immigrants might be addressed

1.

THE NATIONAL CHILDREN’S STUDY

- Agenda for the meeting is as follows:
 - Symposium overview
 - Format of the meeting

2.

Meeting Agenda

Thursday, December 15, 2011

Welcome, Objectives, and Introduction

Steven Hirschfeld, M.D., Ph.D.

Captain, U.S. Public Health Service; Director, National Children's Study, NICHD, NIH

Maria Lopez-Class, Ph.D., M.P.H.

Project Officer, National Children's Study, NICHD, NIH

Keynote Address: Overview of Migration and Health Disparities Across Race and Ethnicity, Origin Country, and Residency Status

Guillermina Jasso, Ph.D.

Silver Professor and Professor of Sociology, New York University

Migration and Health Disparities in Childhood

Margot Jackson, Ph.D.

Assistant Professor of Sociology, Brown University

Michael S. Rendall, Ph.D.

Professor of Sociology, Maryland Population Research Center, University of Maryland

Yolanda C. Padilla, Ph.D.

Professor of Social Work and Women's Studies, Population Research Center, University of Texas

Randy Capps, Ph.D.

Demographer and Senior Policy Analyst, Migration Policy Institute

Remarks from the NICHD Deputy Director

Yvonne T. Maddox, Ph.D.

Deputy Director, NICHD, NIH

Maternal and Child Health: Understanding Race, Ethnicity, and Immigration Status

Richard M. Lee, Ph.D.

Associate Professor of Psychology, University of Minnesota

Irma T. Elo, Ph.D., M.P.A.

Professor of Sociology, Population Studies Center, University of Pennsylvania

Nancy Landale, Ph.D.

Liberal Arts Research Professor of Sociology and Demography, Pennsylvania State University

Lisa Roney, M.P.A.

Independent Immigration Evaluation and Research Consultant, Westat, Inc.

Measuring Migration and Immigration in Studies of Child Health

Douglas Massey, Ph.D.

Henry G. Bryant Professor of Sociology and Public Affairs, Princeton University

Jennifer Van Hook, Ph.D.

Professor of Sociology and Demography, Population Research Institute, Pennsylvania State University

Jennifer Glick, Ph.D.

Professor of Sociology, School of Social Family Dynamics, Arizona State University

Shana Alex Lavarreda, Ph.D., M.P.P.

Research Scientist and Director, Health Insurance Studies, University of California, Los Angeles, Center for Health Policy Research

Rebecca Clark, Ph.D.

Chief, Demographic and Behavioral Sciences Branch, Center for Population Research, NICHD, NIH

Charles Hirschman, Ph.D.

Professor of Sociology, University of Washington

Immigration, Health, and the Future of Our Children

Elena V. Rios, M.D., M.S.P.H.

President, National Hispanic Health Foundation; President, National Hispanic Medical Association

Friday, December 16, 2011

Measuring Social and Cultural Dimensions of Child Health

Felipe Gonzalez Castro, Ph.D.

Professor and Director, Health Psychology Program, University of Texas at El Paso

Glorisa Canino, Ph.D.

Professor and Director, Behavioral Sciences Research Institute, University of Puerto Rico Medical School

Yeshashwork Kibour, Ph.D.

Clinical Psychologist and Associate Director of Clinical Training, American School of Professional Psychology, Argosy University

Yonette Thomas, Ph.D.

Associate Vice President for Research Compliance, Howard University

Participation of Immigrants in Research Studies

Larissa Aviles-Santa, M.D., M.P.H.

Project Director, Hispanic Community Health Study/Study of Latinos, National Heart, Lung, and Blood Institute (NHLBI), NIH

Immigrants: Global Economies and Children's Well-Being

Richard Alba, Ph.D.

Distinguished Professor of Sociology, City University of New York Graduate Center

Wrap-Up and Next Steps

Christine Bachrach, Ph.D.

Research Professor, Maryland Population Research Center, University of Maryland

Chapter 2: Keynote Address: Overview of Migration and Health Disparities Across Race and Ethnicity, Origin Country, and Residency Status

Guillermina Jasso, Ph.D.

Silver Professor and Professor of Sociology, New York University, New York, NY

Innovative approaches are needed to determine visa status, which is important to child health outcomes. Four sets of children are involved in international migration: foreign- and native-born children living with foreign-born parents in the destination country, and foreign- and native-born children living in the origin country, with either parents or relatives. Children in each set have different life chances and health outcomes. Every child and parent connected to the immigration process experiences certain features of the immigration context every day of their lives.

The major types of foreign-born individuals in the United States are Legal Permanent Residents (LPRs) who have naturalized, legal temporary residents, and undocumented residents. Pathways to becoming an LPR include numerically unlimited visas, numerically limited visas, humanitarian visas, and legalization. Numerically unlimited visas are immediately available; numerically limited visas have long waiting periods. More than 4.5 million people are waiting for numerically limited visas annually, and about one-third of those are children. The visa process is long, arduous, and stressful.

Some children are ineligible to become LPRs when their parents become LPRs because the parents cannot have accompanying children, the child is age 21 or older, the LPR's sponsor cannot sponsor stepchildren, or the LPR does not meet financial requirements to bring children.

Two key ideas about immigration are selection—including self-selection and selection by government action—and assimilation. Researchers should consider what regions of a hierarchy self-select for migration to the United States and whether governments favor or oppose migration from certain regions of the hierarchy. Selection mechanisms differ across countries and over time, and selection varies in intensity. The fire igniting self-selection weakens with each generation. Assimilation trajectories are responsive to many factors, including selection.

Topics related to immigration and health include sources of health differences, sources of health change, and populations at risk. Three sources of health change are visa stress, migration stress, and exposure to the U.S. health-relevant environment. Immigrants must learn how to extract benefits from the environment and to avoid its harms. The Study could include children from Puerto Rico, who have migration stress without visa stress, to study the effects of migration stress alone.

The New Immigrant Survey (NIS) seeks to create a new public use database to answer questions about immigration behavior and the impact of immigration.¹ The NIS adult sample includes minor children (age 18 to 20) of U.S. citizens, adult citizen children who sponsor their parents for immigration, and children of immigrants in the adult sample. The NIS child sample includes children interviewed at age 8 to 12. Health information is available for all children, except adult citizen children who sponsored their parents for immigration.

¹ For more information on the NIS, visit <http://nis.princeton.edu/project.html>. Retrieved on December 1, 2013.

The 2003 NIS LPR cohort was asked for subjective assessments of health during childhood, both at the time of filing the paperwork for immigration and at the time of interview, and about family relative income during childhood. The results were as follows:

- The healthiest males during childhood had above average family relative income.
- The healthiest females had far above average family relative income.
- At the time of filing, those in the far above average income category were less healthy than those in the above average category.
- Health assessments at the time of interview were nearly level across income levels.

Immigrant children of U.S. citizens in the sample were left behind in the origin country when parents immigrated. About 40 percent of minor children of U.S. citizens have previous undocumented immigration experience. Immigrant children of U.S. citizens are very healthy during childhood and at the time of filing, but health at interview is worse, especially among older groups. About 18 percent reported that they experienced depression due to the stress of the visa application process; and health insurance coverage rates were lower than average for the cohort.

Results of multivariate analyses of the 2003 NIS cohort included the following:

- Men were healthier than women.
- Non-Hispanic blacks and immigrants who spoke English, Spanish, and another language in childhood were healthier than other groups.
- Individuals born in the Philippines, the Dominican Republic, and Colombia were healthiest during childhood.
- Those born in the Philippines and China were healthiest at filing and at interview.
- Childhood family income has a positive effect on health during childhood and at filing, but the effect peaked and declined at interview.
- The unhealthiest groups were: those with previous undocumented immigration experience; Hispanics who did not provide any information on race; non-Hispanic Asians; and immigrants born in Vietnam, Guatemala, and Haiti.

Researchers need to collect health information about citizen children who sponsor parents for immigration. Some of these children may be “anchor babies.” About 8 percent of immigrant parents and about 18 percent of Mexican-born parents were sponsored by a native-born adult child. Among these Mexican-born parents, about 78 percent were women, and about 83 percent of these women had undocumented immigration experience. The older the parent, the less likely it was that the sponsoring child was born in the United States. The health of parents of U.S. citizens soon after admission was not poor, but not excellent.

More than two-thirds of adults in the NIS sample had children. Of those, about one-third had at least one native-born child. The distribution of origin countries for immigrants with children was different than the distribution for the entire sample. Although about 40 percent of the sample had undocumented immigration experience, more than half of children ages 8 to 12 had parents with undocumented immigration experience.

OBJECTIVES

- General
 - Understand health processes among children of immigrants
 - Theoretical issues
 - Empirical issues
- Specific
 - Inform design of National Children’s Study
 - Sample
 - Questionnaire content
 - National Children’s Study uniquely situated to address key questions in immigrant health

1.

OVERVIEW

- Universe of Immigrant Children
- Universe of Immigrant-U.S. Children
- U.S. Immigration Context
- Behavioral Framework for Immigrant-U.S. Children and Parents
- Immigrant-U.S. Children in the New Immigrant Survey (NIS)
- A Few Thoughts on Policy

2.

OVERVIEW

- Universe of Immigrant Children
- Universe of Immigrant-U.S. Children
- U.S. Immigration Context
- Behavioral Framework for Immigrant-U.S. Children and Parents
- Immigrant-U.S. Children in the NIS
- A Few Thoughts on Policy

3.

UNIVERSE OF IMMIGRANT CHILDREN

- Child and at least one parent born in different countries
- Child and at least one parent living in different countries
- Child living outside country of birth
- Child and/or parent approved to move to a new country

4.

OVERVIEW

- Universe of Immigrant Children
- Universe of Immigrant-U.S. Children
- U.S. Immigration Context
- Behavioral Framework for Immigrant-U.S. Children and Parents
- Immigrant-U.S. Children in the NIS
- A Few Thoughts on Policy

5.

UNIVERSE OF IMMIGRANT-U.S. CHILDREN

- Four sets of children obtained by cross-classifying country of birth and country of residence
 - With different life chances
 - With different sibship inequalities

6.

UNIVERSE OF IMMIGRANT-U.S. CHILDREN

1. Foreign-born living with foreign-born parents at destination
2. Native-born living with foreign-born parents at destination
3. Foreign-born living in origin country
 - Living with relatives; parents at destination
 - Living with foreign-born parents in origin country
4. Native-born living in origin country
 - Sent to relatives while parents remain at destination
 - Living with foreign-born parents in origin country

7.

UNIVERSE OF IMMIGRANT-U.S. CHILDREN

- Families living abroad
 - Native-born child, but parents have no intention of moving to U.S.
 - Example: Child born while parent studying in the United States
 - Foreign-born child and/or parent approved for legal permanent residence and waiting for a numerically limited visa

8.

OVERVIEW

- Universe of Immigrant Children
- Universe of Immigrant-U.S. Children
- [U.S. Immigration Context](#)
- Behavioral Framework for Immigrant-U.S. Children and Parents
- Immigrant-U.S. Children in the NIS
- A Few Thoughts on Policy

9.

TYPES OF FOREIGN-BORN IN U.S.

- Legal permanent residents (LPR)
- LPRs who have naturalized
- Legal temporaries
 - On LPR track
 - Aspiring to LPR
 - Not aspiring to LPR
- Illegals

10.

NEW LEGAL IMMIGRANTS

- 1991-1995: 781,848 per year
- 1996-2000: 771,307 per year
- 2001-2005: 980,344 per year
- 2006-2010: 1,119,735 per year

11.

NEW LEGAL IMMIGRANTS

- 2006: 1,266,047
- 2007: 1,052,322
- 2008: 1,107,010
- 2009: 1,130,735
- 2010: 1,042,563

12.

NEW LEGAL IMMIGRANTS

- 1991-1995: 781,848 per year
- 1996-2000: 771,307 per year
- 2001-2005: 980,388 per year
- 2006-2010: 1,119,823 per year

13.

NEW LEGAL IMMIGRANTS

- 2006: 1,266,129
- 2007: 1,052,415
- 2008: 1,107,126
- 2009: 1,130,818
- 2010: 1,042,625

14.

PATHWAYS TO LPR

- Numerically unlimited visas
 - Spouses, parents, and minor children of U.S. citizens
- Numerically limited visas
 - Family preferences: 226,000+
 - Employment preferences: 140,000+
 - Diversity: 50,000
- Humanitarian
- Legalization

15.

PATHWAYS TO LPR

- Country ceilings for numerically limited family and employment preferences set at 7 percent of the total annual limit for independent countries—in 2011: 25,620
- Because countries differ in population size and in visa demand, 4 countries face longer waits: China, India, Mexico, Philippines

16.

LEGALIZATION OF ILLEGALS: IMMIGRATION REGISTRY LAW

Act	Entry Date	Years in U.S. Required	
		Shortest	Longest
1929	1 Jul 1924	5	15
1939	3 Jun 1921	18	19
1940	1 Jul 1924	16	34
1958	28 Jun 1940	18	25
1965	30 Jun 1948	17	38
1986	1 Jan 1972	14	Currently 39

17.

MOST IMMIGRANTS REQUIRE SPONSORS

- Sponsors are of four types
 - Native-born U.S. citizens
 - Immigrants (LPRs and LPRs who have become U.S. citizens)
 - Firms and organizations
 - U.S. government
- Sponsors represent networks and a step to social integration

18.

SPONSORS OF IMMIGRANTS

- U.S. citizens sponsored in 2010
 - 271,909 spouses
 - 116,208 parents
 - 88,297 minor children (biological, step, adopted)
 - 59,815 adult children (and families)
 - 62,686 siblings (and families)

19.

SPONSORS OF IMMIGRANTS

- U.S. LPRs sponsored in 2010
 - 92,088 spouses and children
- U.S. employers sponsored
 - Up to 148,343 workers and their family members

20.

LOTTERY IMMIGRANTS

- “Sponsored” by the government: i.e., the people of the United States
- Up to 50,000 LPR visas per year to lottery winners and their spouses and minor children
- Ineligible if 50,000 LPRs from country in past 5 years

21.

LOTTERY IMMIGRANTS

- Ineligible countries:
 - DV-2003: Canada, China, Colombia, Dominican Republic, El Salvador, Haiti, India, Jamaica, Mexico, Pakistan, Philippines, South Korea, U.K., Vietnam
 - DV-2011: Also Brazil, Ecuador, Guatemala, Peru, Poland
 - DV-2013: Also Bangladesh, Poland

22.

IMMIGRANT-U.S.: WAITING FOR A VISA

- Waiting for numerically limited LPR visa (366,000/year)
 - November 2010: 4,683,393
 - November 2011: 4,624,399
- How many are children?
 - Unknown
 - Percent LE 15 among 2010 LPRs: 21.2
 - Percent 16-20 among 2010 LPRs: 11.3
 - If a third of the waiting list is under 21, then the number of children in 2010-2011 is about 1.5 million

23.

IMMIGRANT-U.S.: WAITING FOR A VISA

- Where are the children living?
 - Unknown
 - In origin country or in U.S. (legally or illegally)

24.

NEW ARRIVALS AND ADJUSTEES

- Over half of all new LPRs are already living in the U.S.
- In 1996–2005, adjustees exceeded new arrivals in every year except 1998, 1999, 2003.
- In 1996–2005, 55.8 percent adjustee
- In 2006–2010, 59.2 percent adjustee

25.

HEALTH AND LPR

- Applicant must pass a medical examination to ensure that he or she is not inadmissible on medical grounds.

26.

MEDICAL GROUNDS FOR INADMISSIBILITY

- Communicable disease of public health significance (e.g., tuberculosis)
- Lack of required vaccinations
- Physical or mental disorders with harmful behavior
- Drug abuse or addiction

27.

VISA PROCESS

- Arduous
- Long
 - Visa wait for numerically limited visas (currently up to 23 years)
 - Processing time for all visas
- Stressful—documents can be lost, etc.

28.

WHY WOULD SOME CHILDREN BE INELIGIBLE TO ACQUIRE LPR WHEN THEIR PARENTS BECOME LPR?

- LPR cannot have accompanying children (e.g., LPR has parent visa)
- Child is age 21 or older
- LPR's sponsor cannot sponsor them as stepchildren
- LPR's spouse (principal) cannot include them as accompanying stepchildren
- LPR does not meet the financial requirements for bringing them

29.

TWO SCENARIOS

- Foreign-born person marries U.S. citizen
- Foreign-born couple

30.

FOREIGN-BORN MARRIES CITIZEN

- Foreign-born's children cannot obtain visas as accompanying children.
- Foreign-born's children can be sponsored by citizen, if foreign-born married citizen before child turned 18.
 - Unmarried, under 21: unlimited child of U.S. citizen
 - Unmarried, 21+: limited Family 1st
 - Married: limited Family 3rd
- If financial requirements are not met, some children must be left behind.
- Subsequent sponsorship can be in 3 ways
 - Sponsored by citizen
 - Same rules as above

31.

FOREIGN-BORN MARRIES CITIZEN

- Sponsored by foreign-born while an LPR
 - Unmarried of any age: limited Family 2nd
- Sponsored by foreign-born after naturalizing
 - Unmarried, under 21: unlimited child of U.S. citizen
 - Unmarried, 21+: limited Family 1st
 - Married: limited Family 3rd
- Financial requirements must be met
- Foreign-born can naturalize after 3 years as LPR
- Foreign-born's children who are under 18 when foreign-born naturalizes acquire citizenship
- Foreign-born's decision whom to bring now and whom to bring later considers LPR & naturalization future

32.

FOREIGN-BORN COUPLE

- Foreign-born couple's children
 - Unmarried, under 21: accompanying children
 - Other children: no visas available
- If financial requirements are not met, some children must be left behind.
- Subsequent sponsorship can be in 2 ways:
 - Sponsored by foreign-born while an LPR
 - Unmarried of any age: limited Family 2nd
 - Sponsored by foreign-born after naturalizing
 - Unmarried, under 21: unlimited-child-of-U.S.-citizen
 - Unmarried, 21+: limited Family 1st
 - Married: limited Family 3rd

33.

FOREIGN-BORN COUPLE

- Financial requirements must be met.
- Foreign-born can naturalize after 5 years as LPR.
- Foreign-born couple's children who are under 18 when foreign-born naturalizes acquire citizenship.
- Foreign-born couple's decision whom to bring now and whom to bring later considers LPR and naturalization prospects.

34.

FINANCIAL REQUIREMENTS 2011

- Contractually binding affidavit of support to accept financial responsibility must be filed by sponsor in most family visa cases and some employment cases.
- Sponsor (possibly with joint sponsor) must have enough income and/or assets to maintain own household plus sponsored immigrant(s) at 125 percent of Federal Poverty Guidelines. Examples exclude Alaska and Hawaii:
 - Household size 2: \$18,387
 - Household size 4: \$27,937
 - Household size 8: \$47,037

35.

FINANCIAL REQUIREMENTS

- Higher in Alaska and Hawaii
- Waiver if a U.S. citizen is sponsoring a child under 18 who will acquire citizenship
- Threshold reduced to 100 percent of Federal Poverty Guidelines for sponsors on active duty in the U.S. Armed Forces who are sponsoring their spouse or child
- Obligation to support sponsored immigrants ends when they become a U.S. citizen or are credited with 40 quarters of qualifying work

36.

TIMING OF SPONSORSHIP

- New LPR must decide whether to start the sponsorship process immediately or wait until naturalization.
- Decision will depend on:
 - Child's age and (predicted) marital status
 - Visa waiting times (in Visa Bulletin)
 - Timing of naturalization

37.

U.S. LAW AND PRACTICE SHAPE NATURALIZATION ELIGIBLES

- Adult Immigrants (18+ at LPR)
 - General provisions (GenProv): 5 years residency
 - Special provisions (SpecProv): 0 to 4 years residency—veterans, spouses of U.S. citizens, refugees, asylees, etc.

38.

U.S. LAW AND PRACTICE SHAPE NATURALIZATION ELIGIBLES

- Child Immigrants (<18 at LPR)
 - Adoptee, automatic citizenship
 - Biological child of U.S. citizen, almost automatic citizenship
 - Child of immigrants
 - If parent naturalizes while child LPR is <18, child acquires citizenship.
 - Otherwise, child LPR applies upon reaching 18 years of age.

39.

U.S. LAW AND PRACTICE SHAPE NATURALIZATION ELIGIBLES

- Child Immigrants (<18 at LPR)
 - Whether a child immigrant acquires derivative citizenship or naturalizes "on her own" depends on age at LPR, parental residency requirement, and parental naturalization.

40.

FOREIGN-BORN COUPLE'S DILEMMA

- Suppose they have two children, ages 9 and 13, and they can only bring one. One parent will naturalize in 6 years.
 - Bring 9-year-old, leave 13-year-old
 - 9-year-old becomes citizen at age 15
 - 13-year-old may be brought in 3 years, eligible to naturalize at age 21
 - Bring 13-year-old, leave 9-year-old
 - 9-year-old may be brought in 3 years, becomes citizen at age 15
 - 13-year-old becomes eligible to naturalize at age 18
- Summary. Weigh 9-year-old losing 3 years of LPR vs. 13-year-old losing 3 years of LPR + 3-year delay to naturalization

41.

NON-LPR CHILDREN OF NEW LPRS

- Sponsorship in the future
- Where do they live?
 - In the origin country
 - In the U.S. illegally

42.

OVERVIEW

- Universe of Immigrant Children
- Universe of Immigrant-U.S. Children
- U.S. Immigration Context
- Behavioral Framework for Immigrant-U.S. Children and Parents
- Immigrant-U.S. Children in the NIS
- A Few Thoughts on Policy

43.

BEHAVIORAL FRAMEWORK

- General
 - Selection
 - Assimilation
- Health
 - Sources of health differences and health change
 - Populations at risk

44.

SELECTION

- Self-selection: who wants to move to the U.S.?
 - From what region(s) of a hierarchy? Bottom? Middle? Top? Bottom and top? All?
- Migration regime
 - Favor/oppose what region(s)?

45.

MIGRATION REGIME

- Define migration regime, incorporating combined effects of:
 - Government policies
 - Family dynamics
 - Special subsidies (Hatton & Williamson, 2005)
 - Inducements (Massey, 1998; Massey et al., 1993)
 - Costs (Sjaastad, 1962)
 - Obstacles (Lee, 1966)

46.

SELECTION MECHANISMS

- Both self-selection and migration regime
 - May differ across countries
 - May differ over time
 - May vary in intensity

47.

SELECTION AND HERITABILITY

- The fire igniting self-selection is transmitted to children, but is weakened across each generation.
- Are there distinctive decay curves? Half-lives?

48.

ASSIMILATION TRAJECTORIES

- Responsive to many factors
- Including selection

49.

THREE SOURCES OF HEALTH VARIATION AND CHANGE

- Visa stress
 - Start of visa process to unconditional LPR
- Migration stress
 - From inception of U.S. residence until some point thereafter
- Exposure to U.S. health-relevant environment
 - From inception of U.S. residence; varies as immigrant learns to extract benefits and mitigate harms

50.

WHO IS AT RISK OF THREE SOURCES OF HEALTH CHANGE?

- Visa stress
 - Everyone who needs an LPR visa
- Migration stress
 - Everyone who comes to live in U.S.
- Exposure to U.S. health-relevant environment
 - Everyone who lives in U.S., both natives and immigrants

51.

SPECIAL SUBPOPULATIONS

- Visa stress without migration stress
 - Foreign-born who have lived in U.S. since childhood, such as children of long-term legal temporary residents (e.g., journalists) or illegals
- Migration stress without visa stress
 - Persons from Puerto Rico, American Samoa, etc.
- Exposure effects without visa stress or migration stress
 - Native-born children of native-born parents

52.

SPECIAL SEQUENCES

- Visa stress ends before migration stress begins
 - Among new arrivals
- Migration stress ends before visa stress begins
 - among some adjustees and some new arrivals with prior long-term temporary residence
- Visa stress and migration stress experienced simultaneously
 - Probably among most adjustees
 - Reminiscent of findings by Simmons and Blyth (1987) on transition to puberty and middle school

53.

OVERVIEW

- Universe of Immigrant Children
- Universe of Immigrant-U.S. Children
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- [Immigrant-U.S. Children in the NIS](#)
- A Few Thoughts on Policy

54.

OBJECTIVE OF NIS

- Create new public-use database on legal immigrants and their children.
- Answer fundamental questions about migration behavior and the impacts of immigration.

55.

HISTORY OF NIS DESIGN

- Developed by public and private panels
 - Select Commission on Immigration and Refugee Policy, 1981
 - NAS-NRC Panel on Immigration Statistics, 1985
 - Rockefeller/Sloan Workshop on Immigration, 1985
 - IUSSP Workshop on Migration, 1987
 - NIH Workshop on Immigration, 1993
 - NAS-NRC Workshop on Immigrant Children and Families, 1994
 - NAS-NRC Panel on Impacts of Immigration, 1997
 - Binational Study of U.S.-Mexico Migration, 1997

56.

PRINCIPAL INVESTIGATORS

- Guillermina Jasso, New York University
- Douglas S. Massey, Princeton University
- Mark R. Rosenzweig, Yale University
- James P. Smith, RAND Corporation

57.

SOURCES OF SUPPORT

- NIH (NICHD and NIA)
- National Science Foundation
- Citizenship and Immigration Services, U.S. Department of Homeland Security
- Assistant Secretary for Planning and Evaluation, HHS
- Pew Charitable Trusts

58.

NIS-2003-1

- LPR frame May–November 2003
- Interviewed June 2003–June 2004
 - Mean time between LPR and interview: 17 weeks
- Interviewed in 95 languages
- Response rate
 - Adult sample, N = 8,573: 68.6%
 - Child sample, N = 810: 64.8%

59.

NIS RESPONDENTS

- Adult Sample
 - Sampled immigrant: 8,573
 - Spouse, if married: 4,334
 - Children ages 8-12: 1,072
 - Children ages 3-12: 2,551
- Child Sample
 - Sponsor-parent of sampled child: 810
 - Spouse of sponsor-parent: 579
 - Children ages 8-12: 194
 - Children ages 3-12: 483
- Parent information on children ages 5–17

60.

WHAT NEXT?

- LPR phase of immigrant career just beginning
- Track immigrants over time to observe unfolding of integration process
 - Extent and pace of adjustment
 - Trajectory of extracting greater benefits from U.S. environment and mitigating costs
- NIS-2003-2 in the field in 2007–2009

61.

TOP ORIGIN COUNTRIES NIS-2003 ADULT IMMIGRANTS

- Mexico – 17.5%
- India – 7.30%
- El Salvador – 6.11%
- Philippines – 5.47%
- China – 5.27%

62.

NIS-2003 ADULT IMMIGRANTS COME FROM 168 COUNTRIES

- Other countries with 100+ cases
 - Vietnam, Guatemala, Dominican Republic, Colombia, Haiti, Cuba, Jamaica, Poland, Nigeria, Korea, Peru, Russia, Ethiopia, Canada, Ukraine, U.K.
- Countries with 70-99 cases
 - Ecuador, Pakistan, Taiwan, Iran, Morocco, Albania, Bulgaria

63.

HEALTH DURING CHILDHOOD

- Subjective assessment of health during childhood
 - “While you were growing up, from birth to age 16”
- Response categories
 - Poor, fair, good, very good, excellent
 - Coded 1 to 5

64.

HEALTH AT FILING FOR LPR

- Subjective assessment of health at the time of the migration decision
 - “At the time of that first filing that started the process for the immigrant visa that you now have”
- Response categories
 - Poor, fair, good, very good, excellent
 - Coded 1 to 5

65.

HEALTH AT INTERVIEW

- Subjective assessment of health at the time of the interview
- Response categories
 - Poor, fair, good, very good, excellent
 - Coded 1 to 5

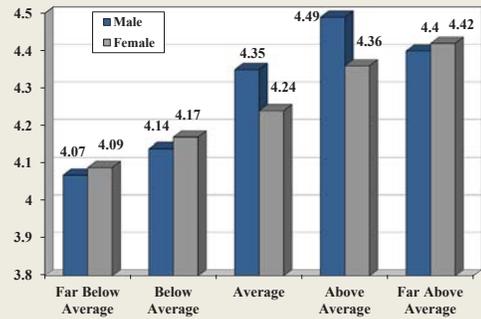
66.

FAMILY RELATIVE INCOME DURING CHILDHOOD

- “Thinking about the time when you were 16 years old, compared with families in the country where you grew up, would you say your family income during that time was far below average, below average, average, above average, or far above average?”
 - Coded -2 to +2

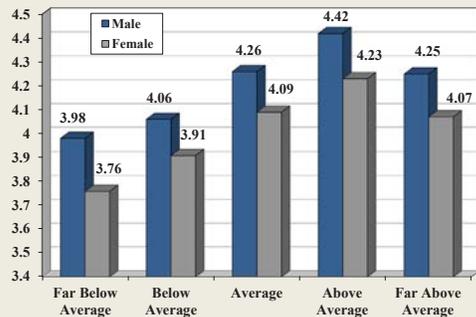
67.

FIG 1. HEALTH IN CHILDHOOD, BY FAMILY RELATIVE INCOME IN CHILDHOOD AT AGE 16: NIS 2003



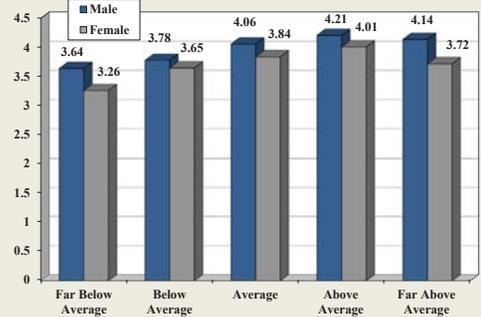
68.

FIG 2. HEALTH AT FILING FOR LPR, BY FAMILY RELATIVE INCOME IN CHILDHOOD AT AGE 16: NIS 2003



69.

FIG 3. HEALTH AT INTERVIEW SOON AFTER LPR, BY FAMILY RELATIVE INCOME IN CHILDHOOD AT AGE 16: NIS 2003



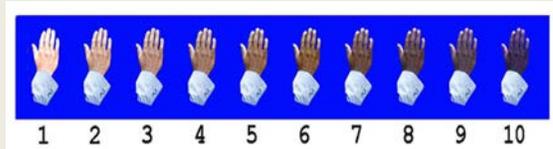
70.

SKIN COLOR SCALE

- Assessment by interviewer
- Data for respondents interviewed in person or seen by interviewer
- 11-point scale, with 0 indicating albinism

71.

SCALE OF SKIN COLOR DARKNESS



72.

SETS OF CHILDREN IN NIS DATA

- Adult Sample
 - Main sampled adult immigrants
 - Minor children of U.S. citizens, age 18–20
 - Adult single children of U.S. citizens (F1)
 - Married children of U.S. citizens (F3)
 - Adult single children of LPRs (F2B)
 - All children of main sampled immigrants, including:
 - Adult U.S. citizen children who sponsored parents
 - Children age 3–17 of main sampled immigrants
 - Interviewed if age 8–12

73.

SETS OF CHILDREN IN NIS DATA

- Child Sample
 - Main sampled child immigrants, including adopted:
 - Minor children of U.S. citizens, age 5–17
 - Other children in household, age 3–17
 - Interviewed if age 8–12

74.

HEALTH INFORMATION ON NIS CHILDREN

- Adult Sample
 - Main sampled adult immigrants
 - Minor children of U.S. citizens, age 18–20: **Yes**
 - Adult single children of U.S. citizens (F1): **Yes**
 - Married children of U.S. citizens (F3): **Yes**
 - Adult single children of LPRs (F2B): **Yes**
 - Children of main sampled immigrants
 - Adult citizen sponsors of parents: **No**
 - Children age 5–17 of main sampled immigrants: **Yes**
 - Interviewed if age 8–12

75.

HEALTH INFORMATION ON NIS CHILDREN

- Child Sample
 - Main sampled child immigrants, including adopted
 - Minor children of U.S. citizens, age 5–17: **Yes**
 - Other children, age 5–17: **Yes**
 - Interviewed if age 8–12

76.

FOUR SETS OF ADULT CHILDREN, NIS-2003: TOP FIVE COUNTRIES OF BIRTH

Minor	F1	F3	F2B
Mexico 28.8	Mexico 19.8	Philippines 17.3	Dom. Rep. 25.4
Philippines 8.31	Jamaica 10.1	Mexico 12.5	Mexico 19.3
Jamaica 6.47	Philippines 7.07	India 10.1	Philippines 9.62
China 4.59	Guyana 5.66	China 7.30	Haiti 7.89
Dom. Rep. 3.81	Haiti 5.62	Poland 5.65	China 5.01

77.

FOUR SETS OF ADULT CHILDREN, NIS-2003: TOP FIVE RACE/HISPANIC COMBINATIONS

Minor	F1	F3	F2B
H-White 37.3	H-White 28.9	NH-Asian 44.5	H-White 35.5
NH-Asian 19.1	NH-Black 25.0	H-White 22.8	NH-Asian 21.5
NH-Black 17.9	NH-Asian 21.9	NH-White 13.1	H-No Race 13.5
H-No Race 8.26	H-No Race 7.10	NH-Black 9.23	NH-Black 11.0
NH-White 6.60	NH-White 6.52	H-No Race 4.44	NH-White 3.95

H = Hispanic NH = Non-Hispanic

78.

FOUR SETS OF ADULT CHILDREN, NIS-2003: BASIC CHARACTERISTICS

Measure	Minor	F1	F3	F2B
Percent female	41.9	54.3	57.7	49.2
Age at filing	16.4	26.3	32.2	25.1
Age at LPR	20.2	33.3	40.2	34.7
Age 10 English only	13.4	22.3	11.7	8.53
Age 10 English +	24.3	28.8	23.2	13.3
Family relative income at age 16	-.137	-.21	-.278	-.326
Skin color	4.62	4.92	4.10	4.95

79.

FOUR SETS OF ADULT CHILDREN, NIS-2003: IMMIGRATION PROCESS CHARACTERISTICS

Measure	Minor	F1	F3	F2B
Always want LPR	39.1	38.2	28.8	39.5
Any school in U.S.	40.0	21.1	6.90	9.43
Visa wait	3.88	7.34	8.16	9.49
Percent adjustee	44.1	32.8	18.3	21.5
Arrival, U.S. add.	7.1	8.32	6.53	13.3
Illegal experience	40.5	31.4	20.2	24.1
Intend to stay	82.9	77.5	83.0	85.2

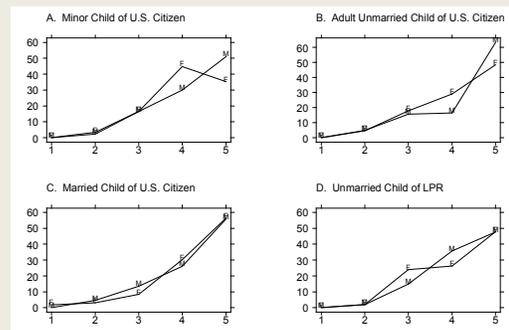
80.

FOUR SETS OF ADULT CHILDREN, NIS-2003: HEALTH CHARACTERISTICS

Measure	Minor	F1	F3	F2B
Health as child	4.22	4.29	4.35	4.25
Health at filing	4.38	4.26	4.35	4.16
Health at interview	4.15	4.03	3.87	3.87
Visa depression	17.9	17.5	18.6	9.49
Health insurance	26.4	20.2	32.1	16.9

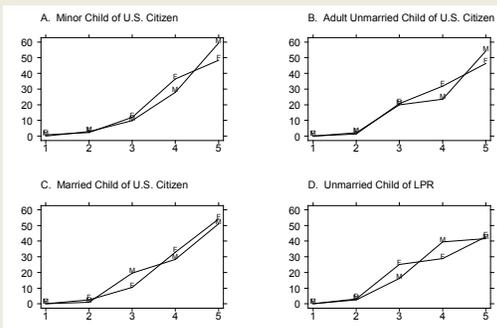
81.

FIG 4. HEALTH IN CHILDHOOD: FOUR SETS OF ADULT CHILDREN IN THE NIS-2003



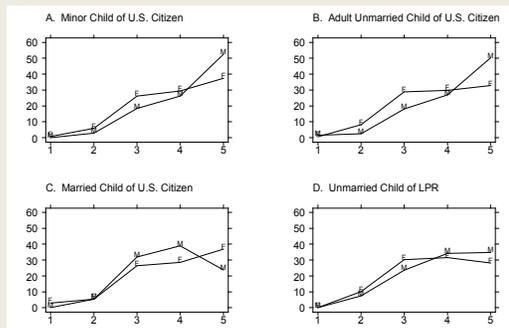
82.

FIG 5. HEALTH AT FILING FOR LPR: FOUR SETS OF ADULT CHILDREN IN THE NIS-2003



83.

FIG 6. HEALTH AT INTERVIEW SOON AFTER LPR: FOUR SETS OF ADULT CHILDREN IN THE NIS-2003



84.

MULTIVARIATE ANALYSIS

- Dependent variables
 - Health in childhood
 - Health at filing for LPR
 - Health soon after LPR
- All in two versions
 - Numeric with five values
 - Ordered-logit

85.

MULTIVARIATE ANALYSIS

- Independent variables
 - Gender
 - Country of birth
 - Race-Hispanic combination
 - Age (none / at filing / now)
 - Language(s) at home at age 10
 - Religion in childhood
 - Family relative income at age 16
 - Adjustee / illegal experience
 - Visa category (four sets + other)

86.

RESULTS

- Highly statistically significant results in both OLS and logit
- Men healthier than women
- Healthiest
 - Non-Hispanic blacks
 - Spoke English and Spanish and other
 - Philippines/Dominican Republic/Colombia in childhood but Philippines/China at filing and now

87.

RESULTS

- Childhood income has a positive effect on health in childhood and at filing, but peaks and declines for health now.
- Unhealthiest
 - Those with previous illegal experience
 - Hispanics who do not provide race and non-Hispanic Asians
 - Born in Vietnam/Guatemala/Haiti

88.

HEALTH INFORMATION ON NIS CHILDREN

- Adult Sample
 - Main sampled adult immigrants
 - Minor children of U.S. citizens, age 18–20: **Yes**
 - Adult single children of U.S. citizens (F1): **Yes**
 - Married children of U.S. citizens (F3): **Yes**
 - Adult single children of LPRs (F2B): **Yes**
 - Children of main sampled immigrants
 - Adult citizen sponsors of parents: **No**
 - Children age 5–17 of main sampled immigrants: **Yes**
 - Interviewed if age 8–12

89.

HEALTH INFORMATION ON NIS CHILDREN

- Child Sample
 - Main sampled child immigrants, including adopted
 - Minor children of U.S. citizens, age 5–17: **Yes**
 - Other children, age 5–17: **Yes**
 - Interviewed if age 8–12

90.

NATIVE-BORN ADULT CHILDREN WHO SPONSOR PARENTS FOR LPR

- “Anchor babies”
- No health info in NIS—yet
- 8.26% of parents sponsored by a native-born now-adult child
- 18.1% of Mexico-born parents
- Among Mexico-born, 77.7% women
- Among Mexico-born mothers, 83.2% have been illegal

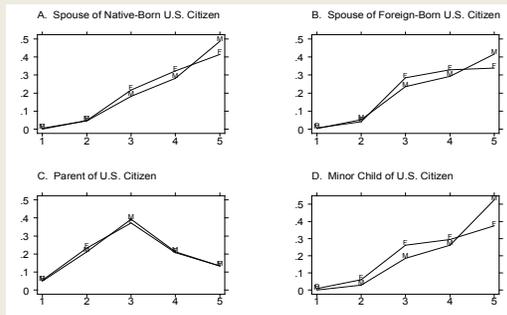
91.

NATIVE-BORN ADULT CHILDREN WHO SPONSOR PARENTS FOR LPR

- Logit analysis of probability that sponsor is native-born
 - Strong and highly significant positive effects of previous illegal experience and birth in Mexico
 - Highly significant negative effect of age

92.

FIG 7. HEALTH SOON AFTER ADMISSION TO LPR, IN FOUR SETS OF RELATIVES OF U.S. CITIZENS



93.

HEALTH INFORMATION ON NIS CHILDREN

- Adult Sample
 - Main sampled adult immigrants
 - Minor children of U.S. citizens, age 18–20: **Yes**
 - Adult single children of U.S. citizens (F1): **Yes**
 - Married children of U.S. citizens (F3): **Yes**
 - Adult single children of LPRs (F2B): **Yes**
 - Children of main sampled immigrants
 - Adult citizen sponsors of parents: **No**
 - Children age 5–17 of main sampled immigrants: **Yes**
 - Interviewed if age 8–12

94.

HEALTH INFORMATION ON NIS CHILDREN

- Child Sample
 - Main sampled child immigrants, including adopted
 - Minor children of U.S. citizens, age 5–17: **Yes**
 - Other children, age 5–17: **Yes**
 - Interviewed if age 8–12

95.

NIS-2003 IMMIGRANTS HAVE THEIR OWN CHILDREN

- 67.3% have biological children.
- Among new immigrants with biological children, the average number is 2.73.
- Among new immigrants with biological children, 35.8% have at least one native-born child.
- 18.7% of all the biological children are native-born.

96.

FOUR SETS OF ADULT CHILDREN, NIS-2003: FERTILITY CHARACTERISTICS

Measure	Minor	F1	F3	F2B
% have biological child	12.2	46.5	91.0	58.6
Number of biological children	1.46	2.13	2.38	2.36
% have native-born biological children	63.1	24.6	14.0	21.4
Number of native-born biological children	1.01	.504	.206	.478

97.

CHILDREN AGE 8–12 IN NIS-2003

- Biological children of new adult immigrants
- 1,014 children of 887 immigrants
- 50.2% are girls
- Nativity/entry history
 - 45.1% were born in the U.S.
 - 6.41% entered before age 4
 - 43.1% entered at age 4 or older

98.

TOP FIVE COUNTRIES OF BIRTH

- | Adults | Parents of Children 8–12 |
|-----------------------|--------------------------|
| • Mexico – 17.5% | • Mexico – 25% |
| • India – 7.27% | • El Salvador – 13.9% |
| • El Salvador – 6.11% | • Guatemala – 6.58% |
| • Philippines – 5.48% | • India – 5.19% |
| • China – 5.39% | • Philippines – 4.79% |

99.

PREVIOUS ILLEGAL EXPERIENCE

- All immigrants — 39.6%
- Children 8-12 whose parents have illegal experience — 52.3%
- Parents of children 8-12 — 52.6%

100.

PREVIOUS ILLEGAL EXPERIENCE TOP THREE COUNTRIES OF BIRTH

- | Adults | Parents of Children 8–12 |
|-----------------------|--------------------------|
| • El Salvador – 92.5% | • Guatemala – 97.4% |
| • Guatemala – 86.7% | • El Salvador – 95.6% |
| • Mexico – 77.6% | • Mexico – 91.5% |

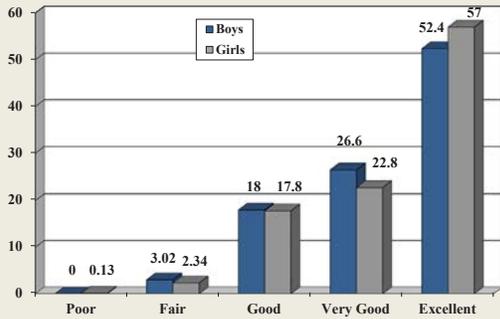
101.

CHILD'S HEALTH AT INTERVIEW

- Subjective assessment of child's health provided by parent
 - "Would you say that [child's] health is excellent, very good, good, fair, or poor?"
- Response categories
 - Poor, fair, good, very good, excellent
 - Coded 1 to 5

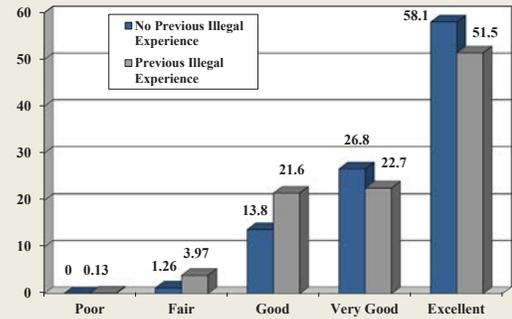
102.

FIG 8. PARENT-ASSESSED HEALTH AT INTERVIEW, CHILDREN AGE 8–12, BY CHILD'S GENDER: NIS 2003



103.

FIG 9. PARENT-ASSESSED HEALTH AT INTERVIEW, CHILDREN AGE 8-12, BY PARENT'S PREVIOUS ILLEGAL EXPERIENCE: NIS 2003



104.

PRELIMINARY MULTIVARIATE RESULTS

- Parent's previous illegal experience has negative effect on child's health
- Healthiest had Spanish as first language
- Children brought at age 4+ were healthier, next those younger, then native-born
- No gender effect

105.

HEALTH INFORMATION ON NIS CHILDREN

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 - Main sampled adult immigrants
 - Minor children of U.S. citizens, age 18–20: **Yes**
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 - Married children of U.S. citizens (F3): **Yes**
 - Adult single children of LPRs (F2B): **Yes**
 - Children of main sampled immigrants
 - Adult citizen sponsors of parents: **No**
 - Children age 5–17 of main sampled immigrants: **Yes**
 - Interviewed if age 8–12

106.

HEALTH INFORMATION ON NIS CHILDREN

- Child Sample
 - Main sampled child immigrants, including adopted
 - Minor children of U.S. citizens, age 5–17: **Yes**
 - Other children, age 5–17: **Yes**
 - Interviewed if age 8–12

107.

OVERVIEW

- Universe of Immigrant Children
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- A Few Thoughts on Policy

108.

A FEW THOUGHTS ON POLICY

- For immigrant-U.S. children outside U.S., invite them to participate/attend:
 - Department of Defense Education Activity (DoDEA) schools
 - Bahrain, Belgium, England, Germany, Guam, Italy, Japan, Korea, Netherlands, Portugal, Spain, Turkey
 - Department of State-assisted American schools, in 134 countries
 - Including all top 10 countries except El Salvador
 - Department of State-sponsored programs, including Office of English Language Programs
 - Worldwide; RELOs in China, India, Mexico

109.

A FEW THOUGHTS ON POLICY

- For immigrant-U.S. children in U.S., invite them to participate/attend:
 - Events linked to U.S. history
 - Tours of historical monuments and battlefields
 - Historical re-enactments
 - Tours of themed areas (Williamsburg, etc.)
 - Events linked to U.S. government
 - Tours of executive agencies
 - Tours of legislative chambers
 - Tours of courts
 - Events linked to immigration
 - Naturalization ceremonies

110.

OVERVIEW

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- A Few Thoughts on Policy

111.

OBJECTIVES

- General
 - Understand health processes among children of immigrants
 - Theoretical issues
 - Empirical issues
- Specific
 - Inform design of National Children's Study
 - Sample
 - Questionnaire content

112.

Chapter 3: Migration and Health Disparities in Childhood

Cross-national data indicate that immigration tends to be bimodal. High-status immigrants bring high levels of education and professional qualifications, and their children often excel in Western schools. In contrast, low-status immigrants bring low levels of education and take low-skill jobs, and their children often face difficulties in Western schools. Low-status immigrants often come from former colonies or Western countries and are racially and/or religiously distinct. Large portions of immigrants in Western countries are low-status immigrants.

Visa status can be a significant source of stress for immigrants and can impact children's health. More than 4.5 million people in the United States are waiting for numerically limited visas annually, and about one-third of those are children. Some children are ineligible to become legal permanent residents (LPRs) when their parents receive a visa because the parents cannot have accompanying children, the child is older than 21 years, the parent's sponsor cannot sponsor stepchildren, or the parent does not meet financial requirements to bring children. Children with different visa statuses have different life chances and health outcomes.

Survey data from recent immigrants revealed several important findings related to migration and health disparities. First, immigrants who were healthier than others during their childhood had above-average family incomes as adults. However, the health status of immigrant children of U.S. citizens declined over time. Further, survey results indicated the unhealthiest groups were those with previous undocumented immigration experience, Hispanics who did not provide any information on racial status, non-Hispanic Asians, and immigrants born in Vietnam, Guatemala, and Haiti.

Past research suggested U.S.-born children in immigrant families may have more favorable health-related outcomes than their native-born peers, and better outcomes than would be expected given their typical socioeconomic status and, in many cases, their racial/ethnic minority status. Research presented at the symposium indicated that these patterns may exist both in the United States and in other first world-developed countries. An important question to address in the future is whether and how these health-related patterns change over a person's lifetime given changes in the family and the residential and social environment. The characteristics of homes, neighborhoods, and communities should be measured to help understand these environments and whether health-related patterns change over the life course. In addition, health markers should be measured regularly to allow for the better understanding of development patterns.

Some theories argue that acculturation leads to poor health habits and poorer health outcomes. However, a study presented at the symposium found that immigrant mothers with lower proficiency in the English language were more likely to have young children who were obese, independent of socioeconomic status (SES). A mother's English-language proficiency was a stronger predictor of childhood obesity than her foreign-born status or age at arrival in the United States. This suggests that acculturation, in the form of English-language proficiency, may reduce the prevalence of obesity among the children of immigrants. Further, English-language proficiency may be a marker of legal status, a predictor of socioeconomic status, or associated with difficulties when interacting with institutions.

The "epidemiological paradox" (e.g., having good health, despite having an SES) is well documented for Mexican American adults. However, it has been less studied for children, other immigrant groups, or across generations. To address this gap, a study examined four common child health outcomes (allergies, asthma, development problems, and learning disabilities) that were found to be generally more common among later generations rather than earlier generations (e.g., first-generation versus second-generation

versus third-generation Americans). By the third-plus generation, the health advantage of the immigrant epidemiologic paradox seemed to disappear for children. Although generational patterns seemed to be similar across racial/ethnic groups, more research is needed to have a better understanding of these patterns.

Nativity Differences in Mothers' Health Behaviors and Child Health: A Cross-National and Longitudinal Lens

Margot Jackson, Ph.D.

Assistant Professor of Sociology, Brown University, Providence, RI

Children in immigrant families sometimes have health outcomes that are more favorable than their native-born peers and that more favorable than expected based on socioeconomic resources and minority status. Knowledge about this immigrant advantage is based on studies of Latin American populations.

To determine whether this advantage is universal, Dr. Jackson examined the foreign-born population in the United Kingdom and tested three hypotheses:

- Unhealthy acculturation may cause the advantage to decline with time.
- Upward SES mobility may cause mothers to maintain healthier behaviors.
- Stratification literature predicts that the decline in healthy behavior should be faster among mothers in lower SES ethnic groups.

To compare the United States and the United Kingdom, Dr. Jackson used data from two national birth cohort studies—the Fragile Families and Child Wellbeing Study conducted in the United States and the Millennium Cohort Study conducted in the United Kingdom. She looked at data about maternal breastfeeding, smoking, prenatal care and child birth weight, and child asthma history at age 5.

In the United States, use of early prenatal care was high among all mothers. Prenatal smoking was most prevalent among U.S.-born mothers, and foreign-born mothers had the highest rates of breastfeeding. The results from the United Kingdom were similar. In both countries, the rates of smoking among foreign-born mothers did not converge with the rates for U.S.-born mothers, suggesting that healthy behaviors persisted among immigrants. The findings may be influenced by selective migration or selective attrition from the study.

A next step is to understand how healthy patterns may change beyond early childhood and in the context of changes in family, residential, and social environments. Consistent measurement of a health marker is essential for examining trajectories and development. Regular measurement of the proximate social environment will permit examination of determinants.

GOALS OF THE TALK

- To reveal the early origins of inequality in the health environments of immigrant mothers and their children.
 - Examining several ethnic groups in the United States and United Kingdom.
 - Comparing immigrant families to not only native-born whites, but to their native-born ethnic counterparts.
- To examine whether differences persist beyond infancy and testing hypotheses about patterns over time.
- To compare children in the United States to those in the United Kingdom, with a similarly large immigrant population but a different policy context of reception.

1.

IS THE “IMMIGRANT ADVANTAGE” IN MOTHERS’ HEALTH BEHAVIOR (AND CHILD HEALTH) UNIVERSAL?

- Children in immigrant families sometimes have more favorable outcomes than their native-born peers, and than we would expect on the basis of their socioeconomic resources and—in some cases—their racialized minority status.
 - Healthier parenting behaviors (breastfeeding, not smoking, immunizations)
 - Healthier birth outcomes
- This is true despite the presence of strong and persistent racial and socioeconomic inequalities in child health.

2.

IS THE “IMMIGRANT ADVANTAGE” IN MOTHERS’ HEALTH BEHAVIOR (AND CHILD HEALTH) UNIVERSAL?

- Much existing knowledge about immigrant mothers’ behavioral advantage has focused on Latin-American populations—for good reason.
- We turn the lens on the U.K., where the foreign-born population has very different regional origins, including Europe, South Asia, Africa, and the Caribbean.

3.

DOES ADVANTAGE PERSIST BEYOND INFANCY?

Theory is ambiguous about the health-related integration of foreign-born mothers and their children. We test three hypotheses:

- On the one hand, unhealthy acculturation theory suggests that *foreign-born mothers’ advantage will decline with time, producing a decreasing immigrant-native gap as children age.*
 - In this vein, much cross-sectional evidence documents a gradient by age at arrival.
 - But a cross-section can only tell us so much.

4.

DOES ADVANTAGE PERSIST BEYOND INFANCY?

- However, an alternative hypothesis draws from evidence on upward socioeconomic mobility to argue that *mothers may maintain healthier behaviors as their children age, producing stable immigrant-native differences.*
- Finally, the stratification literature predicts that *decline in healthy behavior should be faster among mothers in socioeconomically disadvantaged ethnic groups.*

5.

THE VALUE OF A CROSS-NATIONAL PERSPECTIVE

- As we’ve learned, the share of children in immigrant families in the U.S. has dramatically increased in recent decades.
- It also has in the U.K.:
 - As in the U.S., 25% of children and adolescents have a foreign-born parent.

6.

THE VALUE OF A CROSS-NATIONAL PERSPECTIVE

- Comparison across the two countries is useful for at least two reasons:
 - The size of the population is comparable, providing an opportunity to expand our understanding beyond the U.S.—research on children in immigrant families has been extremely limited in the U.K..
 - The two countries differ in their health care and social welfare systems, with more accessible health care, more generous policies regarding child care, home visits, family assistance, and social housing in the U.K.
- The multitude of policy differences could produce variation across the two societies in the health and development of children in immigrant families.

7.

DATA, MEASURES, METHOD

- Two national birth cohort studies representative of national populations, with longitudinal information on environments and child well-being, & ethnic minority oversample:
 - Fragile Families and Child Wellbeing Study (U.S.)
 - Millennium Cohort Study (U.K.)
 - Multiple comparison groups
- Birth through age 5:
 - Multiple regression
 - Multilevel growth curve models that examine *within-individual* change

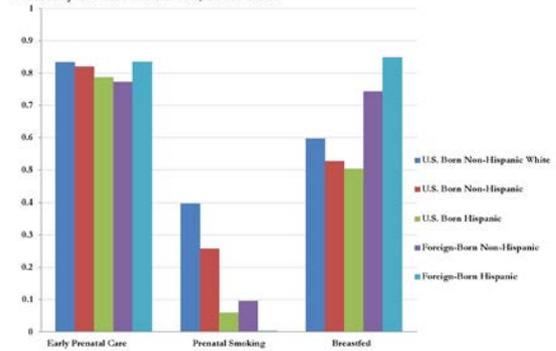
8.

DATA, MEASURES, METHOD

- Maternal Health Behaviors, Child Physical Health:
 - Breastfeeding, smoking, prenatal care
 - Birthweight, asthma history (age 5)
- Rich set of sociodemographic measures.
- Finally, important to note that multivariate relationships of interest are very similar in the FFS and other national surveys. And response rates are very high because of hospital-based sampling frame.

9.

Probability of Maternal Behaviors, United States

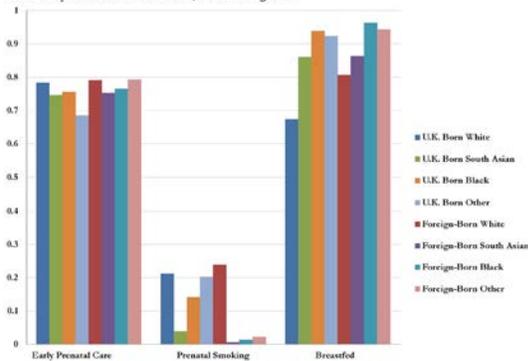


Note: All other variables held constant at their means.
Early prenatal care usage high among all mothers.
Healthy behaviors more common among all immigrant mothers.

7

10.

Probability of Maternal Behaviors, United Kingdom



Note: All other variables held constant at their means.
Patterns similar to U.K.

8

11.

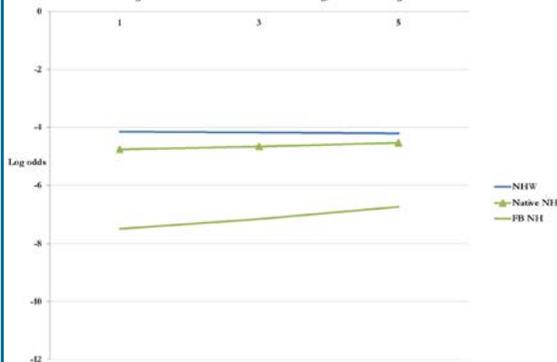
U.S.	Birthweight (lbs.)	Asthma, Age 5 (Probability)
U.S. Born Non-Hispanic White	7.257	0.144
U.S. Born Non-Hispanic	7.13	0.121
U.S. Born Hispanic	7.22	0.236
Foreign-Born Non-Hispanic	6.847	0.121
Foreign-Born Hispanic	7.325	0.178

U.S.	Birthweight (lbs.)	Asthma, Age 5 (Probability)
U.K. Born White	7.461	0.145
U.K. Born South Asian	6.681	0.150
U.K. Born Black	7.085	0.189
U.K. Born Other	6.892	0.048
Foreign-Born White	7.548	0.145
Foreign-Born South Asian	6.777	0.101
Foreign-Born Black	7.371	0.010
Foreign-Born Other	6.989	0.200

Second-generation children not at a birthweight or asthma disadvantage. Preliminary evidence for stability hypothesis.

12.

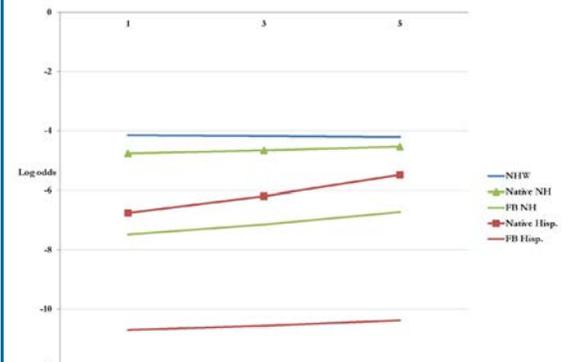
Persistence of Immigrant-Native Differences in Maternal Smoking, United States: Ages 1-5



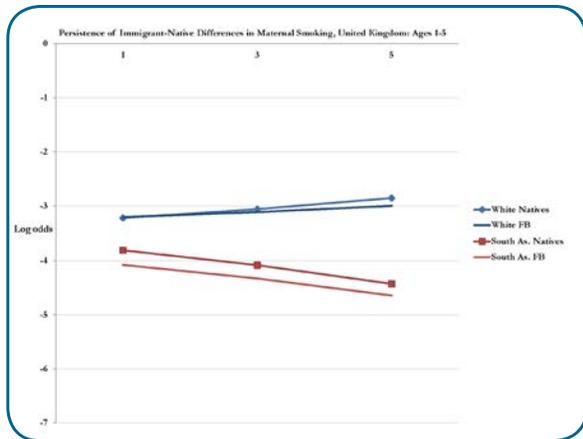
No significant pattern of convergence among immigrant mothers. More support for stability than for unhealthy acculturation.
No support for stratified model of assimilation.

13.

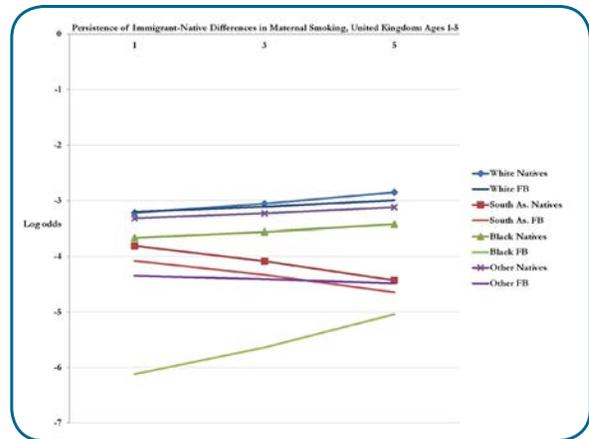
Persistence of Immigrant-Native Differences in Maternal Smoking, United States: Ages 1-5



14.



15.



16.

THE ROLE OF SELECTION

- Two types:
 - Selective migration (are those who migrate representative of their origin population?)
 - Selective attrition (do respondents selectively drop out of the survey?)
 - Former harder to examine than the latter
- Selective migration:
 - We compare average characteristics of FFS and MCS mothers to those of women and mothers from sending countries, using DHS and WHO data.
 - Health behaviors of our mothers are very similar.

17.

THE ROLE OF SELECTION

- Selective attrition:
 - Foreign-born mothers who drop out are not selected on health behaviors.
- But selection surely plays a role, and immigrant-native differences we observe should be viewed as an upper bound.

18.

RECAP

- Immigrant mothers have particularly favorable smoking and breastfeeding patterns.
- ALL mothers are likely to receive early prenatal care—both countries are successful in providing health care to young families.
- Children in immigrant families also have healthy birth weights, on average, and do not experience a greater likelihood of asthma by age 5.

19.

RECAP

- Direction and magnitude of patterns is largely similar across the U.S. and U.K.
- Stability of patterns over time not consistent with theory of unhealthy acculturation and stratified models of the health-related integration of immigrant families.

20.

CONCLUDING THOUGHTS AND DISCUSSION POINTS

- The aim has been to describe the health-related integration of mothers and children in immigrant families across two policy contexts.
- Understanding how these patterns *change* beyond early childhood—whether gradients emerge more quickly for some—will be key, as family, residential and social environments evolve.

21.

CONCLUDING THOUGHTS AND DISCUSSION POINTS

- From a measurement perspective, some especially important points:
 - Consistent measurement of a health marker is essential for examining trajectories and development.
 - Regular measurement of the proximate social environment (in the family) will permit examination of determinants.
 - The ability to monitor selective attrition relies on early measurement of country of birth.

22.

Immigrant Mothers' English-Language Competence as a Predictor of Their U.S.-Born Children's Obesity Prevalence in Kindergarten

Michael S. Rendall, Ph.D.

Professor of Sociology, Maryland Population Research Center, University of Maryland, College Park, MD

Dr. Rendall presented conclusions from his research:

- The epidemiological paradox that immigrants have more favorable health outcomes, even with lower SES, did not transfer to reduced obesity prevalence among their young children.
- The "adverse acculturation hypothesis" is not supported. On the contrary, if English-language proficiency is considered a marker of acculturation, then acculturation may reduce the prevalence of obesity among the children of immigrants.

Some previous research on obesity found a protective effect for children of immigrants, but other research found no protective effect. Parent isolation from the "unhealthy" U.S. diet and lifestyle does not translate to children's isolation from that lifestyle.

Dr. Rendall pooled data from the Early Childhood Longitudinal Study Birth Cohort (ECLS-B) and Kindergarten Cohort (ECLS-K) to examine heterogeneity among kindergarten-age children of immigrants by considering the mother's age at arrival and English-language proficiency.

The research found that having an immigrant mother with low English-language proficiency was associated with a higher risk of obesity. The mother's English-language proficiency was a stronger predictor of a child's obesity in kindergarten than were the mother's age at arrival or foreign-born status alone.

Children were categorized by the generation status of their mothers. Mothers in generation 1.0 arrived in the United States at age 13 or older. Mothers in generation 1.5 arrived at age 12 or younger. Children were also categorized by the high or low English-language proficiency of their mothers. Logistic regression modeling showed that having a foreign-born mother with low English-language proficiency increased a child's risk of obesity.

THEORY AND EVIDENCE ON OBESITY OF CHILDREN OF IMMIGRANTS IS MIXED

1. Theory of adverse effects of acculturation to unhealthy U.S. diet and sedentary lifestyle \geq children of immigrants are protected from obesity
 - Mazur et al (2003) found a protective effect of having Spanish-speaking parents: lower percentage of calories from fat among age 4-16 Hispanic children in 1988-1994 NHANES.
 - Li, et al., (2011) found "no evidence that having a foreign born parent is protective of early childhood...obesity," using the ECLS-B (age 4 in mid-2000s)
 - Van Hook and Baker (2010) found no evidence of an obesity protective effect for daughters of immigrants, and evidence of an obesity risk effect for sons of immigrants, using the ECLS-K (kindergarten in 1998-1999).

1.

THEORY AND EVIDENCE ON OBESITY OF CHILDREN OF IMMIGRANTS IS MIXED

2. Theory that *immigrant parent isolation* from unhealthy U.S. diet and sedentary lifestyle may not mean *children of immigrants' isolation* from U.S. unhealthy diet and lifestyle (Van Hook and Baker, 2010)
 - Evidence of lower parental English proficiency associated with higher obesity for boys (but not for girls) in kindergarten through 5th grade, using ECLS-K

2.

OUR STUDY'S GOALS

1. *More empirical evidence*: take advantage of the kindergarten observation in both the ECLS-B and ECLS-K to estimate the same models in each; and to increase statistical power by pooling the samples
2. Examine heterogeneity among children of immigrants by considering:
 1. Mother's age at arrival in the U.S.
 2. Mother's English-language proficiency

3.

PREVIEW OF OUR FINDINGS

- Being the child of an immigrant mother with *low English proficiency* is associated with *higher obesity* in kindergarten compared to both children of native-born parents and children of immigrant mothers with high English proficiency (after controlling for SES).
- *English-language proficiency* of a child's mother is a stronger predictor of obesity in kindergarten than is the mother's *age at arrival* in the U.S., or than is her *foreign-born status* alone.

4.

EARLY CHILDHOOD LONGITUDINAL STUDY: KINDERGARTEN COHORT (ECLS-K)

- Nationally representative school-based sample of children in kindergarten in the 1998-1999 school year
- Additional survey waves: 1st, 3rd, 5th, and 8th grades
- Complete case analysis of 11,680 children observed in fall of kindergarten (mean age 5.7), of whom 1,900 (weighted 15%) had a foreign-born mother (includes Puerto Rican born)

5.

EARLY CHILDHOOD LONGITUDINAL STUDY: BIRTH COHORT (ECLS-B)

- Nationally representative sample of children born in the US during calendar year 2001
- Observed in waves at 9 months, 2 years, 4 years, and kindergarten (2006-2007)
- Complete case analysis of 5,300 children observed in kindergarten (mean age 5.7 years), of whom 1,300 (weighted 19%) had a foreign-born mother (again, includes Puerto Rican born)

6.

NATIONAL HEALTH AND NUTRITION EXAMINATION SURVEY (NHANES)

- Nationally representative household-based sample, 5 cross-sectional waves 1999-2008
- Oversampled African Americans, Hispanics, and low-income households
- Analysis of 1,710 children age 5-6, of whom 460 (weighted 18%) had a foreign-born head of household (includes Puerto Rican born)

7.

OBESITY MEASURED

- Data from measured weight and height
- Body mass index, BMI = (weight in kg) / (height in cm)²
- "Obese" = at or above the 95th percentile of the sex-specific CDC growth charts for BMI-for-age

8.

PREVALENCE OF OBESITY AT KINDERGARTEN (OR AGE 5-6) BY MOTHER'S NATIVITY

	ECLS-K, Kindergarteners, 1998	ECLS-B, Kindergarteners, 2006 or 2007
	Weighted % (CI)	Weighted % (CI)
Mother foreign-born	16.9 (15.0, 18.9)	23.1 (19.5, 26.7)
Mother native-born	10.6 (9.9, 11.3)	15.2 (13.8, 16.5)

9.

PREVALENCE OF OBESITY AT KINDERGARTEN (OR AGE 5-6) BY MOTHER'S OR HOUSEHOLD HEAD'S NATIVITY

	NHANES Children ages 5-6, 1999-2008	ECLS-K, Kindergarteners, 1998	ECLS-B, Kindergarteners, 2006 or 2007
	Weighted* % (CI)	Weighted % (CI)	Weighted % (CI)
Household-head foreign-born	13.6 (10.1, 18.0)	-	-
Household-head U.S.-born	14.2 (11.9, 16.8)	-	-
Mother foreign-born	-	16.9 (15.0, 18.9)	23.1 (19.5, 26.7)
Mother U.S.-born	-	10.6 (9.9, 11.3)	15.2 (13.8, 16.5)

10.

GENERATION STATUS OF FOREIGN-BORN MOTHERS: ECLS-K & ECLS-B

- Generation status created using mother's age at first arrival in the U.S.:
 - ECLS-K: reported in spring 1st grade, with missing data filled using reports from subsequent waves
 - ECLS-B: reported at 2 year wave, with missing data filled using reports from subsequent waves
- Categorization of generation status (Rumbaut, 2004):
 - Generation 1.0: Mothers arrived in the U.S. at age 13 or older
 - Generation 1.5: Mothers arrived in the U.S. at age 12 or younger

11.

DISTRIBUTION OF KINDERGARTENERS WITH FOREIGN-BORN MOTHERS BY MOTHER'S GENERATION STATUS*

	ECLS-K		ECLS-B	
	Weighted %	n	Weighted %	n
Mother of Generation 1.0 (age ≥13 years at arrival)	74.6	1430	77.9	1050
Mother of Generation 1.5 (age <13 years at arrival)	25.4	460	22.1	250

12.

MOTHER'S ENGLISH LANGUAGE PROFICIENCY: ECLS-K & ECLS-B

- English language proficiency of mother if English is not the language used in the household:
 - How well do you (1) speak, (2) read, (3) write, and (4) understand English?
- Our categorization:
 - "High English": self-report proficiency as "very well" on all four questions
 - "Low English": self-report proficiency as "pretty well," "not very well," or "not well at all" on at least one of the four questions

13.

DISTRIBUTION OF MOTHER'S ENGLISH PROFICIENCY

	ECLS-K, (Reported at Kindergarten)		ECLS-B (Reported at 9 months)	
	Weighted %	n	Weighted %	n
Low English	60.3	1130	67.1	800
High English	39.7	760	32.9	500

14.

LOGISTIC REGRESSION MODELS FOR OBESITY: ECLS-K, ECLS-B, AND POOLED ECLS-K & ECLS-B

- Four models, with different sets of immigrant variables
 - Model 1: only Foreign born vs. U.S. born (“Nativity”)
 - Model 2: Nativity and also 1.0 vs. 1.5 Generation Status
 - Model 3: Nativity and also High English vs. Low English proficiency [THIS IS THE MODEL WITH THE BEST FIT]
 - Model 4: Nativity, Generation Status, and English proficiency

15.

LOGISTIC REGRESSION MODELS FOR OBESITY: ECLS-K, ECLS-B, AND POOLED ECLS-K & ECLS-B

- Pooled models include an intercept shift variable for ECLS-B (vs. ECLS-K)
 - The model that additionally interacted “survey” with the set of all covariates fit less well than the model with only a survey intercept shift (using the criterion of the lowest QIC statistic)

16.

LOGISTIC REGRESSION MODELS PREDICTING OBESITY IN KINDERGARTEN ADJUSTING FOR RISK AND PROTECTIVE FACTORS IN THE ECLS-K, ECLS-B, AND THE ECLS-K AND ECLS-B POOLED

	Model 1: Nativity		
	ECLS-K Odds Ratio	ECLS-B Odds Ratio	Pooled Odds Ratio
Mother’s nativity			
U.S.-born (vs. Foreign-born)	0.662***	0.994	0.785*
Survey sample control			
ECLS-B (vs. ECLS-K)	-	-	1.537***
Observations	11,670	5,300	16,970
Model Fit Statistic (QICu)	-	-	12,626.3

Notes: Logistic regression models include the following variables not shown: race/ethnicity, mother’s education, mother’s age at birth, child’s age, gender, household income (logged), mother’s marital status, mother’s employment at K, mother worked birth to K, child care in the year before K, birthweight, early gestation, siblings, weekday hours of TV, family dinner. Sample entails children born within the 50 U.S. states or DC with complete information on risk and protective factors. Estimates employ sample weights and adjust for complex sampling schemes of the surveys.

17.

LOGISTIC REGRESSION MODELS PREDICTING OBESITY IN KINDERGARTEN ADJUSTING FOR RISK AND PROTECTIVE FACTORS IN THE ECLS-K, ECLS-B, AND THE ECLS-K AND ECLS-B POOLED

	Model 2: Mother’s Nativity and Generation Status		
	ECLS-K Odds Ratio	ECLS-B Odds Ratio	Pooled Odds Ratio
Mother’s nativity and generation status			
(Ref.= Foreign-born Generation 1.0)			
Foreign-born Generation 1.5	0.892	0.914	0.915
Native-born	0.638***	0.972	0.764*
Survey sample control			
ECLS-B (vs. ECLS-K)	-	-	1.536***
Observations	11,670	5,300	16,970
Model Fit Statistic (QICu)	-	-	12,627.8

Notes: Logistic regression models include the following variables not shown: race/ethnicity, mother’s education, mother’s age at birth, child’s age, gender, household income (logged), mother’s marital status, mother’s employment at K, mother worked birth to K, child care in the year before K, birthweight, early gestation, siblings, weekday hours of TV, family dinner. Sample entails children born within the 50 U.S. states or DC with complete information on risk and protective factors. Estimates employ sample weights and adjust for complex sampling schemes of the surveys.

18.

LOGISTIC REGRESSION MODELS PREDICTING OBESITY IN KINDERGARTEN ADJUSTING FOR RISK AND PROTECTIVE FACTORS IN THE ECLS-K, ECLS-B, AND THE ECLS-K AND ECLS-B POOLED

	Model 3: Mother’s Nativity and English Proficiency		
	ECLS-K Odds Ratio	ECLS-B Odds Ratio	Pooled Odds Ratio
Mother’s nativity and English proficiency			
(Ref.= Foreign-born Low English)			
Foreign-born High English	0.632**	0.603+	0.636**
Native Born	0.528***	0.849	0.650***
Survey sample control			
ECLS-B (vs. ECLS-K)	-	-	1.523***
Observations	11,670	5,300	16,970
Model Fit Statistic (QICu)	-	-	12,618.0

Notes: Logistic regression models include the following variables not shown: race/ethnicity, mother’s education, mother’s age at birth, child’s age, gender, household income (logged), mother’s marital status, mother’s employment at K, mother worked birth to K, child care in the year before K, birthweight, early gestation, siblings, weekday hours of TV, family dinner. Sample entails children born within the 50 U.S. states or DC with complete information on risk and protective factors. Estimates employ sample weights and adjust for complex sampling schemes of the surveys.

19.

LOGISTIC REGRESSION MODELS PREDICTING OBESITY IN KINDERGARTEN ADJUSTING FOR RISK AND PROTECTIVE FACTORS IN THE ECLS-K, ECLS-B, AND THE ECLS-K AND ECLS-B POOLED

	Model 4: Mother’s Nativity, Generation Status and English Proficiency		
	ECLS-K Odds Ratio	ECLS-B Odds Ratio	Pooled Odds Ratio
Mother’s Nativity and English proficiency			
(Ref.= Foreign-born Low English)			
Foreign-born High English	0.613**	0.538+	0.600**
Native Born	0.534***	0.866	0.661***
Generation Status of Foreign-born Mothers			
(Ref.= Generation 1.0)			
Generation 1.5	1.085	1.245	1.148
Survey sample control			
ECLS-B (vs. ECLS-K)	-	-	1.523***
Observations	11,670	5,300	16,970
Model Fit Statistic (QICu)	-	-	12,619.5

Notes: Logistic regression models include the following variables not shown: race/ethnicity, mother’s education, mother’s age at birth, child’s age, gender, household income (logged), mother’s marital status, mother’s employment at K, mother worked birth to K, child care in the year before K, birthweight, early gestation, siblings, weekday hours of TV, family dinner. Sample entails children born within the 50 U.S. states or DC with complete information on risk and protective factors. Estimates employ sample weights and adjust for complex sampling schemes of the surveys.

20.

**ECLS-B ONLY: LOGISTIC REGRESSION MODELS
PREDICTING OBESITY IN KINDERGARTEN
ADJUSTING FOR THE LARGER SET OF RISK AND
PROTECTIVE FACTORS COLLECTED IN THE ECLS-B**

	Model 1 Odds Ratio	Model 2 Odds Ratio	Model 3 Odds Ratio	Model 4 Odds Ratio
Mother's Nativity and English proficiency (Ref.=Foreign-born Low English)				
Foreign-born High English	-	-	0.545+	0.520+
Native Born	0.824	0.777	0.675*	0.682*
Generation Status of Foreign-born Mothers (Ref.= Generation 1.0)				
Generation 1.5	-	0.805	-	1.096
Observations	-	-	-	5,300

Notes: Logistic regression models include the following variables not shown: race/ethnicity, mother's education, mother's age at birth, child's age, gender, household income (logged), mother's marital status, mother's employment at K, mother worked birth to K, child care in the year before K, birthweight, early gestation, siblings, weekday hours of TV, family dinner, breastfeeding, mother's pre-pregnancy BMI, bottle to bed, solids before 4 months, soda daily, and never fast food. Sample entails children born within the 50 US states or D.C. with complete information on risk and protective factors. Estimates employ sample weights and adjust for complex sampling schemes of the ECLS-B.

21.

CONCLUSIONS

- The "Epidemiological Paradox" that immigrants have more favorable health outcomes even with lower SES does *not* transfer to their young children's reduced obesity prevalence.
- The "Adverse Acculturation Hypotheses" is also not supported. On the contrary, if English proficiency is considered a marker of acculturation, then acculturation may *reduce* the prevalence of obesity among the children of immigrants.

22.

Emerging Health Disparities in New Generations of U.S. Children

Yolanda C. Padilla, Ph.D.

Professor of Social Work and Women's Studies, Population Research Center, University of Texas, Austin, TX

The epidemiological paradox (i.e., having good health, despite having an SES disadvantage) is well documented at birth for Mexican Americans. The epidemiological paradox is not well documented in the childhood of other immigrant groups, and it is not known whether the paradox disappears over time or across generations.

Data from the 2007 National Survey of Children's Health were used to estimate the prevalence of seven child health conditions—asthma, allergies, ear infections, developmental problems, headaches, learning disabilities, and overweight. The study compared the prevalence of these conditions in the first, second, and third generations for four racial/ethnic groups—non-Hispanic whites, non-Hispanic blacks, Hispanics, and Asians.

The survey found generational gradients for four common health conditions: allergies, asthma, developmental problems, and learning disabilities. Logistic regression models were used to test variables that might explain these gradients: access to and use of health care, SES, parents' health and home health environment, social support, neighborhood conditions, and all covariates. None of the models explained the lower risk of allergies among the first and second generations or the generational gradients. The models did not entirely explain the gradient in learning disabilities but showed that socioeconomic disadvantage plays a role. Socioeconomic disadvantage explained the increased risk of learning disabilities in the third-plus generations for blacks and Hispanics.

By the third-plus generation, black and Hispanic children had higher rates of most conditions, and the epidemiological paradox disappeared for all of the health conditions studied.

Dr. Padilla suggested that the Study could consider other factors that may explain generational patterns, such as cohort changes, selective migration, unhealthy assimilation, and changing responses to survey questions. Analyses of health disparities could provide information about the life chances of children of immigrants. Dr. Padilla added that the Study could define health more broadly, considering outcomes such as low education, teen pregnancy, and involvement in the juvenile justice system.

BACKGROUND

Children of immigrants

- 25% of all children
- Relatively socioeconomically disadvantaged
- Better health at birth than their native-born counterparts

Epidemiological paradox: good health despite SES disadvantage

- Well documented at birth for Mexican Americans
- Not well documented in childhood or for other immigrant groups
- Question about whether the paradox "disappears" over time and across generations

1.

CURRENT STUDY

Estimates the prevalence of 7 child health conditions:

- Asthma, allergies, ear infections, headaches, developmental problems, learning disabilities, overweight

Compares three generational groups:

- 1st, 2nd, 3rd+

Within four racial/ethnic groups:

- Non-Hispanic whites, non-Hispanic blacks, Hispanics, and Asians

Regression analyses:

- Test explanations for disparities

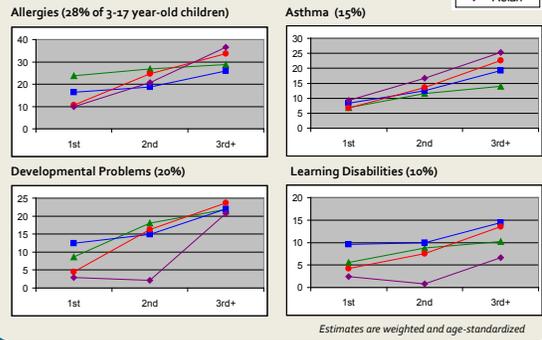
2.

DATA

- 2007 National Survey of Children's Health
- Analytic sample= 64,509
 - 3-17 year olds
 - Missing covariates imputed (for multiple regression analyses)
 - All analyses weighted to account for sample design

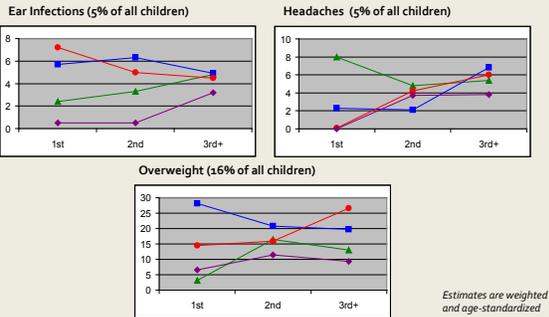
3.

GENERATIONAL GRADIENT IN FOUR COMMON CHILD HEALTH OUTCOMES



4.

LESS CONSISTENT GENERATIONAL PATTERNS FOR TWO LESS COMMON CHILD HEALTH OUTCOMES AND OVERWEIGHT



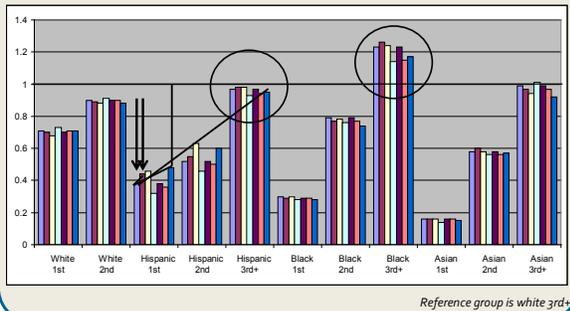
5.

SERIES OF LOGISTIC REGRESSION MODELS CONTROLLING FOR:

1. Race/ethnicity/generation, sex, and age
- PLUS**
2. Access to/use of health care
 3. Socioeconomic status & family structure
 4. Parents' health and home health environment
 5. Social support
 6. Neighborhood conditions
 7. All covariates

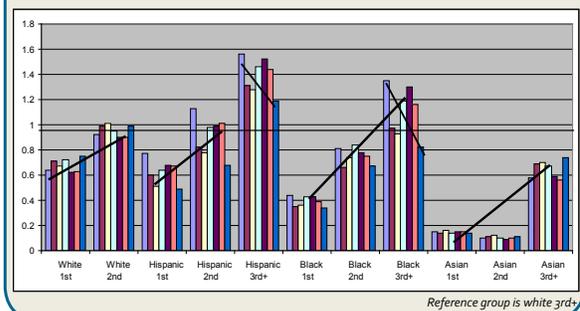
6.

ODDS RATIOS OF ALLERGIES, BY RACE/ETHNICITY/GENERATION, ACROSS 7 MODELS



7.

ODDS RATIOS OF LEARNING DISABILITIES, BY RACE/ETHNICITY/GENERATION, ACROSS 7 MODELS



8.

SUMMARY OF MAIN FINDINGS

- Robust generational gradient for four common health outcomes
- By the third-plus generation, black and Hispanic children have higher rates of most conditions
- The epidemiologic paradox pattern “disappears” by the third-plus generation

9.

ANALYTICAL AND SUBSTANTIVE IMPLICATIONS FOR THE NATIONAL CHILDREN’S STUDY

Analytical Implications

- Other factors to consider to explain generational patterns
 - Cohort changes
 - Selective migration
 - Unhealthy assimilation
 - Changing responses to survey questions

10.

ANALYTICAL AND SUBSTANTIVE IMPLICATIONS FOR THE NATIONAL CHILDREN’S STUDY

Substantive Implications

- What does our analyses on health disparities tell us about the life chances of children of immigrants?



Public health more broadly defined:



11.

RESEARCH ARTICLE

Erin R. Hamilton, Jodi Berger Cardoso, Robert A. Hummer, & Yolanda C. Padilla. (2011). *Demographic Research*, 25, Article 25, 783–818.

<http://www.demographic-research.org/Volumes/Vol25/25/>

12.

Discussion

Randy Capps, Ph.D.

Demographer and Senior Policy Analyst, Migration Policy Institute, Washington, DC

Dr. Capps summarized the following points from the three presentations. (Please note that suggestions for the Study are the opinions of the speakers, not the Study leaders.)

- The Study should collect data to explain the consistent generational health gradients.
- Selective migration and unhealthy assimilation may explain the health gradients.
- To examine selectivity, the Study may need to determine which country-of-origin groups are in each generation of a racial/ethnic population. Legal status also may affect selectivity; the vast majority of children with undocumented parents are born in the United States.
- More information about unhealthy assimilation is needed.
- The Study can be used to find out what immigrant parents are doing better than their native-born counterparts.
- The epidemiological paradox does not extend to obesity.
- English-language fluency may be a marker of legal status, a predictor of SES, or associated with difficulties interacting with institutions. It is not known how English-language fluency affects migrant selectivity.
- The health behaviors of parents are key intervening variables in child health.
- Rates of smoking were lower and rates of breastfeeding are higher among immigrant mothers in the United States. The findings in the United Kingdom were not as strong and appeared to vary more by ethnicity than by generation.
- Countries in the United Kingdom may be healthier than the United States even though the standard of living is lower.
- In contrast to Dr. Padilla's findings, Dr. Jackson did not find much difference in asthma rates among different groups.

Dr. Padilla said that her findings were true for immigrants from different countries of origin. Generational cohort and legal status were important variables. The historical period should be considered—the implications of legal status are greater today than they were a few decades ago.

Dr. Rendall noted that longitudinal data need to be collected for variables that indicate acculturation. English proficiency and legal status may change over time.

Dr. Jackson said that there was a bimodal distribution of black and South Asian immigrants with regard to education. Groups should be cross-classified by race, ethnicity, and SES to look for patterns.

Dr. Capps added summarized that it was important to collect data about generational cohort, attrition, English ability, individual origins, length of parental residence in the United States, and environmental characteristics of homes, neighborhoods, and communities of immigrant families.

Participants also discussed the following issues:

- Information about countries of origin should be collected. Obesity rates may be higher in some countries than in the United States, and asthma prevalence varies among populations from different countries. The epidemiological paradox applies to different mental health conditions for Hispanic populations from different countries of origin.
- The question was posed as to whether smoking was a good marker of maternal health behavior. Smoking behavior may remain more stable over time because it is gender-coded in many countries. Dr. Jackson said that she had considered other health behaviors in her research, and the patterns were strikingly similar. The benefits of using smoking as a marker of health behavior outweighed the limitations.
- English-language proficiency may be a marker of marginalization.
- A participant asked whether generational cohorts accounted for the races of both parents. Dr. Padilla said that the races of both parents were not available in the dataset she used.
- Dr. Capps noted that the ECLS included a number of strong measures of parenting that should be included in the Study. Data about interactions with institutions outside the family, such as schools, also should be included.

Chapter 4: Maternal and Child Health—Understanding Race, Ethnicity, and Immigration Status

Less research has been conducted on Asian Americans, compared to other racial/ethnic groups, partly due to perceptions of this population as a “model minority.” Furthermore, most studies on Asian American groups relied primarily on samples on the west coast, which limited the generalizability of their findings. Research discussed at the symposium addressed postpartum depression, mental illness and substance use, and the effects of being a parent. Among the findings reported: a diagnosis of postpartum depression was found to be three times as likely to occur among Asians/Pacific Islanders as among whites; Filipino mothers, compared to other Asian groups, reported more childhood conduct disorders as well as more lifetime smoking and lifetime illicit drug use; and being a parent to a young child had health benefits for Asian immigrants, although these effects were mitigated by discrimination, poverty, and parental age.

Past research examining health outcomes among black immigrants tended to treat them as a single, homogenous group. In contrast, a study presented at the symposium addressed differences in maternal health and birth outcomes across African immigrants, Caribbean immigrants, and U.S.-born black women. This research found generally favorable health outcomes for African and Caribbean women compared to U.S.-born black women. African and Caribbean women were less likely to smoke, have hypertension, or have previous poor birth outcomes, and their babies had higher birth weights and lower rates of being small for gestational age. In addition, African and Caribbean women were more likely to marry and give birth at older ages. African women tended to be more educated than Caribbean or U.S.-born black women, but they had lower rates of prenatal care use. More research is needed to fully understand the reasons for these differing outcomes.

Child health is not separable from child development. Findings presented from an ongoing study showed how the health conditions and development of children of Mexican immigrants compared to U.S. children from other racial and ethnic groups. Children of Mexican immigrant parents appeared to have a higher prevalence of low cognitive development and clustered health problems (i.e., problems in a number of different domains) compared to other groups. Trends toward low cognitive development and clustered health problems seemed similar for children of Mexican origin regardless of whether the mother was born in the United States or in Mexico.

Asian American Maternal and Child Health

Richard M. Lee, Ph.D.

Associate Professor of Psychology, University of Minnesota, Minneapolis, MN

Asian Americans are included as “other” in many datasets; they often are not viewed as a population worth studying because of the “model minority” stereotype. However, they are the most heterogeneous racial group in the United States, and the picture of Asian American maternal and child health is incomplete.

Asian Americans are far less likely to use physical and mental health services than other groups, and they are more likely to use informal services or no services. Asian American ethnic groups differ in use of prenatal care and in perinatal, neonatal, and infant outcomes. There is mixed evidence about whether Asian Americans have more or less health insurance coverage than the rest of the population. Differences may depend on ethnic group and region.

U.S.-born Asian American children perform similarly to white children in many developmental outcomes. They are less likely to miss school, have a learning disability, use medication, or have chronic conditions. Although Asian American children are seen as high achieving, Southeast Asian and Filipino children are lower achieving. This may be explained by the common use of supplemental education in Korean and Chinese immigrant families.

Some research suggests that Asian American children may have worse physical and mental health outcomes than whites, and that Southeast Asian parents may be less likely to engage in parent-child activities, use childcare services, or have books available in the home.

Research on Asian American health is limited by dependence on west coast samples, the use of demographic data to address complex cultural phenomena, a lack of data on the transactional nature of health care, and a lack of data on paternal health.

Dr. Lee described the results of current research projects:

- Asian/Pacific Islander women were three times more likely to be diagnosed with postpartum depression. Discussing depression with a health care provider increased diagnosis rates, but only about 39 percent of Asian/Pacific Islander women reported having this conversation with a provider.
- Compared with other Asians, Filipino mothers reported more conduct disorder symptoms as children or teens, more lifetime smoking, and more lifetime illicit drug use. Everyday discrimination and acculturation accounted for this difference, but perceived racial discrimination had no effect on these outcomes. For drug use and conduct disorder, everyday discrimination and acculturation had additive effects.
- A study found that being a parent had health benefits for men and women. The benefits disappeared when poverty and parental age were taken into account. Discrimination independently reduced health benefits. Fathers were more likely than mothers to drink and smoke.
- Based on public health data, immigrant/refugee Asian American parents were reluctant to report child mental health problems. Fear of losing custody of their children could be a factor in this reluctance.

OVERVIEW

- Asian American Maternal and Child Health
 - Services and outcomes
 - Limitations
- Public Health Data Studies
 - PRAMS, NLAAS, SHAPE
- Summary and Considerations

1.

ASIAN AMERICAN PUBLIC HEALTH

- The "Other" in public health research
- Model minority stereotype
- Heterogeneous > homogenous
- Incomplete picture of Asian American maternal and child health

(Ghosh, 2010)

2.

ACCESS AND UTILIZATION

- Asian Americans, including children, are 3x less likely to utilize physical and mental health services
 - Asian Americans with mental health disorders have lower mental health utilization
- More likely to utilize informal or no services
 - Especially when there are language and transportation barriers

(Lee, S.Y., et al., 2011; Spencer & Chen, 2004; Flores & Tomany-Korman, 2008)

3.

PRENATAL CARE USE (PCU)

- Ethnic group differences
 - Korean and Vietnamese had lower PCU than Chinese
- Nativity
 - Chinese American immigrant mothers less likely to have adequate prenatal care (vs. U.S.-born Chinese Americans)
- Demographics
 - Marital status, age of pregnancy, education, number of children at home, partner abuse → PCU

(Li & Keith, 2011; Ta & Hayes, 2010; Yu, et al., 2001)

4.

PERINATAL OUTCOMES

- Racial and nativity group differences
 - Indian children are small for gestational age
 - Multiracial mothers have low birth weight and preterm births
 - U.S.-born Asian American ethnic groups have lower birth weight and preterm births than foreign-born Asian Americans

(Lee, H.C., et al., 2010; Li & Keith, 2011; Schempf, et al., 2010)

5.

NEONATAL OUTCOMES

- Infant mortality
 - Thai infants have higher rates than whites/other Asians
 - Filipinos have higher rates than other Asians
 - U.S.-born Chinese mothers with low education more likely to have infant mortality

(Baker, et al., 2007; Hayes, et al., 2008; Qin & Gold, 2010)

6.

INFANCY

- Filipino, Korean, and Vietnamese mothers with child <1 had lower non-depression rates (vs. whites)
- Asian American mothers (in CA) less likely to breastfeed (vs. whites)
- Infant mortality is 2x greater among Asian American mothers under 20 years (vs 20-24 years age)

(Huang, et al., 2008; National Vital Statistics Reports, 2011)

7.

CHILDHOOD HEALTH CARE

- Availability
 - Mixed evidence on whether Asian Americans (immigrant and U.S.-born) have more/less health insurance
 - Among poorest Asian Americans, they are less likely to be aware of Medicaid
- Utilization
 - Consistent evidence that Asian Americans are less likely to utilize sources of care

(Flores & Tomany-Korman, 2008; Huang, et al., 2006; Yu, et al., 2004, 2010)

8.

POSITIVE CHILD OUTCOMES

- U.S.-born Asian Americans were more similar to whites
- Asian American children less likely to miss school, have a learning disability, use medication, or have chronic conditions
- Ethnic group differences in education
 - Southeast Asians and Filipino < achievement
 - Use of supplemental education by Korean and Chinese families

(Eng, et al., 2008; Yu, et al., 2004, 2010; Zhou, 2006)

9.

NEGATIVE CHILD OUTCOMES

- Asian Americans have worse physical and mental health (vs. whites)
- Chinese, Korean, Vietnamese children more likely to be in fair/poor health compared to whites
- Southeast Asian parents less likely to engage in parent-child activity, use child care services, have books available

(Huang, et al., 2011)

10.

LIMITS AND CONSIDERATIONS

- Majority West coast samples
- Demographic data to address complex cultural phenomena
- Transactional (clinician-patient) nature of health care
- Paternal health

11.

CURRENT RESEARCH

- To examine racial and ethnic group differences in maternal health/mental health
- To examine women/men with and without younger-aged children
- To consider cultural factors in group differences

12.

NYC PRAMS 2004-2007

- A population-based survey data administered to postpartum women from the five NYC boroughs
 - To monitor maternal behaviors and experiences of women before, during, and after pregnancies that include live births
- 3,748 NYC mothers, 2-4 month old infants

13.

RACIAL GROUP DIFFERENCES

- Asian/Pacific Islanders were 3x more likely than whites to receive a post-partum depression diagnosis
- For all groups, having a prenatal depression diagnosis increased rates of post-partum depression diagnoses
 - Discussion about depression with providers was associated with increased post-partum depression diagnoses for Asian/Pacific Islanders and African Americans
 - But only 38.6% of Asian/Pacific Islander women reported having this conversation

14.

PRAMS SUMMARY

- Asian/Pacific Islanders were most likely to benefit from information provided by the provider
BUT
- Asian/Pacific Islanders were the least likely to be provided information about depressed mood

15.

NLAAS

- National rates of mental illness and service use of Latinos (N = 2,554) and Asian Americans (N = 2,095)
 - To examine ethnic group differences in the mental health of Asian American mothers with children <10 years old
 - Identify culture-specific mediators
- 232 Vietnamese, Filipino, Chinese, Other Asian

16.

ETHNIC GROUP DIFFERENCES

- Filipino mothers, compared to Chinese, Vietnamese, and other Asians
 - More conduct disorder symptoms as child/teen
 - More lifetime smoking
 - More lifetime illicit drug use

17.

SMOKING MEDIATORS

- Everyday discrimination fully mediates effects of ethnicity on smoking
 - Perceived racial discrimination has no effect
- Acculturation (immigrant status, years in the U.S., and language proficiency) fully mediates effects of ethnicity on smoking

18.

DRUG USE MEDIATORS

- Everyday discrimination has additive effect
 - Perceived racial discrimination has no effect
- Acculturation has additive effect
 - Language proficiency, immigrant status (lower use), generation status (greater use)

19.

CONDUCT DISORDER MEDIATORS

- Acculturation and discrimination have additive effects
 - Language proficiency, immigrant status (less symptoms), generation status (greater symptoms), everyday discrimination
 - Perceived racial discrimination has no effect

20.

NLAAS SUMMARY

- "Immigrant Paradox"
 - Immigrant status appears to have a protective effect on risk behaviors
 - More acculturated, U.S.-born Filipino mothers had more risk behaviors
- Everyday discrimination (i.e., unfair treatment) is more potent than perceived racial discrimination
- Findings based on preliminary analyses

21.

SHAPE

- Public health surveillance project to monitor health of residents in Hennepin County, MN
- 7,860 residents surveyed
 - 443 Asian American (306 Southeast Asian)
- To compare 328 Asian immigrants with/without children under 6 years old
 - Includes 77 mothers and 72 fathers with children < 6 years old

22.

PARENTAL EFFECTS

- Immigrants w/children < 6 had fewer unhealthy days than immigrants w/o younger-aged children
 - 4 vs. 6 bad days/month
 - Same effects for women and men
 - Differences hold when other children taken into account but disappear when poverty and parental age taken into account
 - Discrimination independently reduces differences

23.

FATHER EFFECTS

- More likely to have 1-2 & 3-4 drinks/day than mothers
- More likely to currently smoke than mothers
 - Everyday, some days, former
- Having younger-aged children does not alter drinking/smoking usage for fathers

24.

SHAPE SUMMARY

- Parental Paradox?
 - Is being a parent to a young child a health advantage among immigrants?
- Paternal health may be an important issue to consider.
- Discrimination, poverty, and parent age also are relevant factors.
- Findings are based on preliminary analyses.

25.

CHILD CONSIDERATIONS

- Observations from analyses of other public health data
 - SHAPE-Child Survey | Hmong Mental Health Screening
- Immigrant/refugee Asian American parents reluctant to report child mental health problems
 - Not as concerned about disclosing adult mental health concerns
 - Fear/concern of losing custody (or CPS intervention) of children

26.

CONCLUSIONS

- Transactional nature of health care is relevant.
- Limits of Immigrant Paradox:
 - Moderated by parenthood?
 - Explained by everyday discrimination?
- Consideration of paternal health
- Differential reports of parental and child (mental) health

27.

ACKNOWLEDGMENTS

- Asian American Center on Disparities Research (UC-Davis)
 - Nolan Zane (PI), Anne Saw, Alan Chan
- Hennepin County Human Services and Public Health Department
 - Sheldon Swaney (Project Director)
- Asian American Psychological Association (AAPA)
 - Anna Lau
- Asian Caucus of Society for Research on Child Development (SRCD)

28.

Birth Outcomes Among Native-Born and Foreign-Born Black Women in the United States

Irma T. Elo, Ph.D., M.P.A.

Professor of Sociology, Population Studies Center, University of Pennsylvania, Philadelphia, PA

Black immigrants from the Caribbean and Africa make up about 85 percent of all black immigrants to the United States. Most Caribbean immigrants are U.S. citizens and have lived in this country longer than other black immigrant groups. Most voluntary migration from Africa to the United States began after the Immigration and Nationality Act of 1965 was enacted, with substantial increases in recent years. Immigrants come from an increasing number of African countries and are more geographically dispersed in the United States than are Caribbean immigrants. African immigrants are less likely to be U.S. citizens and more likely to be refugees or to enter under a diversity visa program.

Little research has been conducted on black immigrants and their children, and most studies have grouped all foreign-born blacks together. These studies show that foreign-born blacks have lower mortality, better health outcomes, and better birth outcomes than U.S.-born blacks. Studies that have looked at region of origin have found that African immigrants have more favorable health outcomes than do Caribbean immigrants.

Dr. Elo discussed the results of recent research:

- African and Caribbean women were more likely to marry and give birth at older ages than other U.S. migrant and nonmigrant groups.
- African women were more highly educated than Caribbean or U.S.-born black women. Caribbean women had education levels similar to those of U.S.-born black women.
- African women were most likely to receive inadequate prenatal care.
- Compared with U.S.-born black women, foreign-born black women were less likely to have hypertension or a previous poor birth outcome, more likely to have diabetes, and less likely to smoke.
- Foreign-born black women had better birth outcomes than U.S.-born black women.
- Women born in Africa had heavier infants than women born in the Caribbean.
- Among U.S.-born black women, migrants had better birth outcomes than nonmigrants.

Among U.S.-born black women, birth weight increased with increasing education. This gradient was not as strong among African-born women and was not present for Caribbean-born women. Infants of the most poorly educated foreign-born black women had birth weights similar to infants of college-educated U.S.-born black women. These trends may reflect long-term exposure to disadvantage for U.S.-born black women, different meanings of educational attainment in different countries, or selective migration.

Among African-born women, Somalis are very poorly educated and most likely to be refugees. Nigerians are the most educated. Ethiopians have the best birth outcomes. Ghanaians and Somalis have similar outcomes, even though Somalis are much more likely to be refugees. These differences are not explained by characteristics of mothers or risk factors.

More data are needed to explain differences in birth outcomes, for example:

- Mother's and father's country and place of birth
- SES in country of origin
- Education attainment and where education was obtained
- Health compared with citizens in country of origin
- U.S. legal status and visa type
- Length of stay in the United States
- Longitudinal followup of maternal health in addition to child health

BLACK IMMIGRATION TO THE UNITED STATES

Caribbean-born black immigrants

- Over half of all black immigrants (1.7 million in 2009)
- Dates back to early 20th century with a substantial increase after 1965 immigration reform
- Primary origin countries: Jamaica, Haiti, Trinidad and Tobago (over 90% of black Caribbean immigrants)
- Legal status:
 - 16% estimated to be unauthorized
 - 49% naturalized citizens
 - 29% legal permanent (28%) or temporary (1%) residents
 - 7% refugees
- Recent admissions: family preferences (75%), refugees (24%), employment (1%), diversity visa (0%), other (0%)

(Source: Thomas, 2011)

1.

BLACK IMMIGRATION TO THE UNITED STATES

African-born black immigrants

- Substantial voluntary migration since 1965
 - Large increase since 2000 (92% - 2000-2009)
 - 1.1 million black African immigrants in 2009
- Primary origin countries: Nigeria, Ethiopia, Ghana, Kenya, Somalia, Liberia) - growing diversity over time
- Legal status:
 - 21% estimated to be unauthorized
 - 26% naturalized citizens
 - 28% legal permanent (26%) or temporary (2%) residents
 - 25% refugees
- Recent admissions: family preferences (48%), refugees (22%), diversity visa (24%), employment (5%), other (1%)

(Capps, et al., 2011)

2.

HEALTH OF BLACK IMMIGRANTS AND THEIR CHILDREN

Foreign-born versus Native-born blacks:

- Lower adult mortality (e.g., Hummer, et al., 1999; Singh & Siahpush, 2002)
- Better adult health (e.g., Cho, et al., 2004; Elo, et al., 2011)
- Lower rates of preterm and low birth weight births, lower infant mortality (e.g., David & Collins, 1997; Hummer, et al., 1999; Singh & Yu, 1996)
- Health heterogeneity among immigrant subgroups (Read & Emerson, 2005; Elo, et al., 2011; Elo & Culhane, 2010)
 - African immigrants healthier than Caribbean immigrants
 - Heterogeneity within African and Caribbean subgroups?

3.

DATA

- Vital statistics birth record data from states that had implemented the 2003 revision of U.S. birth certificates
 - 2005 (13 states): Infants of **NH-black women** who were born in the 50 U.S. states and the District of Columbia, the Caribbean, and Africa
 - 2008 (27 states): Infants of **NH-black women** who were born in the 50 U.S. states and D.C., main sending countries from Africa (Ethiopia, Ghana, Kenya, Nigeria, Somalia) and the Caribbean (Haiti and Jamaica)

4.

BIRTH OUTCOMES AND EXPLANATORY VARIABLES

Birth Outcomes

- Small-for-gestational age birth (SGA) (< 10th percentile of the birth weight distribution for a given gestational week)
- Birth weight (continuous)

5.

BIRTH OUTCOMES & EXPLANATORY VARIABLES

Explanatory Variables

- "Migration status"
 - U.S.-born migrant, U.S.-born nonmigrant, Caribbean, African
- Sociodemographic characteristics
 - Maternal age, education, marital status, birth order, and child's sex
- Health behaviors and medical risk factors
 - Prenatal care and smoking during pregnancy
 - Hypertension, diabetes, and previous poor pregnancy outcome

6.

METHODS

Regression Models

- Small-for-gestational-age birth: logit regression
- Birth weight in grams: ordinary linear regression
- Standard errors corrected for clustering by mother's migration status

Set of Models

- Model 1: Mother's country of birth
- Model 2: Model 1 + socio-demographic characteristics
- Model 3: Model 2 + health behaviors + medical risk factors
 - Model 3 with interactions between mother's country of birth and educational attainment

7.

MATERNAL CHARACTERISTICS (%)

Characteristic	U.S. nonmigrant	U.S. migrant	Caribbean	African
Maternal age				
18-19	14.8	9.6	3.0	1.9
20-30	65.0	60.8	45.6	43.5
30+	20.2	29.5	51.4	54.6
Maternal education				
< high school	21.8	14.5	21.0	19.1
high school	40.0	32.0	33.6	24.5
some college	30.1	35.5	30.2	28.6
college degree	8.1	18.1	15.2	27.8
Marital status				
married	23.8	40.9	56.9	77.5

8.

MATERNAL CHARACTERISTICS (%)

Characteristic	U.S. nonmigrant	U.S. migrant	Caribbean	African
Prenatal care				
Adequate plus	30.4	30.6	27.3	22.9
Adequate	27.4	28.4	32.7	29.1
Intermediate	9.1	9.8	10.3	11.4
Inadequate	24.3	23.1	20.5	28.1
Missing	8.8	8.1	9.1	8.6
Risk factors				
Hypertension	8.0	7.8	7.0	5.1
Diabetes	4.5	4.9	6.1	5.4
Prev. poor outcome	8.0	7.6	3.5	4.4
Smoked in pregnancy	11.9	10.5	1.3	0.6

9.

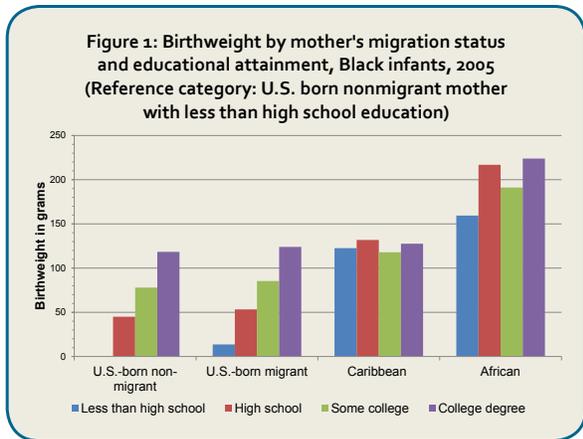
BIRTH OUTCOMES

Migration Status	SGA Birth (%)	Mean Birth weight ^a
Native-born		
Nonmigrant	17.0	3,099 (1.7)
Migrant	17.4	3,091 (2.0)
	15.6	3,128 (3.6)
Foreign-born		
Born in the Caribbean	12.3	3,244 (4.6)
Born in Africa	13.2	3,207 (5.6)
	10.4	3,326 (8.0)

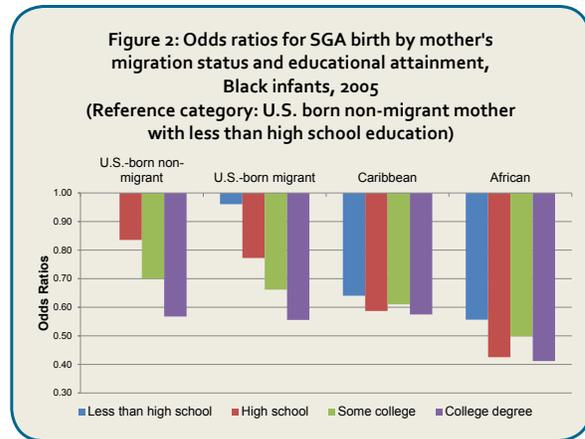
^a (standard deviation in parentheses)

All differences among the subgroups are significant.

10.



11.



12.

BIRTH OUTCOMES BY MOTHER'S COUNTRY OF BIRTH

Africa	Caribbean
<ul style="list-style-type: none"> Ethiopia Ghana Kenya Nigeria Somalia 	<ul style="list-style-type: none"> Haiti Jamaica

13.

MATERNAL CHARACTERISTICS (%)

Maternal Characteristic	Ethiopia (2,084)	Ghana (1,500)	Kenya (993)	Nigeria (3,429)	Somalia (2,081)
Age					
< 20	0.9	1.1	1.5	0.5	5.5
20-30	37.9	34.7	37.5	29.9	56.9
30+	61.3	64.3	61.1	69.5	37.7
Education					
< High school	15.7	10.0	2.5	2.7	60.1
High school	41.4	31.6	15.8	15.1	25.7
Some college	28.2	30.6	43.2	26.3	11.3
College deg.	14.8	27.8	38.5	56.0	2.9
Marital status					
Married	69.3	60.3	70.5	84.8	78.2

14.

MATERNAL CHARACTERISTICS (%)

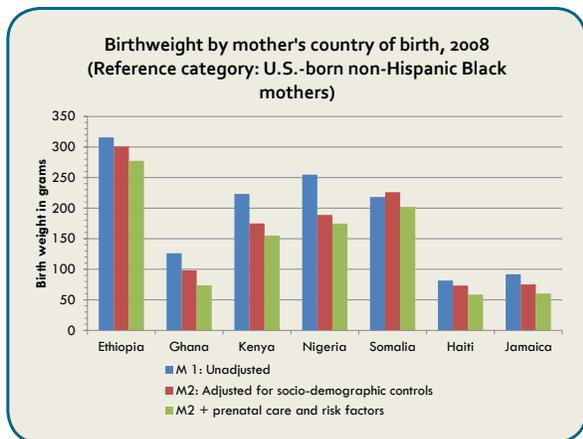
Maternal Characteristic	Ethiopia (2,084)	Ghana (1,500)	Kenya (993)	Nigeria (3,429)	Somalia (2,081)
Prenatal care					
1 st trimester	55.3	58.1	57.2	54.3	47.5
2 nd & 3 rd	34.9	31.7	35.2	35.1	41.8
None	1.5	1.9	1.5	1.8	3.2
Missing	8.4	8.3	6.1	8.8	7.5
Medial risks					
Hypertension	4.4	6.9	4.0	5.8	3.4
Diabetes	6.4	8.0	4.7	5.5	6.3
Prev. poor outcome	2.8	4.8	3.0	3.9	5.0
Smoked in preg	0.9	0.0	0.6	0.1	0.5

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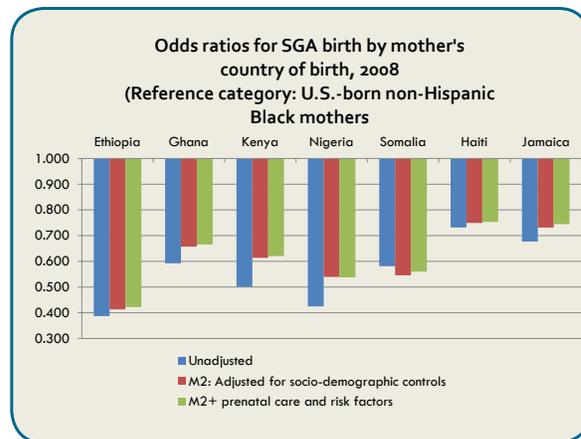
BIRTH OUTCOMES

Mother's Country of Birth	SGA Birth (%)	Mean Birth weight
Africa		
Ethiopia	7.8	3,420
Ghana	11.5	3,230
Kenya	9.9	3,325
Nigeria	8.5	3,359
Somalia	11.3	3,320
Caribbean		
Haiti	13.9	3,183
Jamaica	12.8	3,196

16.



17.



18.

CONCLUSIONS

- Birth outcomes among black U.S. residents vary by region and country of birth.
- Among the foreign-born, Africans have more favorable birth outcomes than Caribbeans.
- Birth outcomes vary by the mother's country of birth among African immigrants.
- The differences cannot be explained by data available on the birth certificate.
- The foreign-born advantage is most pronounced among women with low levels of education.

19.

IMPLICATIONS FOR DATA COLLECTION

- Mother's and father's country of birth and place of birth
- Socioeconomic status in the country of origin (e.g., social status ladder)
- Education attainment—where obtained
- Health compared to the citizens in the country of origin
- U.S. legal status and visa type
- Length of stay in the U.S. (residential history)
- Longitudinal followup of maternal health in addition to child health

20.

Maternal and Child Health: Understanding Nativity, Race, and Ethnicity

Nancy Landale, Ph.D.

Liberal Arts Research Professor of Sociology and Demography, Pennsylvania State University, University Park, PA

The Mexican Children of Immigrants Program Project comprised three research subprojects focusing on early child health, obesity in middle childhood, and health care utilization and health insurance coverage.

The aims of the early child health project, which focused on the children of immigrants from birth to age 5, included:

- Conceptualizing and measuring children’s health, with an emphasis on racial and ethnic disparities
- Examining the role of family contexts in racial and ethnic health disparities
- Understanding the role of immigration

For young children, health is inseparable from development. Early child health includes specific health conditions, functioning, and health potential. The project sought to move from a condition-based analysis of child health to a more holistic approach.

Dr. Landale described U.S. children’s health at age 4 based on data from the Early Childhood Longitudinal Study Birth Cohort (ECLS-B). All of the children in the sample were U.S.-born, but some had immigrant parents. Researchers determined the probability at age 4 of the following health statuses: healthy, asthma only, functional problems, low cognitive achievement, externalizing problems, and low social skills. Researchers also determined the probability of clustered health problems—problems in a number of different domains—and of clustered health problems in addition to a chronic health or functional problem.

Mexican-origin children had a high prevalence of low cognitive achievement and clustered health problems, but the language in which the cognitive achievement tests were given may have been a confounder. Mexican-origin children with foreign-born and U.S.-born mothers showed similar trends, but children of foreign-born mothers had a higher prevalence of low cognitive achievement and clustered health problems. To study these differences, it is important to examine parents’ immigration experience, material resources, parenting, health in general, and maternal preconception/prenatal health.

Data showed that a large portion of Mexican immigrant mothers with low SES and no health insurance were generally healthy. Good parent health counterbalanced low SES, so that child health outcomes were better than expected.

The National Children’s Study could measure child development through direct assessments, consider following maternal health beyond the preconception period, and look at specific countries of origin.

The Mexican Children of Immigrants Program Project

Exploring How Migration and the Contexts of Reception Affect Mexican Children's Health

The Project...

- Explores how country of residence, the migration process, and parents' legal status influence children's health and health care
- Considers how children of Mexican immigrants develop over time
- Assesses the implications of immigrants' dispersion to new destinations for children's health and access to health care

Did you know?..

- More immigrants come from Mexico than any other country
- 1 in 6 U.S. babies are to Mexican/Hispanic mothers
- 44% of children of immigrants are U.S. citizens
- More than half of Mexican children of immigrants have nontraditional parents

1.

KEY AIMS OF PROJECT ON EARLY CHILD HEALTH

Focus on:

- Conceptualization and measurement of children's health, with emphasis on racial and ethnic health disparities
- Role of family contexts in racial and ethnic health disparities
- How immigration and family contexts jointly shape health among Mexican-origin children

2.

HOW SHOULD CHILDREN'S HEALTH BE CONCEPTUALIZED?

Children's health is inseparable from their development. It includes:

- Specific health conditions
- Functioning
- Health potential (development)

3.

Table 1. Variables Used in Latent Class Analysis of Child Health

Variable	Percent	Description
Asthma	11.5	Parent told child has asthma by a doctor, nurse or other health professional
Overweight/Obese	36.3	Child's Body Mass Index \geq 85th percentile for gender and age
Other Chronic Conditions	7.4	Chronic health condition diagnosed by a doctor: Autism, diabetes, epilepsy, heart defect, ADHD, ODD, mental retardation, mobility problem, other developmental delay, special equipment used
Functional Problems	16.2	Diagnosed by a professional with specific functional disability: Attention, activity, limbs, hearing, vision, communication
Daily Prescription Use	10.3	Takes prescription medication daily
Low Fine Motor Skills	28.7	Based on fine motor skills direct assessment
High Externalizing Behavior	22.0	Based on additive index of externalizing behavior (Cronbach's $\alpha = .77$): How often child is physically aggressive, angry, has temper tantrums, acts impulsively, is overly active, annoys other children, and destroys others' things
Low Social Skills	24.4	Based on additive index of social skills (Cronbach's $\alpha = .66$): How often child makes friends easily, is accepted by other children, and is invited to play by other children
Low Empathy	19.0	Based on additive index of empathy (Cronbach's $\alpha = .78$): How often child volunteers to help others, comforts others, uses words to describe feelings, invites other children to play, stands up for others' rights, and tries to understand others
Low Early Reading Skills	25.6	Based on direct assessment of early reading skills
Low Early Math Skills	25.1	Based on direct assessment of early math skills
Low Approaches to Learning	16.2	Based on additive index of approaches to learning (Cronbach's $\alpha = .70$): How often child eager to learn new things, able to pay attention well, works independently, keeps working on tasks until finished, and has difficulty concentrating or staying on task (reverse coded for consistency)

4.

Table 2. Probability of reporting each health problem conditional on membership in latent health status (Weighted; N=6800)

	Healthy	Asthma	Functional Problems	Low Cognitive Achievement	Externalizing + Low Approaches to Learning	Low Social Skills	Cluster	Cluster + Chronic
Percentage in latent Health Status:	51%	4%	4%	17%	3%	12%	6%	4%
Health Indicator	-	-	-	-	-	-	-	-
Asthma	0.07	0.84	0.11	0.10	0.20	0.02	0.15	0.22
Overweight/Obese	0.35	0.45	0.38	0.39	0.37	0.32	0.41	0.37
Other Chronic Conditions	0.03	0.09	0.34	0.04	0.06	0.00	0.04	0.85
Functional Problems	0.06	0.25	1.00	0.13	0.20	0.10	0.11	0.91
Daily Prescription Use	0.05	0.85	0.15	0.05	0.10	0.06	0.05	0.35
Low Fine Motor Skills	0.15	0.30	0.16	0.52	0.26	0.30	0.61	0.70
High Externalizing Behavior	0.12	0.23	0.14	0.22	1.00	0.23	0.56	0.57
Low Social Skills	0.09	0.17	0.22	0.15	0.47	0.66	0.70	0.65
Low Empathy	0.03	0.07	0.14	0.10	0.52	0.58	0.63	0.69
Low Early Reading Skills	0.08	0.14	0.04	0.72	0.16	0.13	0.91	0.59
Low Early Math Skills	0.04	0.17	0.06	0.82	0.16	0.11	0.83	0.61
Low Approaches to Learning	0.03	0.09	0.10	0.07	1.00	0.26	0.65	0.69

Note: Item-response probabilities greater than .50 marked in bold to facilitate interpretation.

5.

PREVALENCE OF LATENT HEALTH STATUSES BY RACE-ETHNICITY

	Hispanic						
	All	Mexican	Other	White	Black	Asian	Other
Healthy	0.50	0.28	0.31	0.55	0.33	0.43	0.43
Asthma	0.04	0.02	0.09	0.05	0.09	0.03	0.07
Functional Problems	0.04	0.01	0.06	0.05	0.01	0.00	0.04
Low Cognitive Achievement	0.17	0.37	0.24	0.12	0.27	0.08	0.17
Externalizing	0.03	0.01	0.02	0.03	0.04	0.03	0.05
Low Social Skills	0.12	0.12	0.15	0.14	0.09	0.35	0.15
Cluster	0.06	0.15	0.08	0.02	0.13	0.06	0.07
Cluster + Chronic Conditions	0.04	0.03	0.04	0.05	0.04	0.02	0.03

Note: Columns sum to 100%
Data: ECLS-B (weighted), 48 months

6.

PREVALENCE OF LATENT HEALTH STATUSES BY MATERNAL NATIVITY, MEXICAN-ORIGIN CHILDREN

	Foreign Born	U.S. Born
Healthy	0.26	0.35
Asthma	0.01	0.02
Functional Problems	0.00	0.00
Low Cognitive Achievement	0.44	0.36
Externalizing	0.01	0.02
Low Social Skills	0.09	0.09
Cluster	0.17	0.12
Cluster + Chronic Conditions	0.02	0.03
Note: Columns sum to 100%		
Data: ECLS-B (weighted), 48		

7.

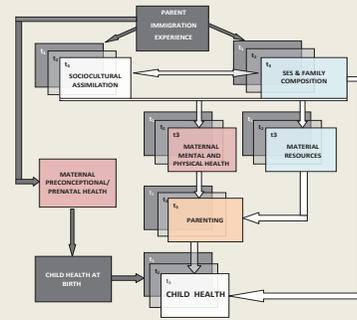
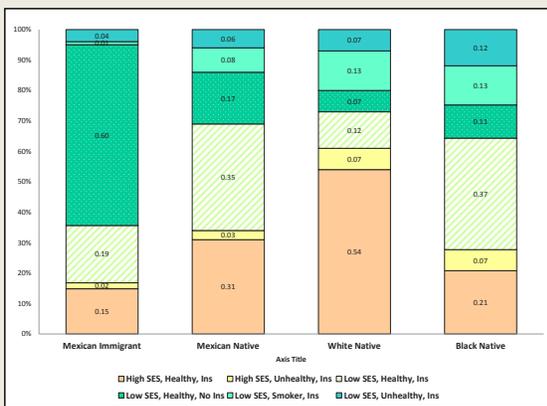


Figure 1. Heuristic Diagram – Three Time Points After Birth for U.S.-Born Children

8.



9.

TAKE AWAY POINTS

- At 4 years of age, Mexican-origin children likely to fall into a health status distinguished by developmental problems.
- Modal health status for Mexican children at age 4 is Low Cognitive Achievement (37%).
- The NCS should take care to measure child development through direct assessments.
- The NCS should consider following maternal health beyond the preconception period.

10.

Discussion

Lisa Roney, M.P.A.

Independent Immigration Evaluation and Research Consultant, Westat, Inc., Rockville, MD

Ms. Roney summarized the following points from the presentations. (Please note that suggestions for the Study are the opinions of the speakers, not the Study leaders.):

- The presentations used different data sources, but no source collected all necessary data.
- The National Children’s Study needs to collect data on fathers as well as mothers.
- Data support the “immigrant paradox” in some areas but not in others.
- Compared with natives, immigrant families are less likely to use health care, have health insurance, and seek and receive quality medical treatment.
- Addressing immigrant status is important. Surveys have developed different ways to collect information without asking about immigrant status directly.
- Data about place of birth need to be collected; outcomes differ by nationality.
- Cultural, SES, and environmental factors in the United States and places of origin need to be addressed.
- The National Children’s Study should collect the following data for both parents: place of birth, length of stay in the United States, educational attainment and where obtained, and SES in the United States and in the home country.
- The National Children’s Study should collect longitudinal physical and mental health measures for mothers, fathers, and children and should measure child development through direct assessments.

Participants also discussed the following issues:

- Research should examine the role of religion.
- Refugees have access to services through settlement programs.
- The Study will include U.S.-born children and should collect migration data from parents.
- The context of the family is key for young children.
- The health of intergenerational or sibling caregivers should be considered. Children in the Study may have siblings who were born elsewhere.
- Data should be used to make policy decisions and target resources.
- The Study may need to oversample some small immigrant populations.
- It will be difficult to track multiple internal migrations over the 21 years of the Study. Differences in state medical coverage and stresses of internal migration may affect health outcomes.

- There are limitations to self-reported health information. The Study could learn what questions are most effective from other health surveys.
- Surveys should capture information about parent mental health. Foreign-born parents may not report mental health issues for themselves or their children. Asking broad questions and allowing parents to tell stories may be more effective than asking direct questions.
- Some foreign-born respondents may not understand the five-point rating scale.
- Family structure may need to be measured in more complex ways for children of immigrants. It is important to have a family roster. Children may spend time in their countries of origin.
- Immigrants may return to their countries of origin to receive medical care.
- Some questions may be beyond the scope of the Study. Supplemental studies could examine immigrant issues in more detail.
- It is important to measure the family socioeconomic environment.

THE HEALTH OF IMMIGRANT CHILDREN IS CRITICAL, BUT SO ARE THEIR PARENTS!

- Immigration levels near all-time high
- Large percentage of births to mothers born outside United States
- At least one in five U.S. children in the U.S. has at least one foreign-born parent

1.

FOREIGN-BORN WOMEN IN THE U.S.

- More likely than natives to:
 - Live in poverty and poor housing
 - Have lower education
 - Be unemployed
 - Lack health insurance.
- Twice as likely as natives to be of childbearing age

2.

PANEL PRESENTATIONS

- Use different data sources and approaches
- All show collecting data on mothers and maternal health in NCS is important to understand
 - Foreign-born children
 - Children born in the U.S. to foreign-born mothers
- Lee and Elo: Also information on father

3.

“IMMIGRANT PARADOX”

Children born to immigrant mothers have higher health and developmental outcomes than children born to native mothers despite lower income and education of immigrant women.

- Elo: Effect most pronounced for foreign-born Black women with low levels of education
- Lee: Immigrant status of Asian mothers has a protective effect on risk behavior
- Lansdale: Low Mexican mother SES results in physically healthy children

4.

GENERAL FINDINGS

Compared to natives, immigrant families are less likely to:

- Make best use of available healthcare
- Have health insurance
- Have a regular place of healthcare
- Seek and receive quality medical treatment.

5.

BROAD MIGRATION-RELATED FACTORS THAT NEED TO BE ADDRESSED

1. Immigration Status: Different statuses have different access to healthcare and different stressors
 - Lawfully present permanently
 - Lawfully present temporarily
 - Refugee/asylumee
 - Unauthorized (can't ask directly!)
 - U.S. citizen

Elo differentiates; Lansdale makes some distinction

6.

BROAD MIGRATION-RELATED FACTORS THAT NEED TO BE ADDRESSED

2. Place of Birth: Continent, ethnicity, or race is not sufficient; major differences in characteristics and outcomes by nationality
 - Elo and Lee: Analyze for several maternal COBs in Africa and Asia showing significant differences
 - Lansdale: Focuses on Mexican origin mothers and their children

7.

BROAD MIGRATION-RELATED FACTORS THAT NEED TO BE ADDRESSED

3. Cultural, SES, and Environmental Factors in the U.S. and Place of Origin (Elo):
 - Immigrants have widely varying levels of education, employment status, working conditions, and integration.
 - Immigrants from developing countries: Low education, financial resources, and English
 - Correlates to poor birth outcomes
 - Less ability to navigate U.S. healthcare/education systems
 - Environmental factors—accidents, illnesses
 - Access to balanced nutrition/nutrients
 - Health literacy—cultural and language barriers

8.

SUGGESTIONS FOR THE NATIONAL CHILDREN'S STUDY

- Place of birth of BOTH parents
- Length of stay in the U.S.
- Information on educational attainment and where obtained
- Measures of SES—U.S. and home country
- Longitudinal physical and mental health measures—mother, father, and child
- Measures of child development through direct assessments

9.

Chapter 5: Remarks from the NICHD Deputy Director

Yvonne T. Maddox, Ph.D.

Deputy Director, NICHD, NIH, Bethesda, MD

Dr. Maddox thanked the participants and added that it was critical to discuss immigration within the context of children's health before the Main Study begins. She noted that research on the influences of immigration on health has been an important area for the NICHD because diverse families and communities affect children's health and well-being.

Dr. Maddox explained that the NICHD's Demographics and Behavioral Sciences (DBS) Branch supports research on immigration and child health, among other topics. The September 2007 DBS Branch Report, available on the NICHD website, includes a section on people, places, and population movement, and addresses population economics.

Population health and dynamics are becoming priority areas for the NICHD. As an example, Dr. Maddox noted that the NICHD Division of Special Populations held a workshop in early December 2011 on the health of children and families in rural communities. This topic was significant because it was recognized that not all immigrants settle in cities and that rural issues should also be considered in research projects.

Chapter 6: Measuring Migration and Immigration in Studies of Child Health

The undocumented population living in the United States has risen dramatically since the 1990s. About one-third of all Latino children in the United States are living with an undocumented parent. Research suggests that the lack of legal status within the United States is the single largest barrier to Hispanic SES mobility, better health, and integration. Undocumented immigration status leads to multiple issues that researchers should consider, including biased samples with a significant coverage error rate among, for example, children of Mexican-born mothers; difficulties measuring key health variables; and omitted variable bias in models and estimates. Strategies to address these methodological limitations are needed, particularly in measuring legal status. Data from several surveys suggest this may be possible, because immigrants appear to be willing to answer questions about their legal status. However, taking steps to ensure confidentiality is advised.

Children's home environments vary considerably based on the timing of parent migration and linguistic isolation. Research indicates there is variation in home environments across children whose mothers arrived in the United States during childhood, during adulthood, or were U.S.-born. Key differences included: the number of activities that parents participated in with their children (greater for U.S.-born mothers and mothers who arrived in early childhood compared to mothers who arrived later); interaction with U.S. institutions (less for children whose mothers arrived in late adolescence or early adulthood); and exclusive parental care (more likely for children whose mothers arrived in late adolescence or early adulthood). Children's cognitive development scores also vary based on the mother's age of arrival in the United States and linguistic isolation.

Research on health insurance coverage among undocumented immigrants also suggests a low rate of insurance among noncitizen children. It was noted that the Affordable Care Act would not extend coverage to undocumented immigrants. As such, U.S.-born children of undocumented immigrants may be excluded indirectly from coverage.

A study was described that targeted U.S. Hispanics and had a high retention rate (greater than 85 percent). The study used several strategies to recruit and retain participants, including having a large number of study staff, considering staff members' ages and knowledge of target cultures/communities, developing staff members' recruitment skills, conducting weekly recruitment team calls for problem solving, developing strong community partnerships, and gaining a large amount of publicity.

Illegality and the Vulnerability of Latino Children in the United States

Douglas Massey, Ph.D.

Henry G. Bryant Professor of Sociology and Public Affairs, Princeton University, Princeton, NJ

Today, the United States is experiencing much higher levels of immigration than were present in 1970. The Latino population has increased from 4.7 percent in 1970 to 16.3 percent in 2010, and most of the increase is due to immigration. About 400,000 legal immigrants arrive from Latin America each year. The undocumented population grew dramatically from the mid-1990s through 2008.

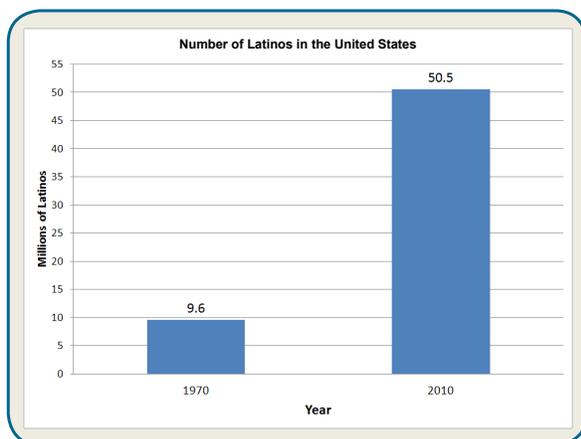
Since 1970, the percentage of Latinos in the United States who were foreign born has increased, and immigration from Central America and South America has expanded. The percentages of foreign-born and undocumented immigrants vary for different ethnic groups. Today and in the future, a large share of births will be to parents who are undocumented present in the United States. About one-third of all Latino children in the United States are living with an undocumented parent.

Deportations have risen to record levels and are a constant threat to undocumented individuals and their families. A 2008 poll found that, among U.S. Hispanics, more than 50 percent worried about deportation, and 64 percent felt that the immigration debate made life difficult for Hispanics. Research indicated that the illegality created by U.S. policies is the single largest barrier to Hispanic SES mobility, health, and integration. With large factions of Latinos living outside the protections of the law, the Hispanic population remains vulnerable.

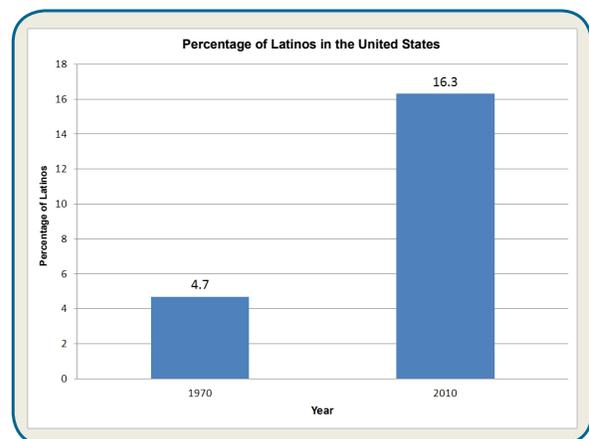
Researchers should consider the following:

- Unless the burden of illegality is lifted from the shoulders of Latinos in the United States, progress with respect to health, integration, and mobility will be significantly slowed.
- As long as large factions of Latinos are unauthorized, it will be very difficult to measure what is perhaps the single most important determinant of child health.
- Difficulty measuring legal status will lead to pervasive omitted variable bias in models and estimates. This bias will shift across groups and over time.

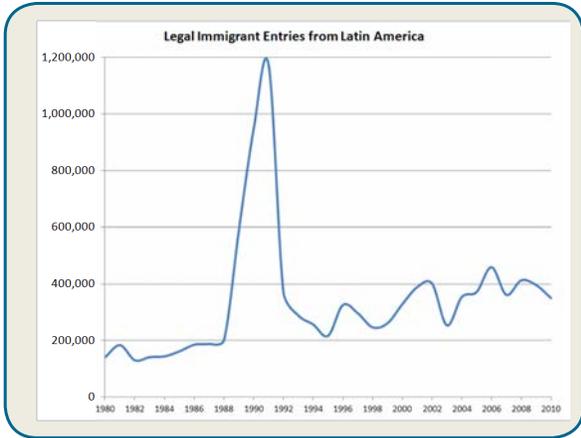
The National Children's Study should make a strong effort to develop a measure of legal status. For example, the Study could ask about legal status later in the course of the Study. The NIS found that respondents were willing to reveal their legal status.



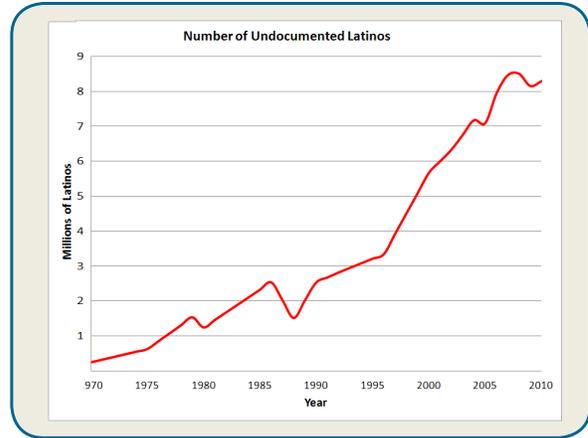
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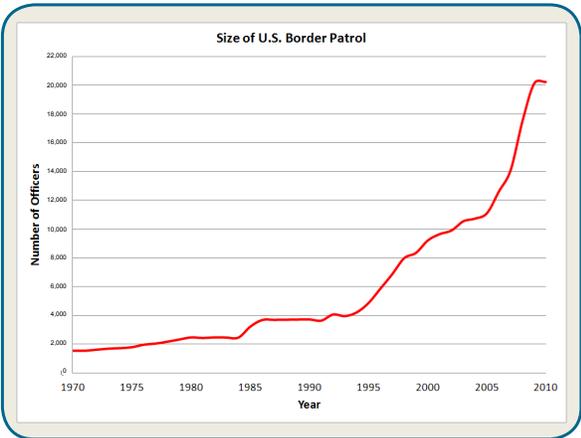
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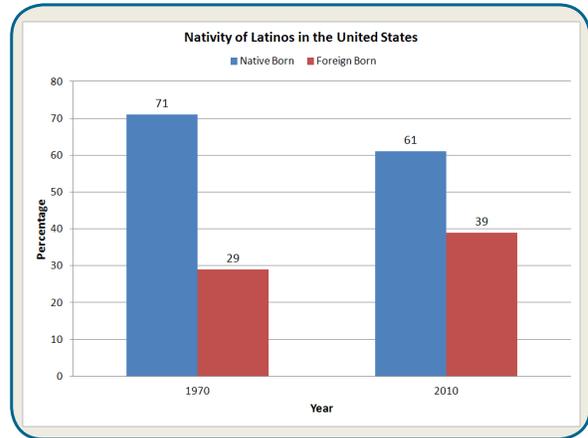
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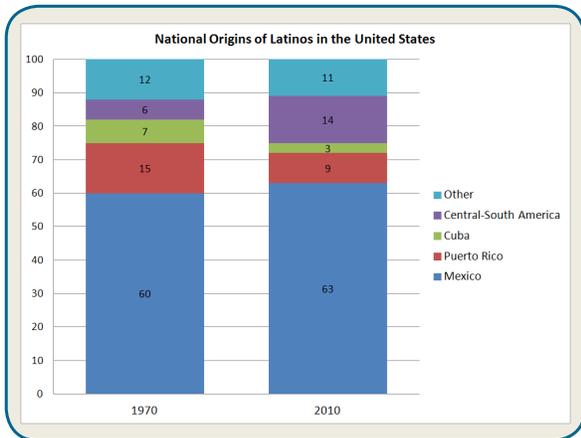
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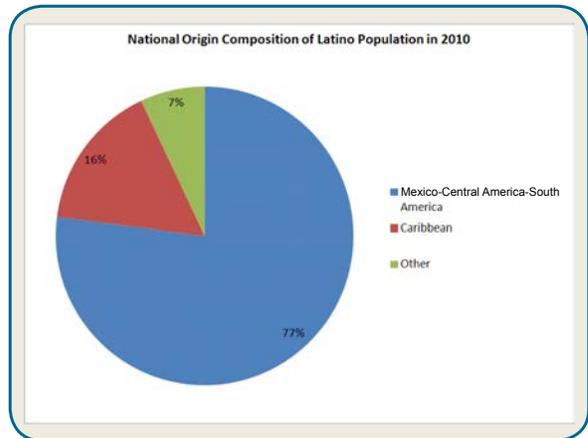
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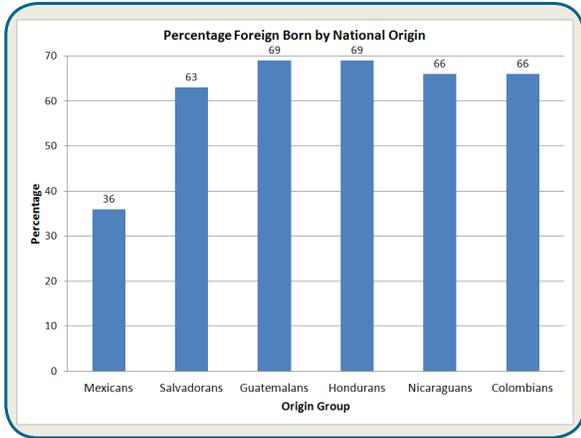
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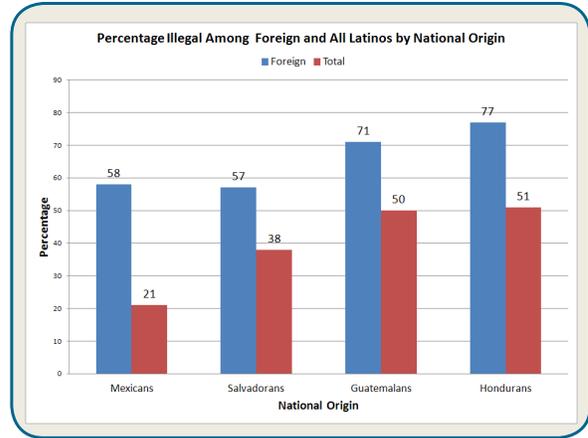
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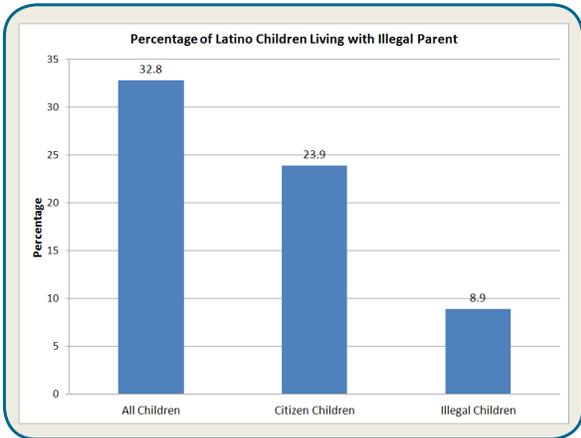
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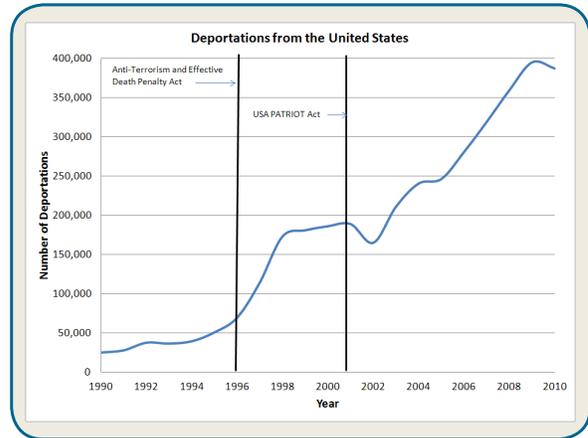
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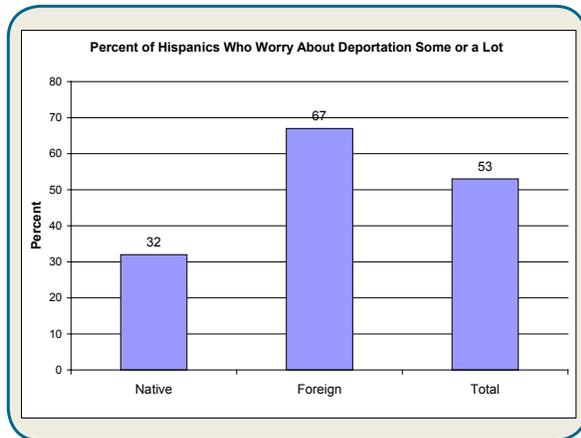
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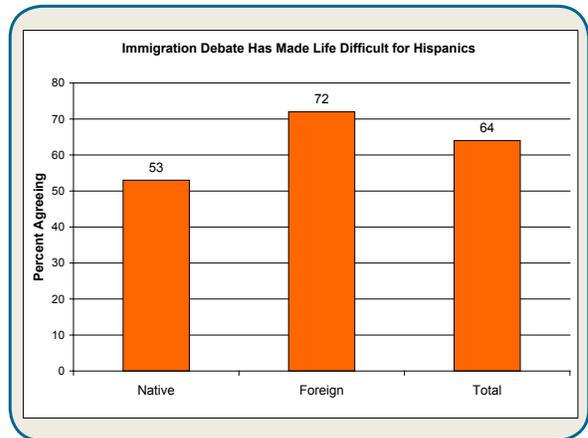
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12.



13.



14.

CONCLUSIONS

- The illegality among Latinos that has been manufactured by U.S. policies over the past three decades constitutes the single largest barrier to Hispanic socioeconomic mobility, health, and integration in the United States.
- With huge fractions of Latinos lying outside the protections of the law and even larger shares related to people who lack legal protections, the Hispanic population has never been more vulnerable and its position in America more precarious.

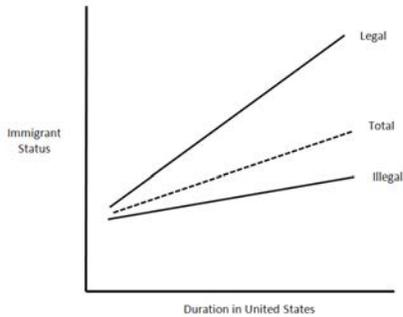
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BOTTOM LINE FOR RESEARCHERS

- Unless the burden of illegality is lifted from the shoulders of Latinos in the United States, progress with respect to health, integration, and mobility will be significantly retarded.
- As long as large fractions of Latinos are unauthorized, it will be very difficult to measure what is perhaps the single most important determinant of child health.
- Pervasive omitted variable bias in models and estimates

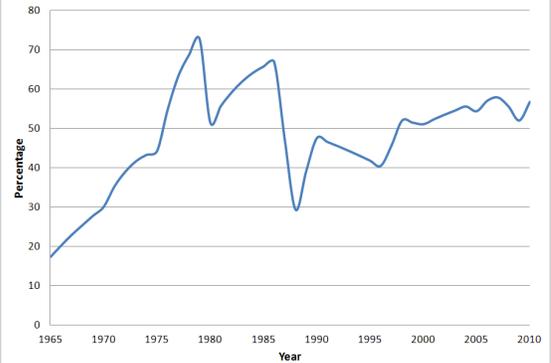
16.

Basic Assimilation Model



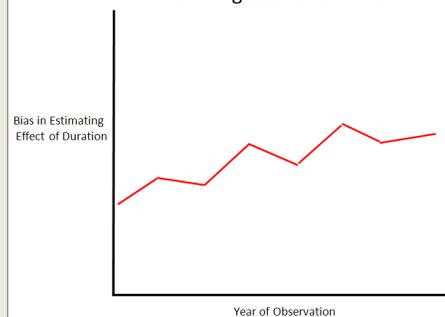
17.

Percentage Foreign Born Mexicans Who Are Undocumented



18.

Shifting Bias Over Time



19.

Who Is Captured in Our Surveys? Coverage Error Among Children of Immigrants

Jennifer Van Hook, Ph.D.

Professor of Sociology and Demography, Population Research Institute, Pennsylvania State University, University Park, PA

Based on comparisons with birth data, the coverage error rate for children of Mexican-born mothers in the American Community Survey (ACS) was 25 percent for children ages 0 to 4 and 15 percent to 20 percent for children ages 5 to 9. Possible reasons for the coverage error include high rates of residential mobility, complex and dynamic living arrangements, the perception that the ACS is for Americans only, and fear of detection. Community partnerships may help improve coverage. The National Children's Study could consider obtaining supplementary samples of births to assess whether its sample is representative.

Removing immigration items is unlikely to improve response. Data from other surveys suggest that questions about immigration status are answered at very high rates:

- The Los Angeles Family and Neighborhood Survey asks indirect questions about legal status.
- The Survey of Income and Program Participation allows people who are unauthorized to choose "other" as their status.
- On the California Health Interview Survey, only 2 percent of foreign-born respondents refused to answer a question about legal status, and 34 percent indicated that they did not have a green card.

The following elements can help maintain confidentiality:

- A certificate of confidentiality to protect data from a subpoena
- Indirect questions about legal status
- Self-administered questionnaires that respondents answer in a private location
- The two-card method, which can be used to statistically determine the number and characteristics of the undocumented

COVERAGE ERROR

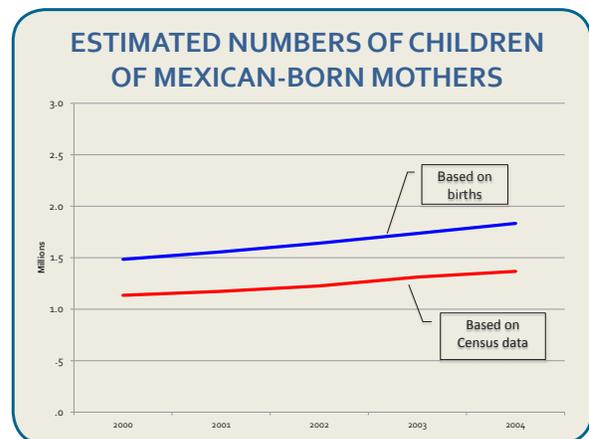
Population estimates based on birth data

- Children age 0-4 of Mexican-born mothers =
Births to Mexican-born mothers (past 5 years)
– Deaths
– U.S.-born children age 0-4 living in Mexico

Population estimates based on Census data

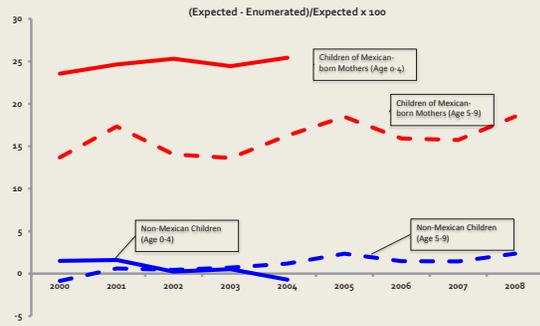
- American Community Survey (ongoing mail-back HH survey designed to produce population estimates and characteristics for all levels of geography)

1.



2.

PERCENTAGE OF U.S.-BORN CHILDREN MISSING FROM THE AMERICAN COMMUNITY SURVEY



3.

POSSIBLE REASONS FOR COVERAGE ERROR

- High rates of residential mobility
- Complex and highly dynamic living arrangements
- Perception that the surveys are "For Americans only"
- Fear of detection

4.

POSSIBLE WAYS TO IMPROVE COVERAGE

- Community partnerships

5.

COMMUNITY PARTNERSHIPS

Their challenges:

- Survey of newly established community of Mexican labor migrants in Durham
- Many were unauthorized
- Sensitive topic (gender, sexual behaviors, HIV risk)

Their solution:

- Community partnerships in the entire research process
- Targeted sampling
- Low refusal rate:
 - Men: 10.7%
 - Women: 7.6%

Parrado, E., A., McQuiston, C., and Flippen, C. (2005). "Participatory Survey Research: Integrating Community Collaboration and Quantitative Methods for the Study of Gender and HIV Risks among Hispanic Migrants." *Sociological Methods and Research* 34(2), 204-239.

6.

POSSIBLE WAYS TO IMPROVE COVERAGE

- Community partnerships
- Supplementary samples of births (particularly in areas with a lot of immigrants)
- But removing immigration items is unlikely to help

7.

AMERICAN COMMUNITY SURVEY IMMIGRATION ITEMS

Place of birth: "Where was this person born?"

Year of immigration: "When did this person come to live in the United States?"

Citizenship: "Is this person a CITIZEN of the United States?"

English Proficiency: "How well does this person speak English?"

8.

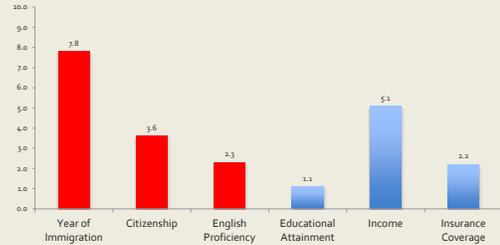
MISSING VALUES

Allocation Rates in American Community Survey for Selected Variables, 2010

	All Mothers	FB Mothers	Mexican-born Mothers
Place of Birth	4.5	2.9	2.8
Educational Attainment	0.6	0.9	1.1
Income	4.7	5.4	5.1

9.

MISSING VALUES, MEXICAN-BORN MOTHERS, 2010 AMERICAN COMMUNITY SURVEY



10.

LA-FANS IMMIGRATION ITEMS

Place of birth: "Where were you born?"

Year of immigration: "In what year did you first come to the United States to live or work? Please do not include short trips for shopping, vacation or family visits."

Citizenship: "Are you a citizen of the United States?"

Green Card: [asked of foreign-born respondents] "Do you currently have a permanent residence card or green card?"

Asylum: [asked of noncitizens without a green card] "Have you been granted asylum, refugee status, or temporary protected immigrant status, TP status?"

Temporary Visa - [asked of noncitizens without a green card or asylum/refugee/TP status] "Do you have a tourist visa, a student visa, a work visa or permit, or another document which permits you to stay in the U.S. for a limited time?"

11.

MISSING VALUES, MEXICAN-BORN MOTHERS, 2001 LA-FANS



12.

SURVEY OF INCOME AND PROGRAM PARTICIPATION

When you moved to the United States to live, what was your immigration status?

1. Immediate relative or family-sponsored permanent resident
2. Employment-based permanent resident
3. Other permanent resident
4. Granted refugee status or granted asylum
5. Nonimmigrant (e.g., diplomatic, student, business, or tourist visa)
6. Other

% Missing (among foreign born): 4.7
% "Other" immigration status: 37.0

13.

CALIFORNIA HEALTH INTERVIEW SURVEY

Are you a permanent resident with a green card?

1. Yes
2. No
3. Application Pending
4. Refused
5. Don't Know

% Refused (among foreign born): 2.1
% With no green card: 33.9

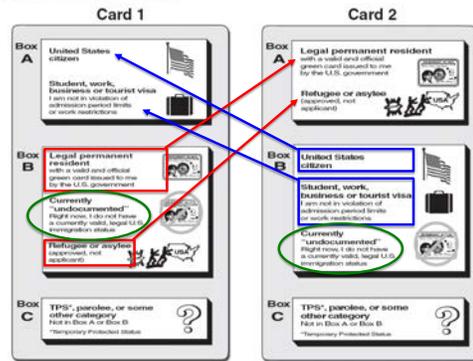
14.

MAINTAINING CONFIDENTIALITY

- Certificate of confidentiality to protect data from a subpoena
- Indirect questions about legal status
 - The “Other” category remains ambiguous
- Self-administered questionnaire in private location
- Two-card method (GAO report number GAO-06-775 “Estimating the Undocumented Population: A ‘Grouped Answers’ Approach to Surveying Foreign-born Respondents,” September 29, 2006.)

15.

Immigration Status Cards 1 and 2



16.

CONCLUSIONS

- Coverage error is a challenge.
- Census/ACS is not the gold standard.
- Community approaches to data collection may have promise.
- It would be counterproductive to drop immigration items from questionnaires.

17.

Parental Migration Context, Home Environment, and the Well-Being of Children of Immigrants

Jennifer Glick, Ph.D.

Professor of Sociology, School of Social Family Dynamics, Arizona State University, Tempe, AZ

The entire growth in the U.S. child population between 2000 and 2008 is attributable to the children of immigrants, and the immigration context affects the home environment and parenting. The family migration context includes:

- Generations in the household: 1, 1.5, 2, 2.5, 3, 4, and so on
- Parental age at arrival: early childhood, middle childhood, adolescence, or adulthood
- Linguistic environment: English only, some English, or linguistically isolated

Researchers analyzed data from the ECLS-B and the NIS about the home environment, which included resources and parenting practices. Mothers who arrived at ages 13 to 17 were most likely to have less than a high school education. Mothers who arrived at age 22 or older were most likely to have a college degree or more. Among mothers with less than a high school education, 53 percent were foreign born and linguistically isolated.

U.S.-born mothers and immigrant mothers who arrived in early childhood reported more activities with their children than did immigrant mothers who arrived later in life. Linguistically isolated foreign-born mothers reported the fewest activities with their children. Compared with parents who did not attend U.S. schools, parents who received some U.S. schooling had more children's books in the home.

Children of mothers who arrived in late adolescence or early adulthood were more likely to be in exclusive parental care and not interacting with U.S. institutions at age 42 months, and they were more likely to live in ZIP Codes with a higher percentage of linguistically isolated households. Children of mothers who arrived in adolescence or early adulthood had lower cognitive development scores at age 24 months.

Differences in human capital accounted for differences in cognitive scores between children of U.S.-born mothers and children of immigrant mothers who arrived in early childhood. For children of mothers who arrived in early adulthood, differences in activities with children in the home, maternal knowledge of infant development, and interviewer assessment of mother-child interactions partially mediated cognitive scores. A related study showed that parenting practices at 24 months partially mediated the relationship between mother's age at arrival and children's social development.

Foreign-born children in linguistically isolated households had lower cognitive development scores than native-born children, but the difference was smaller for linguistically isolated households that were located near other linguistically isolated households.

Mothers who arrived more recently reported lower health status for their children. Research suggests that if there is an immigrant health paradox for mothers, it deteriorates over time and is not associated with positive outcomes for children.

Children's home environments vary considerably based on timing of parent migration and linguistic isolation. The variations in home environments help mediate the relationship between mother's nativity and children's cognitive and socioemotional development. To assess the home environment, more data on fathers and siblings are needed. Communities may be a protective factor if linguistically appropriate resources are available.

HOME ENVIRONMENTS AND PARENTING IMPACT HEALTH AND HEALTH CARE

- Social environments are linked to children’s physical health and cognitive and socioemotional development.
 - Examples:
 - Resource availability influences school readiness.
 - Home environments impact management of chronic conditions such as asthma or diabetes.
 - Parenting influences socioemotional development.
 - It is important to attend to the migration-related factors that shape these environments for an increasing proportion of children in the United States.

1.

THE FAMILY MIGRATION CONTEXT AND THE CONTEXT OF SETTLEMENT INFLUENCE THE HOME ENVIRONMENT

- Generations in the household:
 - 1st, 1.5, 2nd, 2.5, 3rd, 4th, etc.
- Parental age at arrival:
 - Early childhood (prior to formal schooling)
 - Middle childhood (exposure to U.S. schools)
 - Adolescence (some exposure to U.S. school)
 - Adults (post-schooling; post-family formation)

2.

THE FAMILY MIGRATION CONTEXT AND THE CONTEXT OF SETTLEMENT INFLUENCE THE HOME ENVIRONMENT

- Linguistic Environment:
 - English only
 - Some English
 - No one over 14 speaks English well

3.

DATA SOURCES

- Early Childhood Longitudinal Study – Birth Cohort
 - Nationally representative sample of births in 2000
 - Includes many children born to foreign-born mothers
 - Detailed data on children’s early physical, cognitive and development
- New Immigrant Survey (NIS)
 - 2003 sample of immigrants granted legal permanent residency
 - Detailed data on origin, mode of entry to the United States
 - Includes information on children in the household

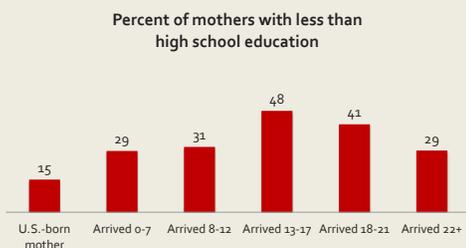
4.

HOME ENVIRONMENTS

- Resources:
 - Human capital (parental education, income, etc.)
 - Possessions (books, safe play space, etc.)
- Parenting practices:
 - Activities at home (reading, playing, etc.)
 - Styles of interaction.
 - Expressing positive or negative regard.

5.

MOTHER’S EDUCATION VARIES BY AGE AT ARRIVAL



Source: ECLS-B, waves 1 and 2; Mothers’ self-reports

6.

MOTHER'S EDUCATION VARIES BY AGE AT ARRIVAL

Percent of mothers with college degree or more

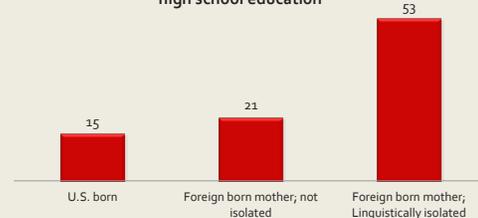


Source: ECLS-B, waves 1 and 2; Mothers' self-reports

7.

MOTHER'S EDUCATION BY LINGUISTIC ISOLATION AT HOME

Percent of mothers with less than high school education



Source: ECLS-B, waves 1 and 2

8.

PARENTING PRACTICES VARY BY PARENTS' AGE AT ARRIVAL TOO

Activities with child reported by mother

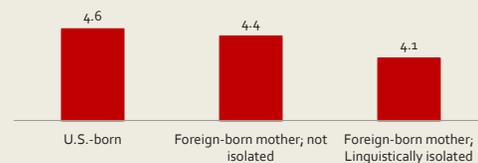


Source: ECLS-B, waves 1 and 2; Mothers' self-reports (0-5)
*Teen arrival associated with statistically significant scores relative to U.S.-born.

9.

PARENTING PRACTICES VARY BY LINGUISTIC ENVIRONMENT IN THE HOME

Activities with child reported by mother



Source: ECLS-B, waves 1 and 2; *Linguistic isolated statistically significant scores relative to U.S.-born.

10.

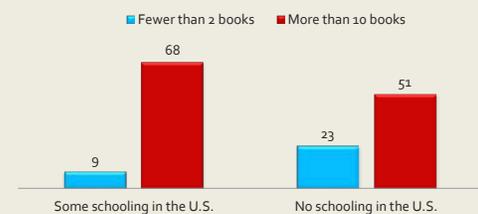
VARIATION MAY EXIST FOR CHILDREN OF ADULT MIGRANTS AS WELL

- Bimodal Educational Distribution
- And...
- Parents educated entirely outside the United States.
 - Parents with at least some education in the United States.

11.

PARENTING PRACTICES VARY BY PARENTS' LOCATION OF SCHOOLING

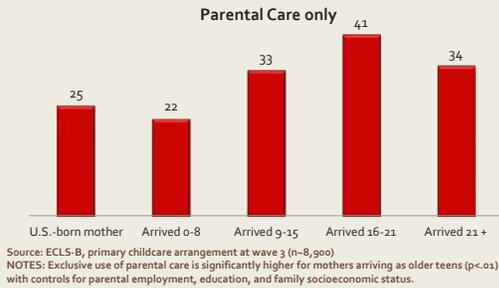
Percent reporting children's books in the home



Source: NIS - 2003 Cohort. (n=795 respondents).
Sample restricted to reports for children age 6 and under. NOTE: Statistically significant differences persistent with controls for years of education and age of adult migrant respondent.

12.

INTERACTIONS WITH AND USE OF U.S. SOCIAL INSTITUTIONS VARIES WITH AGE AT ARRIVAL: SOURCE OF CHILD CARE AT AGE 42 MONTHS BY MOTHER'S AGE AT ARRIVAL IN UNITED STATES



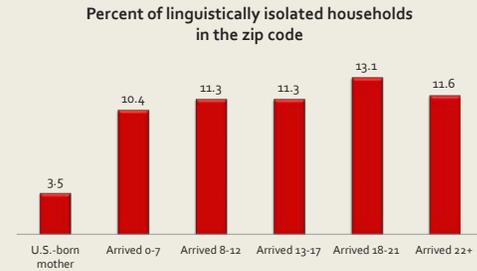
13.

PARENTING BEHAVIORS VARY BY LANGUAGE USE

- Community characteristics can be risk factors or may be protective for health and development.

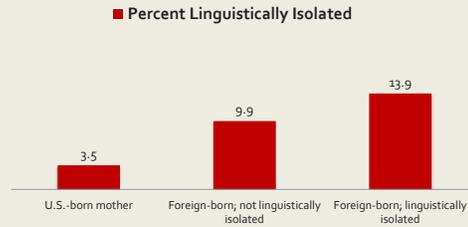
14.

CHILDREN'S ENVIRONMENTS VARY WITH MOTHER'S AGE AT ARRIVAL



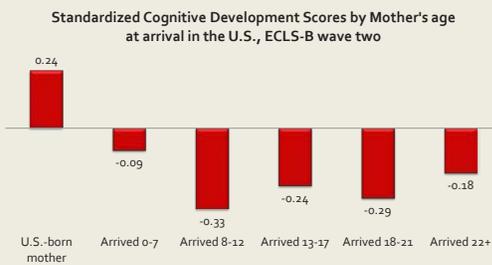
15.

CHILDREN'S ENVIRONMENTS VARY WITH HOUSEHOLD LINGUISTIC ISOLATION AS WELL



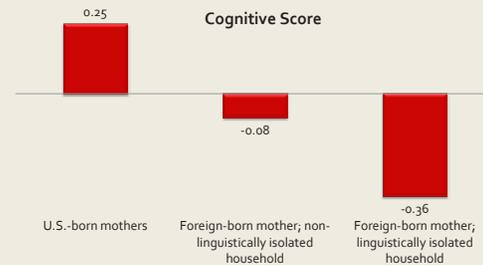
16.

CHILDREN'S OWN DEVELOPMENT VARIES BY MOTHER'S AGE AT ARRIVAL:



17.

LINGUISTIC ISOLATION IS ASSOCIATED WITH LOWER COGNITIVE SCORES AMONG CHILDREN AS WELL



18.

AN IMMIGRANT HEALTH PARADOX?

Child's Health Status (5 = excellent)
by Mother's age at arrival in the US, ECLS-B
wave 2



Source: ECLS-B, waves 1 and 2; Mothers arrival 18-21 significantly below U.S.-born mothers

19.

SUMMARY

- Children of immigrants are not a monolithic group:
 - There is considerable variation in children's home environments based on timing of migration and linguistic isolation.
 - Variations in home environments help mediate the relationship between mother's nativity and children's cognitive and socioemotional development.
 - Communities may be protective if resources are accessible (i.e., linguistically appropriate).

20.

Measuring Immigration Status Among Children in Immigrant Families To Assess Their Health Insurance Status and Public Program Eligibility

Shana Alex Lavarreda, Ph.D., M.P.P.

Research Scientist and Director, Health Insurance Studies, University of California, Los Angeles, Center for Health Policy Research, Los Angeles, CA

Dr. Lavarreda described the California Health Interview Survey (CHIS), which captures data about ethnic groups and subgroups and public health issues such as health insurance coverage, use of and access to health care services, and health status and chronic conditions. The survey collects data on core content every year and collects additional data every few years on specific topics such as discrimination and partner abuse.

The Health Insurance Series in CHIS is administered to the adult respondent for the child chosen for the survey. The CHIS does not include a complete family; it includes the adult, the spouse, and the child. The survey asks about the type of coverage, whether the child is uninsured, and timeframes for insurance coverage. It does not ask about the category of eligibility for Medicaid. CHIS data show that the number of uninsured people in California rose from 6.4 million in 2007 to 7.1 million in 2009 and that counties with large immigrant populations had high percentages of uninsured people.

The Immigration Series in CHIS samples nine Latino ethnic groups. The type of Spanish used in the translation was carefully considered to ensure appropriateness for these ethnic groups. The survey also was translated into Mandarin, Cantonese, Vietnamese, and Korean.

The CHIS asks about legal status and provides assurances that answers are confidential. The question occurs late in the survey, after the respondent has spent time talking with the interviewer; and the response rate for the question has been high. Interviewers make it clear that the CHIS is not affiliated with the federal government. The CHIS asks for an estimate of the number of years living in the United States, not an exact number. It does not collect detailed data on legal visa statuses. CHIS data show that 76 percent of citizen children with undocumented parents are enrolled in Medi-Cal or Healthy Families, and 48 percent of noncitizen children are uninsured.

When the Affordable Care Act (ACA) is implemented, two-thirds of California's 7.1 million uninsured individuals may obtain coverage. However, undocumented immigrants will not be eligible for coverage under the ACA. Based on 2007 data, about 180,000 noncitizen children in California will be directly excluded from enrollment in the ACA health insurance exchange and Medi-Cal expansion. An additional 40,000 citizen children of undocumented parents may be indirectly excluded. It is not known whether there will be a mechanism for undocumented parents to purchase health insurance for eligible children through the exchange.

Rigorous, large-scale surveys that capture immigration and health insurance data are needed to measure the number of children affected by restrictions in the ACA. A coalition of 200 organizations recommended the CHIS as a model for collecting immigrant data to evaluate the ACA. The CHIS provides data estimates to the California state legislature, Exchange Board, and departments of health care services and public health for ongoing implementation of public health insurance programs. Estimates of the immigrant population that will still be uninsured after full ACA implementation would directly assist safety net providers.

WHAT I WILL COVER

- The California Health Interview Survey (CHIS)
 - Items on family-level health insurance and immigration status
- The Patient Protection and Affordable Care Act of 2010 (ACA) restricts its health insurance expansions by citizenship status.
- How can we measure the number of children who will be affected by these restrictions?

1.

WHAT IS THE CALIFORNIA HEALTH INTERVIEW SURVEY?

- CHIS sample is ~ 48,000 households over 2 years (~24,000 annually)
- CHIS sample designed to yield reliable estimates:
 - At the local level for counties and statewide
 - For California's major ethnic groups and several ethnic subgroups
 - Estimates for small geographic areas and for small population groups require pooling sample across survey years

2.

WHAT IS THE CALIFORNIA HEALTH INTERVIEW SURVEY?

- CHIS is an omnibus public health survey - covers a wide range of important public health issues
 - Health insurance coverage and eligibility for public coverage programs, including Affordable Care Act, Medicaid, CHIP
 - Use of health services and access to health care, including clinical preventive health services
 - Health status and chronic conditions (overweight and obesity, diabetes, asthma, hypertension, heart disease, arthritis, stroke, disability, mental health)

3.

HEALTH INSURANCE SERIES IN CHIS

- Questions administered to adult respondent for child and teen samples.
- Separate questions on Medicare, Medicaid, CHIP, job-based and individually purchased coverage.
 - If none of the above, administered questions on military and other government coverage.
 - Includes verification question for being uninsured. "Uninsured" is a residual number.

4.

HEALTH INSURANCE SERIES IN CHIS

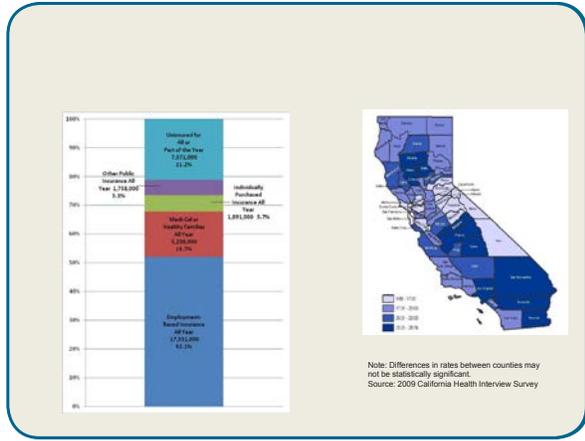
- Timeframes for insurance coverage
 - Current point-in-time
 - Past 12 months prior to survey
 - Length of being uninsured longer than past 12 months

5.

HEALTH INSURANCE SERIES IN CHIS

- Data collected on adult respondent, spouse of adult respondent, and affiliated child and teen in the household selected for the survey, if present
- Does not ask detailed information about categorical eligibility under Medicaid, but asks some questions that allow inference

6.



7.

IMMIGRATION SERIES IN CHIS

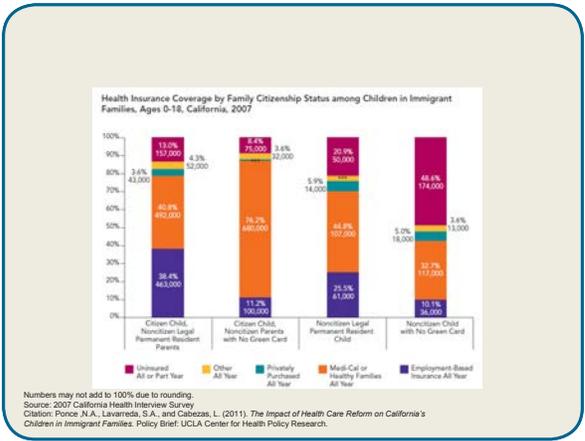
- Samples of race/ethnic groups for statistically adequate estimates
 - Latinos, including multiple Latino ethnic groups
 - Asian Americans, including multiple Asian ethnic subgroups
 - African Americans
 - American Indians
- CHIS administered in six languages
 - English, Spanish, Mandarin, Cantonese, Vietnamese, Korean

8.

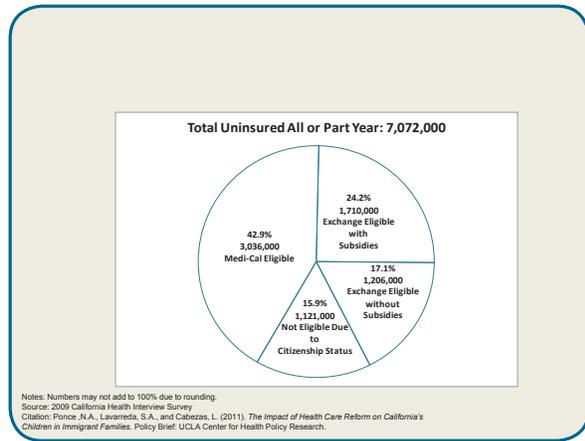
IMMIGRATION SERIES IN CHIS

- Citizenship status questions
 - In what country were you born?
 - [If not U.S.-born] Are you a citizen of the United States?
 - [If not a citizen] Are you a permanent resident with a green card? Your answers are confidential and will not be reported to Immigration Services.
 - About how many years have you lived in the United States?
- Does not contain detailed data on refugee or other legal visa statuses

9.



10.



11.

BOTH DIRECT AND INDIRECT EXCLUSIONS MATTER FOR CHILDREN IN IMMIGRANT FAMILIES

Impact of ACA Citizenship and Residency Restrictions among Children in Immigrant Families Who Were Uninsured During the Past 12 Months, Ages 0-18, California, 2007

Impact of ACA Citizenship and Residency Restrictions	Legal Permanent Resident*	Noncitizen, No Green Card	Total
Direct Effect Child's Citizenship Status	-	-	-
Restricted from Medi-Cal Enrollment	10,000	140,000	150,000
Restricted from Exchange Enrollment	-	30,000	30,000
Total Excluded	10,000	170,000	180,000
Indirect Effect: Parent's Citizenship Status**	-	-	-
Potential Restriction from Medi-Cal Enrollment	-	10,000	10,000
Potential Restriction from Exchange Enrollment	-	30,000	30,000
Total Potential Excluded	-	40,000	40,000
Total Directly and Indirectly Impacted	10,000	210,000	220,000

*Noncitizens with a green card, living in the U.S. fewer than five years
**We assumed that approximately 24% of citizen children with noncitizen parents would not enroll in the Medi-Cal expansion based on the current estimate of percent eligible but not enrolled in public programs for this group. Since the Exchange will be a new program and its eligibility rules would more likely be misinterpreted than the Medi-Cal expansion, we made the upper-bound assumption that 100% of citizen children with noncitizen parents would not enroll in the Exchange.
Note: All estimates are rounded off to nearest tens of thousands.
Source: 2007 California Health Interview Survey
Citation: Ponce, N.A., Lavarreda, S.A., and Cabezas, L. (2011). The Impact of Health Care Reform on California's Children in Immigrant Families. Policy Brief: UCLA Center for Health Policy Research.

12.

TAKE-AWAY POINTS

- Measuring the number of children who will be affected by these restrictions requires:
 - Rigorous, large-scale population-based surveys
 - Adequately capturing the immigration and health insurance statuses of both children and their parents
 - Examining eligibility from a family-level perspective.

13.

TAKE-AWAY POINTS

- Use of CHIS is widespread.
 - Immigration data have been benchmarked against Pew Hispanic Center data.
 - 200 organization coalition (spearheaded by NCLR) recommended CHIS as the model for collection of immigration data to the U.S. DHHS Data Council.
 - CHIS provides data estimates to the California state legislature, Exchange Board, and Departments of Health Care Services and Public Health for ongoing implementation of public health insurance programs.
- Estimates of immigrant populations who will still be uninsured after full ACA implementation directly assists safety net providers.

14.

Discussion

Rebecca Clark, Ph.D.

Chief, DBS Branch, Center for Population Research, NICHD, NIH, Bethesda, MD

Dr. Clark noted that the NICHD DBS Branch funds most research at the NIH on immigration and health. National Children's Study background documents from 2003 through the present show that a question about legal status was consistently recommended, but the Study declined to include the question in 2008. This issue was discussed at subsequent meetings of the National Children's Study Federal Advisory Committee. Other recommendations involved including questions about language, place of birth, assimilation, migration history, time in the United States, culture, and generation.

The presenters in the session all recommended including questions about immigrant/legal status. Several presenters also recommended adding questions about language, place of birth, migration history, length of time in the United States, and generation.

National Children's Study planning documents reflect strong support for including children of immigrant families. Immigrants may need to be targeted for oversampling, and specific recruitment strategies may be needed. The Study should consider the following suggestions (Please note that suggestions for the Study are the opinions of the speakers, not the Study leaders.):

- Strategies to ensure an adequate sample of children from immigrant families
- Strategies available to the Study that are not available to the American Community Survey (ACS)
- How excluding legal status will affect the conclusions of the Study
- Whether questions about legal status affect refusal, loss to followup, or nonresponse rates
- Advantages to deviating from ACS questions on race, ethnicity, length of time in the United States, citizenship, and place of birth

NICHD DEMOGRAPHIC & BEHAVIORAL SCIENCES BRANCH FUNDING

Speaker	Project
Jasso	The New Immigrant Survey
Rendall	U.S.-Born Children in the U.S.-Mexico Migration System Markov-Chain Simulation of Childhood Obesity
Padilla	Mexican-American Child Health: Birth to Early Childhood
Elo	Black-White Differences in Avoidable Mortality, 1980-2005
Landale	Puerto Rican Maternal and Infant Health Project Mexican Children of Immigrants Program
Massey	Mexican & Latin American Migration Projects The New Immigrant Survey
Van Hook	Stability of Mexican-Origin Extended Family Households Immigrant Health and Mortality Research Mexican Children of Immigrants Program

1.

NICHD DEMOGRAPHIC & BEHAVIORAL SCIENCES BRANCH FUNDING

Speaker	Project
Glick	Immigration and Early Life Course Transitions Early School Transitions of Immigrants' Children Family Migration Context, Development and Early School Outcomes
Hirschman	Concepts and Measures of Race and Ethnic Identities

Thanks to Regina Bures for her work on the agenda and in identifying the speakers.

2.

IMMIGRANT VARIABLES FROM NATIONAL CHILDREN'S STUDY DOCUMENTS

Year/Group	'03 AC	'03 SE	'03 SE	'04 SE	'04 WP	'08 NAS	'08 NCS	'10 AC	'11 NCS	'11 AC
Immigrant/legal status	-	x	x	x	x	x	NO	x	D	x
Language	-	x	x	-	-	x	x	-	-	-
POB	-	x	x	-	x	-	x	-	-	-
Assimilation	x	-	-	-	x	-	-	-	-	-
Mig history	-	x	x	-	-	-	-	-	-	-
Time in U.S.	-	-	-	-	x	-	x	-	-	-
Culture	-	-	-	x	-	-	-	-	-	-
Generation	-	-	-	-	-	x	x	-	-	-

3.

IMMIGRANT VARIABLES FROM ABSTRACTS

-	Jasso	Elo	Massey	Van Hook	Glick	Landale	Lavarreda	Rendall
Immigrant/ Legal status	X	X	X	X	X	X	X	X
Language	-	X	X	X	X	X	-	X
POB	X	X	X	X	-	X	-	X
Assimilation	-	-	-	-	-	-	-	-
Mig. history	-	X	X	-	X	-	-	-
Time in U.S.	X	X	X	X	X	X	-	X
Culture	-	-	-	-	X	-	-	-
Generation	-	X	X	X	X	X	-	X

4.

RECRUITMENT AND INCLUSION ISSUES RAISED IN NATIONAL CHILDREN'S STUDY DOCUMENTS

- Immigrants targeted for oversampling
- Need specific recruitment strategies to include immigrants within probability sample
 - Fearful from past government raids
 - May be more geographically mobile
- Immigrants, including undocumented, definitely included in defined population

5.

ENSURING ADEQUATE SAMPLES OF CHILDREN FROM IMMIGRANT FAMILIES

- What strategies recommended to National Children's Study?
 - Special concerns about Mexican origin, undocumented alien parents
- What strategies available to National Children's Study that are not available to American Community Survey?

6.

IMMIGRANT STATUS

- How will excluding measures of immigrant status affect results of analysis, conclusions for National Children's Study?
- How does inclusion of immigrant status questions in surveys affect?:
 - Refusals
 - Lost to followup
 - Item nonresponse

7.

STANDARDIZATION OF IMMIGRANT QUESTIONS

- Any advantages to deviating from Census Bureau/American Community Survey questions on race, ethnicity, length of time in the U.S., citizenship, and place of birth?

8.

Additional Discussion

Charles Hirschman, Ph.D.

Professor of Sociology, University of Washington, Seattle, WA

Dr. Hirschman noted that the presenters' main points about measurement included:

- The importance of measuring the legality of U.S. residents
- The need to address coverage errors
- The importance of generation, parents' age at arrival, and linguistic environment
- How the ACA will affect immigrant children

He added that presenters suggested that the Study's questions on race and ethnicity should be comparable to ACS questions. The questions about immigrant parents and grandparents already used in the Vanguard Study will enable the Study to collect data on the third generation in the United States.

Measuring multiracial identities is increasingly important. In the 2010 Census, 6.2 percent of respondents selected "Some Other Race." Hispanic or Latino respondents make up much of this group. Questions about primary and secondary ethnic or racial identity can help to resolve issues with measuring multiple races and ethnicities.

If the Study collected data about siblings, it could capture data on children born outside the United States and could examine variations in health outcomes within families.

DOUGLAS MASSEY

- Parental Legal Status
 - Citizen, Legal Permanent Resident, Unauthorized
 - Key determinant of the health of immigrant children
- Percent Unauthorized of Foreign Born
 - 21% of Mexican origin
 - 38% of Salvadoran
 - 50% of Guatemalan
 - 52% of Honduran

1.

JENNIFER VAN HOOK

- Children of Mexican immigrants
 - Half have an unauthorized parent
 - Less likely to be surveys and other data sources
- 20-25% of births to Mexican-born mothers are missing in ACS
- Follow up of birth registration data

2.

JENNIFER GLICK

- 25% of all children (< age 8) are 1st or 2nd generation
- Variation in health and home environment by:
 - Immigrant status
 - National origin/race/ethnicity
- Home environment varies by:
 - Age at arrival of mother
 - Linguistic environment

3.

SHANA ALEX LAVARREDA

- How will Affordable Care Act (ACA) affect immigrant children?
 - May exclude many immigrant children
 - Fear may lead many to not enroll
- ACA Medicaid expansion
 - Exclude legal immigrants with <5 years residence
- Implications of California HIS

4.

MEASURING MIGRATION AND IMMIGRATION IN STUDIES OF CHILD HEALTH

1. What measures at the school, neighborhood, and community levels are important to include in a study of child health? Which of these factors may be most relevant to understanding differences in child health by race/ethnicity/immigration status?
2. What are the gaps in existing data sources in studying health disparities and immigration in children? What characteristics of family background, family structure, and sibship are most likely to affect child health?
3. What health care measures would be appropriate to consider for understanding variation in immigrant health care access and quality of care for children?

5.

MEASURING MIGRATION AND IMMIGRATION IN STUDIES OF CHILD HEALTH

4. In what ways is generational status or age at immigration associated with health outcomes in children? What are the important issues to consider when measuring immigration status in a study of child health?
5. How likely is it that children of immigrants are accurately represented in household surveys? What factors influence coverage error among these children? Would alternative sampling frames or methodological approaches help reduce coverage error?

6.

LEGACY (VANGUARD) PILOT PHASE

Preconception: Mother
Pregnancy: Mother and Father

Race and Ethnic Identities

1. Do you (...) consider yourself (...) to be Latino/a?
2. What race do you (...) consider yourself (...) to be?
 - You may select one or more.

7.

LEGACY (VANGUARD) PILOT PHASE

Preconception: Mother
Pregnancy: Mother and Father

Immigrant Generation

1. In what country were you born?
2. About how long have you lived here?
3. Was your mother born in the U.S.?
 - In what country was your mother born?
4. Was your father born in the U.S.?
 - In what country was your father born?

8.

ALTERNATE RECRUITMENT PILOT PHASE FATHERS ONLY

1. Was father born in the U.S.?
2. How long has father lived in the U.S.?
3. Was father's mother born in the U.S.?
4. Was father's father born in the U.S.?
5. What is the person's ethnicity?
6. What is the person's primary language?

Note: In contrast to the items found in the Alternate Recruitment Pilot Phase, the Legacy instruments do include country of origin and how long in the U.S. for both mothers and fathers, as well as the birthplace of their parents.

9.

5. Is this person of Hispanic, Latino, or Spanish origin?

- No, not of Hispanic, Latino, or Spanish origin
 Yes, Mexican, Mexican Am., Chicano
 Yes, Puerto Rican
 Yes, Cuban
 Yes, another Hispanic, Latino, or Spanish origin — Print origin, for example, Argentinian, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard, and so on.

6. What is this person's race? Mark one or more boxes.

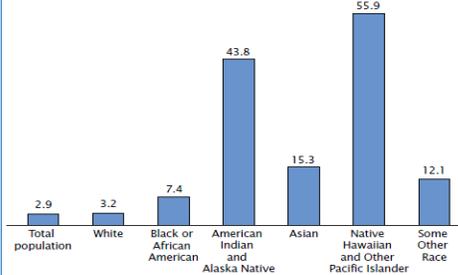
- White
 Black, African Am., or Negro
 American Indian or Alaska Native — Print name of enrolled or principal tribe.
- Asian Indian Japanese Native Hawaiian
 Chinese Korean Guamanian or Chamorro
 Filipino Vietnamese Samoan
 Other Asian — Print race, for example, Hmong, Laotian, Thai, Pakistani, Cambodian, and so on. Other Pacific Islander — Print race, for example, Fijian, Tongan, and so on.
- Some other race — Print race.

source: U.S. Census Bureau, 2010 Census questionnaire.

10.

Figure 2.
Percentage of Major Race Groups Reporting Multiple Races: 2010

(For more information on confidentiality protection, nonsampling error, and definitions, see www.census.gov/prod/cen2010/doc/p194-171.pdf)



Note: Specified race group refers to the alone or in-combination population.
 Source: U.S. Census Bureau, 2010 Census Redistricting Data (Public Law 94-171) Summary File, Table P1.

11.

Table 1.

Population by Hispanic or Latino Origin and by Race for the United States 2000 and 2010
 (For information on confidentiality protection, nonsampling error and definitions, see <http://www.census.gov/prod/cen2010/doc/p194-171.pdf>)

Hispanic or Latino origin and race	2000		2010		Change 2000 to 2010	
	Number	Percentage of total population	Number	Percentage of total population	Number	Percent
HISPANIC OR LATINO ORIGIN AND RACE						
Total population	281,421,906	100.0	306,745,538	100.0	27,323,632	9.7
Hispanic or Latino	35,305,818	12.5	50,477,594	16.3	15,171,776	43.0
Not Hispanic or Latino	246,116,088	87.5	258,267,944	83.7	12,151,856	4.9
White alone	194,552,774	69.1	196,817,552	63.7	2,264,778	1.2
Race						
Total population	281,421,906	100.0	306,745,538	100.0	27,323,632	9.7
One Race	274,595,876	97.6	299,736,465	97.1	25,140,587	9.2
White	211,460,626	75.1	223,553,265	72.4	12,092,639	5.7
Black or African American	34,658,190	12.3	38,929,319	12.6	4,271,129	12.3
American Indian and Alaska Native	2,475,356	0.9	2,332,248	0.9	455,252	18.4
Asian	10,242,998	3.6	14,674,252	4.8	4,431,254	43.3
Native Hawaiian and Other Pacific Islander	398,835	0.1	540,013	0.2	141,178	35.4
Some Other Race	15,359,073	5.5	19,107,368	6.2	3,748,295	24.4
Two or More Races ¹	6,826,228	2.4	9,009,073	2.9	2,182,845	32.0

¹ In Census 2000, an error in data processing resulted in an overstatement of the Two or More Races population by about 1 million people (about 15 percent) nationally, which almost entirely affected race combinations involving Some Other Race. Therefore, data users should assess observed changes in the Two or More Races population and race combinations involving Some Other Race between Census 2000 and the 2010 Census with caution. Changes in specific race combinations not involving Some Other Race, such as White and Black or African American or White and Asian, generally should be more comparable.

12.

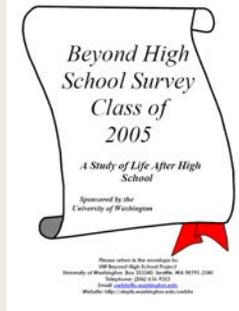
Table 2.

Population by Hispanic or Latino Origin and Race for the United States: 2010
 (For information on confidentiality protection, nonsampling error and definitions, see <http://www.census.gov/prod/cen2010/doc/p194-171.pdf>)

Hispanic or Latino origin and race	Number	Percent
HISPANIC OR LATINO		
Total	50,477,594	100.0
Race		
One Race	47,435,002	94.0
White	26,735,713	53.0
Black or African American	1,243,471	2.5
American Indian and Alaska Native	685,150	1.4
Asian	209,128	0.4
Native Hawaiian and Other Pacific Islander	58,437	0.1
Some Other Race	18,503,103	36.7
Two or More Races	3,042,592	6.0
NOT HISPANIC OR LATINO		
Total	258,267,944	100.0
Race		
One Race	252,301,483	97.7
White	196,817,552	76.2
Black or African American	37,685,848	14.6
American Indian and Alaska Native	2,247,098	0.9
Asian	14,465,124	5.6
Native Hawaiian and Other Pacific Islander	481,576	0.2
Some Other Race	604,265	0.2
Two or More Races	5,966,481	2.3

13.

THE UW BEYOND HIGH SCHOOL PROJECT



- 9,600 high school seniors: 2000-2005
- Pacific Northwest
- Additional questions on identities
- Observed race based on yearbook pictures

14.

UW-BHS SENIOR QUESTIONNAIRE

- Census Race
- Census Hispanic Origin
- Census Ancestry
- Primary Race/Ethnic Identity

161) Considering all the ethnic and racial categories, what is your primary ethnic and/or racial identity?

- Different from National Longitudinal Study of Adolescent Health/NIS
 - Hispanicity on par with Race
 - Asked of all UW-BHS respondents

15.

PROBLEMATIC RESPONSES TO CENSUS RACE QUESTION IN UW-BHS SENIOR SURVEY

- 4% Some Other Race "SOR" write-ins
- 13% Multiple Major (OMB) Races
- 6% skipped the question

16.

PRIMARY RACE/ETHNICITY YIELDS A "BETTER" VERSION OF SINGLE IDENTITY THAN RACE-SING

- 90% of SORs give a codeable response
 - Especially Hispanics and whites
- 96% of multiracial (multiple race) respondents report a primary identity
- 47% of "no-response" (skipped race and Hispanic origin) report a primary identity

17.

PRIMARY RACE/ETHNICITY ALSO ALLOWS FOR A CONTINUUM OF IDENTIFICATION

STRONG **WEAK**
 Monoracial—Multiracial Primary—Multiracial Secondary

IDENTITIES **PERSONS**
 Monoracial Monoracial
 Multiracial Primary Multiracial Primary
 Multiracial Secondary

18.

TYPE OF IDENTITY OF ALL RESPONSES AND OF ALL INDIVIDUALS

Race/ Ethnicity	ALL RESPONSES REPORTED				(n)	ALL INDIVIDUALS CLASSIFIED			
	Single	Primary	Secondary	Total		Mono-racial	Primary Multi	Total	(n)
TOTAL	71%	12%	17%	100%	9,761	84%	15%	100%	8,091
White	82%	7%	11%	100%	5,565	92%	8%	100%	4,954
Black	60%	27%	13%	100%	1,175	69%	31%	100%	1,025
AIAN	13%	15%	72%	100%	416	46%	54%	100%	115
Asian	71%	15%	15%	100%	1,591	83%	17%	100%	1,357
NHOPI	44%	24%	32%	100%	209	64%	36%	100%	142
Hispanic	45%	19%	36%	100%	689	70%	30%	100%	442
Others (SOR)	34%	14%	52%	100%	116	71%	29%	100%	56
					(n)	6,884	1,207		

19.

FAMILY BACKGROUND MEASURES

- Immigrant generation of Mother and Father
 - Length of residence (age at arrival)
 - Mother, Father
 - Countries of birth
 - Mother, mother's father, mother's mother
 - Father, father's father, father's mother
- Immigrant Status of Mother and Father
 - Citizen, legal permanent resident, unauthorized
- Immigrant Status of Siblings
- Census: Race, Hispanic, Ancestry
- Primary Race/Ethnicity

20.

Chapter 7: Measuring Social and Cultural Dimensions of Child Health

Measurement issues related to understanding risk and protective factors that affect the health and well-being of children of immigrants were presented during this session of the symposium. These issues underlined the importance of measuring complex cultural factors to understand their impact on child well-being. The key issues identified were the importance of fully conceptualizing cultural measures; incorporating meaningful, influential cultural variables into surveys; and measuring cultural norms in diverse neighborhoods.

Past studies showed that the circumstances surrounding migration placed children at risk for mental health problems. The symposium addressed research on how the “context of exit” from the country of origin, characteristics of the migrant family, and characteristics of the host country affect mental health. Factors that seem to protect against emotional and mental health problems in children of immigrants include greater familism, having political refugee status, higher education, higher socioeconomic status in the country of origin, being white, living with a family in the host culture, and living in an ethnic enclave. The following factors increased the risk of mental health problems in migrant families: social disadvantage, high visibility (e.g., differences in appearance or language), family conflict, arriving in the United States outside of a family context, lack of education, being born in the United States, poor schooling, discrimination, and violent neighborhoods.

The symposium presenters discussed previous clinical work with immigrant children to highlight issues related to child health. Problems with English fluency, SES, and exposure to U.S. culture can be insufficient in predicting health outcomes. The concepts presented at the symposium emphasized a number of issues, including:

- The need to study family separations
- The need to address bullying of refugee children
- The impact of immigrant parenting styles that are incompatible with the needs of U.S.-born children
- How culture affects the way parents react to observed negative childhood behaviors.

These concepts highlighted the benefit of collecting qualitative data on immigrant experiences in health.

Measuring Social and Cultural Dimensions of Child Health

Felipe Gonzalez Castro, Ph.D., M.S.W.

Professor and Director, Health Psychology Program, University of Texas at El Paso, El Paso, TX

Dr. Castro discussed the following six measurement issues in understanding risk and protective factors that affect the health and well-being of immigrant children:

- **Conceptualization preceding measurement.** Clear conceptualization must precede, not follow, measurement. Anthropologists study acculturation as a process of group change, but psychologists measure acculturation as an individual trait. The language factor in acculturation scores is a good statistical predictor but lacks explanatory power. Acculturation is a form of culture change and adaptation that should be viewed as a life trajectory, not as a scale score of linguistic proficiency. Segmented assimilation theory examines the effects of social and human capital as starting conditions that influence life opportunities and trajectories.
- **Deep-structure analysis.** A distinction needs to be made between surface structure—visible aspects of culture—and deep structure—psychological and historical factors. Scaled scores may have the same meaning across cultures (invariance) or may have different meanings if measured variables are not equivalent (non-invariance).
- **Examination of cultural variables.** Survey instruments should include selected cultural variables or factors to measure issues such as identity conflict, cultural value orientation, and discrimination. For children of immigrants, parents and elders are agents of culture. It is important to measure the quality of the parent-child relationship and peer influences.
- **Psychological measures of youth well-being.** Selected scales of cultural influences and their effect on health-related outcomes should be used. It is important to assess identity formation and how youths relate to their cultural background. Youths with a bilingual/bicultural identity have to assimilate two different cultures. Parental education can build children's resilience against discrimination, which is a significant stressor and promotes poor health outcomes.
- **Models of migration and health.** Models of mediation are needed to understand psychosocial processes of migration and adjustment. Ecodevelopmental models can be used across life milestones and trajectories. For example, Dr. Castro's research found that alcohol and tobacco use were predicted by lower ethnic pride, higher acculturation, and older age. Family function and family social ecology relationships affect health outcomes.
- **New measures of community culture.** New measures are needed to assess cultural norms within diverse neighborhoods such as immigrant enclaves and the implications of community culture for segmented assimilation trajectories in immigrant communities.

Future studies need greater rigor and should: (1) be guided by theory relevant to Latinos; (2) propose specific cultural hypotheses; (3) incorporate cultural variables; (4) examine mechanisms of effect in youth ethnic identity and parent-child relationships; (5) improve program cultural relevance to motivate and sustain participation; and (6) examine sociocultural ecological factors as contributors to enhance prevention interventions.

OVERVIEW

- Will present **six measurement issues** in understanding **risk** and protective factors in the health and **well-being** of immigrant youths
- A decidedly **psychological** and **culturally-focused** approach to understand **process** and for **planning** more **efficacious prevention interventions** among immigrant children, parents and families
- This research approach and its aims involves **prevention science** theory, principles and methods

1.

1. CONCEPTUALIZATION PRECEDE MEASUREMENT

Clear conceptualization (in some cases as guided by theory and models) must precede and not follow measurement

2.

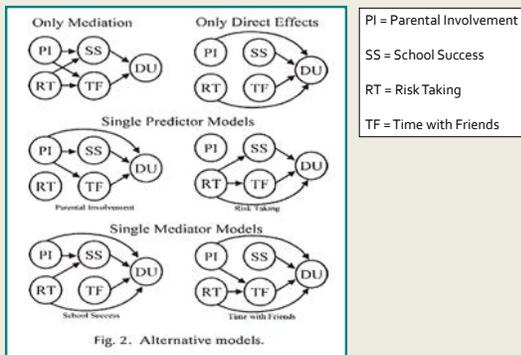


Fig. 2. Alternative models.
Pilgrim, C. C., Schulenberg, J. E., O'Malley, P., Bachman, J. G., & Johnson, L. D. (2006). Mediators and moderators of parental involvement on substance use: A national study of adolescents. *Prevention Science, 7*, 75-89.

3.

CONCEPT AND MEASUREMENT OF ACCULTURATION

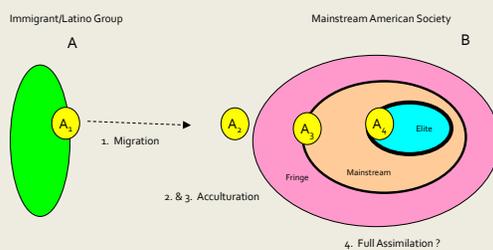
- **Acculturation** was originally studied by **anthropologists** as a **process of group change**
 - Group B **assimilates** into Group A (Redfield, Linton & Herskovitz, 1936)
- In 1980s, **psychologists** measured acculturation as a **person trait**; the concept was **individualized**
 - **Language factor** in acculturation scales is a **good statistical predictor**, but **lacks explanatory power** (Lopez-Class, Castro & Ramirez, 2011).

* Redfield, R., Linton, R., & Herskovitz, M. (1936). Memorandum for the study of acculturation. *American Anthropologist, 38*, 149-152.
* Lopez-Class, M., Castro, F. G., & Ramirez, A. (2011). Conceptions of acculturation: A review and statement of critical issues. *Social Science & Medicine, 72*, 1555-1562.

4.

A-B MODEL OF ACCULTURATION

Individual-Level Model of Acculturation/Assimilation



Castro, F. G., Boyd, S. J., Garvey, M. M., & Kellison, J. G. (2011). Latino youths' substance use intentions: Parental acculturation trajectories and parent-youth relationship factors. In R. Perez-Escamilla & H. Melgor-Quinonez (Eds.), *At risk Latino children's health* (pp. 223-257). Houston, TX: Arte Publico Press.

5.

THEORETICAL APPROACHES

- **Immigration** is a special case of **migration** (relocation within and between countries or environments); a pervasive human experience
- **Acculturation** is a form of **culture change** and **adaptation** as prompted by relocation; it is a process of **sociocultural** and **psychological adjustment** to living conditions within a new environment; as a **process of change**, is best examined in the form of life trajectories, and **not as a scale score on linguistic proficiency**
- **Segmented assimilation theory** examines the effects of **social capital** (social supports within a new environment) and **human capital** (the person's marketable skills), as "starting conditions" that influence **life chances** and **trajectories** within a new social environment

6.

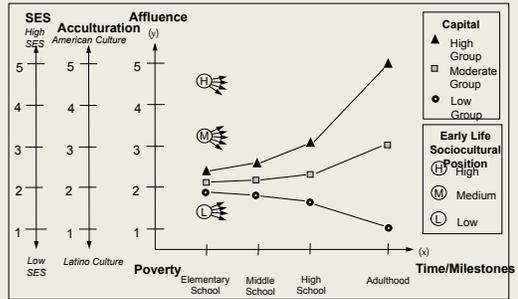
TYPES OF SEGMENTED ASSIMILATION

- **Segmented assimilation** - conceptualized as **sociocultural mobility** that can involve three outcomes (Portes & Zhou, 1993):
 - (a) acculturation change **towards the “mainstream”** White American culture, coupled with **upward socioeconomic mobility (upward assimilation)**;
 - (b) acculturation change **toward the mainstream** White American culture, coupled with **downward socioeconomic mobility into an underclass (downward assimilation)**; and
 - (c) **resistance to assimilation** into the mainstream society. (Portes & Zhou, 1993)

Portes, A., & Zhou, M. (1993). The new second generation: Segmented assimilation and its variants. *Annals of the American Academy of Political and Social Science*, 539, 74-96.

7.

THEORETICAL SEGMENTED ASSIMILATION GROUP TRAJECTORIES



* Castro, F. G., Marsiglia, F., Kulis, S., & Kellison, J. (2010). Lifetime segmented assimilation trajectories and health outcomes in Latino and other community residents. *American Journal of Public Health*, 100, 66-676.

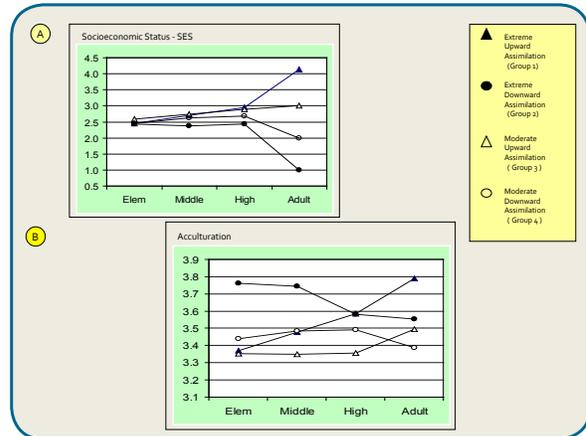
8.

MULTIVARIATE ANALYSIS OF SEGMENTED ASSIMILATION

1. **Latent profile analysis** to identify major **assimilation trajectory subgroups** as defined jointly by levels of acculturation and **socioeconomic status**
 - Solution yields four distinct trajectory subgroups
- A **growth mixture model analysis** of **lifetime assimilation trajectories across four life milestones**
 - These acculturation/assimilation trajectories were examined for these four groups, yielding patterns of lifetime changes in levels of acculturation and in socioeconomic status across the four life milestones.

* Castro, F. G., Marsiglia, F., Kulis, S., & Kellison, J. (2010). Lifetime segmented assimilation trajectories and health outcomes in Latino and other community residents. *American Journal of Public Health*, 100, 66-676.

9.



10.

2. DEEP-STRUCTURE ANALYSIS

A **deep-structure analysis** in **conceptualization and measurement** is needed to fully understand **complex cultural processes**.

11.

SURFACE AND DEEP-STRUCTURE ANALYSIS

- **Surface structure**
 - Visible but cosmetic aspects of a culture (foods, clothing, music, etc.).
- **Deep structure**
 - Deeper factors; psychological, historical
 - A deeper appreciation of core cultural factors as determinants of behavior; beyond **ethnic glosses** (Resnicow, Soler, Braithwaite, Ahluwalia, & Butler, J. (2000).

Resnicow, R., Soler, R., Braithwaite, R. L., Ahluwalia, J. S., & Butler, J. (2000). Cultural Sensitivity in substance abuse prevention. *Journal of Community Psychology*, 28, 271-290.

12.

CULTURAL DIFFERENCES IN THE EXPERIENCE OF DEPRESSION

- From a **cultural perspective**, would the experience of **depression** be more **prevalent, intense, or different** among Chinese people relative to Americans?

Domain	Symptoms	Western (American)	Equivalence	Non-Western (Chinese)
Affective	* Depressed mood * Loss of interest or pleasure * Worthlessness	?	(< ?)	?
Cognitive	* Thought disturbance * Suicidal ideation	?	(< ?)	?
Behavioral	* Psychomotor retardation or agitation	?	(> ?)	?
Organismic	* Insomnia * Weight loss * Fatigue, low energy	?	(= ?)	?

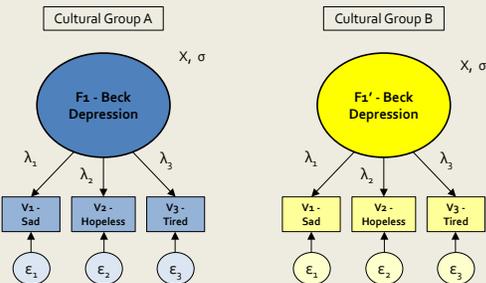
13.

WHAT IS MEANT BY INVARIANCE AND NON-INVARIANCE?

- Invariance – (No differences)** When two scale scores examined **across two different groups** are **equivalent**, thus having the **same meaning** across groups.
- “Non-Invariance” – (Differences exist)** Meaning that a **measured variable** (a scale) is **not equivalent** across cultural groups; for this variable, **differences in measurement and meaning** exist across these cultural groups.

14.

CONFIRMATORY FACTOR ANALYSIS (CFA) MODELS OF DEPRESSION



15.

TYPES OF MEASUREMENT EQUIVALENCE

- Configural Invariance** – Significant **factor structure** for both groups; **significant item loading** (λ s) for each factor (although loadings (λ s) need **not** be equal)
- Weak Factorial Invariance** – **Equal factor loadings** across groups: (respective λ s are equivalent)
- Strong Factorial Invariance** – **Equal item intercepts** meaning: equal item means (after centering the items)
- Strict Factorial Invariance** – **Equal item loadings and equal intercepts**; indicate equal error variances (Widaman & Reise, 1997).

Widaman, K. F., & Reise, S. P. (1997). Exploring the measurement invariance of psychological instruments: Applications in the substance use domain. In K. J. Bryant, M. Windle, & S. G. West (Eds.), *The science of prevention: Methodological advances from alcohol and substance abuse research* (pp. 281-324). Washington, D.C.: American Psychological Association.

16.

3. EXAMINE CULTURAL VARIABLES

Culture counts – Incorporate selected **cultural variables or factors** into survey instruments; move beyond simple indicator variables

17.

CULTURE COUNTS

- “Culture Counts”** (U.S. Dept of Health and Human Services, 2001 [David Satcher, 2001])
 - Issues that are **“thick with culture”**
 - **Identity Conflicts** and Issues (In Transition: Acculturation/Enculturation)
 - **Cultural Value Orientations and Conflicts** (Biculturalism; Cultural Shame & Denial)
 - **Discrimination** (African Americans, New Immigrants, Low-Income Minorities)

U.S. Department of Health and Human Services (2001). *Mental health: Culture, race, and ethnicity- A Supplement to Mental Health: A report of the Surgeon General*. Rockville, MD: U. S. Department of Health and Human Services, Public Health Service, Office of the Surgeon General.

18.

CULTURAL VARIABLES FOR LATINO POPULATIONS

Cultural Variables	Description
Acculturation	Belief and behavior that conforms to mainstream U.S. American values, beliefs, behaviors, ways of life
Biculturalism	A capacity to function within two distinct cultures based on the acquisition of the norms, values and behavioral routines of the dominant culture as well as those of one's own cultural group
Ethnic Identity	Personal identification with one's ethnic cultural group or group of origin
Ethnic Pride	Positive feelings of towards one's own ethnic group; pride in belonging to the group
Machismo	A traditional Latino gender role orientation that accepts male dominance as a proper form of male conduct
Traditionalism	An emphasis and value of cultural beliefs and behaviors, customs and traditions as the correct and preferred ways to live one's life

Castro, F. G. & Hernandez-Alarcon, E. (2002). Integrating cultural variables into drug abuse prevention and treatment with racial/ethnic minorities. *Journal of Drug Issues*, 32, 783-810.

19.

CULTURAL FACTORS IN THE WELL-BEING OF IMMIGRANT CHILDREN

- Parents and elders are **"agents of culture"**
 - Latino parents' **acculturation pathways** form their own cultural identity, which in turn establishes cultural and **family norms** that are then transmitted from parents to children (Castro, Boyd, Garvey & Kellison, 2011).
 - **Quality of parent-child relationship** influences youth development during childhood (birth to 11 years) and early adolescence (ages 12 to 13); role of **parental expectations**
 - **Peer influences** increase during late adolescence (ages 14 to 18)

Castro, F. G., Boyd, S. J., Garvey, M. M., & Kellison, J. G. (2011). Latino youths' substance use intentions: Parental acculturation trajectories and parent-youth relationship factors. In R. Perez-Escamilla & H. Melgor-Quinonez (Eds.), *At risk Latino children's health* (pp. 223-257). Houston, TX: Arte Publico Press.

20.

4. PSYCHOLOGICAL MEASURES OF YOUTH WELL-BEING

Assessing the **well-being** of immigrant youths will require the use of selected scales of **cultural influences**—**cognitive, affective and behavioral**—on **health-related outcomes**.

21.

IDENTITY FORMATION AND ACHIEVEMENT

- **Identity development** – proceeds through three stages: (1) **unexamined ethnic identity**, (2) **ethnic identity search**, and (3) **ethnic identity achievement** (Phinney, 1990).
- Schwartz, Montgomery and Briones (2006) have described components of **youth identity** - **"anchors" youth**, which is most important for **immigrant and ethnic minority youth**, as they struggle with **acculturation stressors and conflicts**.

* Phinney, J. (1990). Ethnic identity in adolescents and adults: Review and research. *Psychological Bulletin*, 108, 499-514.
 * Schwartz, S. J., Montgomery, M. J., & Briones, E. (2006). The role of identity in acculturation among immigrant people: Theoretical propositions, empirical questions, and applied recommendations. *Human Development*, 49, 1-30.

22.

IDENTITY FORMATION AND ACHIEVEMENT

- The development of a **mature and stable identity**, **identity integration**, appears important for **resolving cultural conflicts**.
- A stable and integrated **bilingual/bicultural identity** may include **skills** for resolving **dialectical cultural conflicts**, i.e., those involving a resolution of **cultural conflicts** involving **individualism vs. collectivism**, or **traditionalism vs. modernism**, etc.

23.

CULTURALLY-SENSITIVE PARENTING

- Latino parental education of their children for coping with acculturation and acculturative stress include strategies for building resilience against discrimination (Carranza, 2007).
- Discrimination – a significant stressor and an adverse influence in racial disparities and promotes poor health outcomes (Williams & Mohammed, 2009)

* Carranza, M. E. (2007). Building resilience and resistance against racism and discrimination among Salvadoran female youth in Canada. *Child and Family Social Work*, 12, 390-398.
 * Williams, D. R. & Mohammed, S. A. (2009). Discrimination and racial disparities in health: Evidence and needed research. *Journal of Behavioral Medicine*, 32, 20-47.

24.

CULTURALLY-SENSITIVE PARENTING

- Among **African American parents**, parental education involving **racial socialization** (Stevenson & Arrington, 2009)
 - Promotes youth **awareness** of **racial discrimination** and development of **self-esteem** and **ethnic pride** for **coping** with an episode of discrimination
 - **Teenage Experience of Racial Socialization** inventory
 1. Coping with Antagonism
 2. Cultural Pride Reinforcement
 3. Cultural Legacy Appreciation
 4. Alertness to Discrimination
 5. Cultural Endorsement of the Mainstream

* Stevenson, H. C. & Arrington, E. G. (2009). Racial/ethnic socialization mediates perceived racism and racial identity of African American adolescents. *Cultural Diversity and Ethnic Minority Psychology, 15*, 125-136.

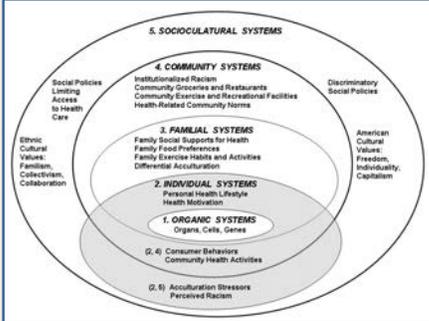
25.

5. MODELS OF MIGRATION AND HEALTH

Examine **mediational models** to understand **psychosocial processes** of migration and **psychosocial adjustments**

26.

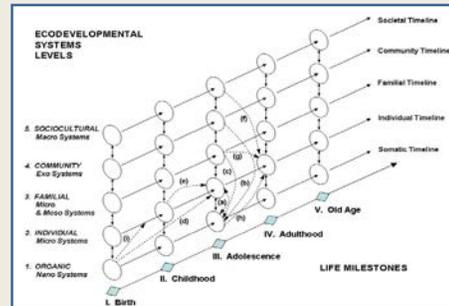
AN ECODEVELOPMENTAL MODEL



Castro, F. G., Shaibi, G. Q., & Boehn-Smith, E. (2009). Ecodevelopmental contexts for preventing type 2 diabetes in Latino and other racial/ethnic minority populations. *Journal of Behavioral Medicine, 32*, 89-105.

27.

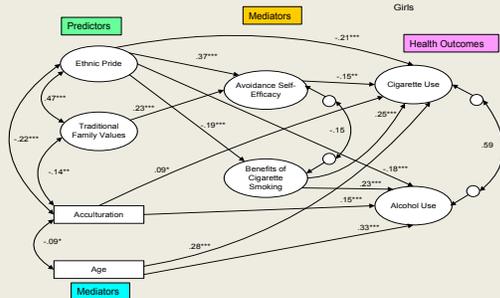
AN ECODEVELOPMENTAL TEMPORAL EFFECTS MODEL



Castro, F. G., Shaibi, G. Q., & Boehn-Smith, E. (2009). Ecodevelopmental contexts for preventing type 2 diabetes in Latino and other racial/ethnic minority populations. *Journal of Behavioral Medicine, 32*, 89-105.

28.

ACCULTURATION, ETHNIC PRIDE, AND TRADITIONAL FAMILY VALUES



* Castro, F. G., Stein, J. A. & Bentler, P. M. (2010). Ethnic pride, traditional family values, and acculturation in early cigarette and alcohol use among Latino adolescents. *Journal of Primary Prevention, 30*, 265-292.
* Iacobucci, D. (2008). *Mediation analysis*. Los Angeles, Sage.

29.

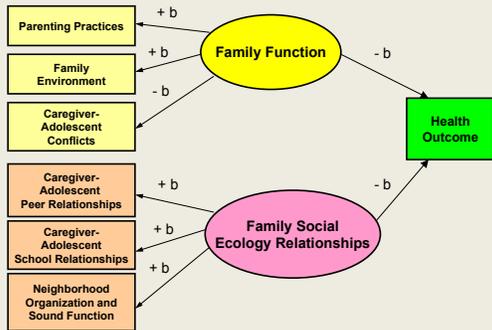
SUMMARY OF CULTURAL INFLUENCES ON SUBSTANCE USE OUTCOMES

- **Acculturation** negative correlation:
 - with **Ethnic Pride** and **Traditional Family Values**
- **Ethnic Pride** positive correlation:
 - with **Traditional Family Values**
- **Alcohol** and **Tobacco Use** predicted by:
 - **Lower Ethnic Pride**
 - **Higher Acculturation**
 - **Higher Age**
- **Mediational Role** of:
 - **Avoidance Self-Efficacy**
 - **Perceived Benefits of Cigarette Smoking**

* Castro, F. G., Stein, J. A., & Bentler, P. M. (2009). Ethnic pride, traditional family values, and acculturation in early cigarette and alcohol use among Latino adolescents. *Journal of Primary Prevention, 30*, 265-292.

30.

MODEL OF EFFECTIVE FAMILY FUNCTION AND SOCIAL ECOLOGY RELATIONSHIPS



31.

6. NEW MEASURES OF COMMUNITY CULTURE

New measures to assess the *cultural norms* within *diverse neighborhoods* such as *immigrant enclaves* to better operationalize *social capital*, and its implications for *segmented assimilation trajectories* in diverse immigrant communities

32.

ASSESSING COMMUNITY NORMS

- *New sociocultural measures* administered in large scale community and regional surveys for a *deep-structure analysis* of *community cultural influences* on health outcomes
- Understanding community *cultural norms* in specific *immigrant enclaves*; deep-structure details on *social* and *human capital*

33.

SUMMARY OF A PREVENTION SCIENCE RESEARCH APPROACH

- Future studies need greater rigor and should:
 1. Be **guided by theory** relevant to Latinos(as)
 2. Propose **specific cultural hypotheses**
 3. Incorporate **cultural variables** into program models, design and targeted outcomes;
 4. Examine **mechanisms of effect** : youth ethnic identity, parent-child relationships
 5. Improve **program cultural relevance** for greater participant motivation and sustained participation
 6. Examining **sociocultural ecological factors** as contributors to enhanced **prevention interventions** (Castro et al., 2006)

Castro, F. G., Barrera, M., Pantin, H., Martinez, C., Felix-Ortiz, M., Rios, R., Lopez, V. A., & Lopez, C. (2006). Substance abuse prevention intervention research with Hispanic Populations. *Drug and Alcohol Dependence, 84*(5), 529-542.

34.

Children of Immigrants

Glorisa Canino, Ph.D.

Professor and Director, Behavioral Sciences Research Institute, University of Puerto Rico Medical School, San Juan, PR

Dr. Canino discussed the importance of measuring the context of immigration and of the essential variables to be measured. She presented data comparing Puerto Rican children living in the South Bronx to children living in San Juan. The data demonstrate that the circumstances surrounding migration place children at risk for mental health problems.

The context of exit, characteristics of the migrant family, and characteristics of the host country affect mental health. Children do not choose to migrate, and they acculturate more quickly than their parents, leading to intergenerational conflicts. Latino parents associate “Americanization” with becoming promiscuous, leading to conflicts between parents and daughters.

Factors that protect against emotional and mental health problems in children include familism, political refugee status, education, higher SES in the country of origin, white race, living with a family in the host culture, and living in an ethnic enclave. Ethnic enclaves may increase or decrease the risk of mental health problems. The risk of mental health problems is increased by a combination of the following factors: social disadvantage, high visibility, family conflict, arriving in the United States outside a family context, lack of education, and being born in the United States. Poor schooling, discrimination, and violent neighborhoods increase the risk of mental health problems exponentially. Family separation and other factors related to immigration undermine parental authority and family cohesion, which protect against mental health problems.

The Boricua Study showed that the stress of acculturation was related to internalizing disorders or antisocial behavior in children. Children living in the South Bronx were more likely to be exposed to violence and discrimination than were children living in San Juan. Exposure to violence increased the risk for antisocial behavior, disruptive behavior disorders, and internalizing disorders.

Children of immigrants, particularly U.S.-born children, are at risk for mental health problems due to the stress of acculturation, and the immigrant paradox does not apply to U.S.-born children. The context of immigration is important in determining risk of victimization and mental health problems.

AIM PRESENTATION

- Will present data from Boricua study and from Suárez-Orozco to exemplify risk of mental health (MH) problems of migrant children. Puerto Ricans are U.S. citizens so they are not considered immigrants.
- Boricua study is a child study of comparison between children 5 to 13 living in San Juan, PR, and comparable Puerto Rican children in the South Bronx, NY (Bird et al., 2006).
- Children in the South Bronx were mostly born in the U.S. (88%), but all were children of migrant Puerto Rican families.

1.

SAMPLE

Target	• 1,125 children & adolescents of Puerto Rican background at each site
Probability samples	• Were drawn in South Bronx (SB) & in the Standard Metropolitan Area (SMA) in Puerto Rico
Ages at baseline	• 5 through 13 years, both genders
Follow-up	• At yearly intervals over three waves (baseline and two follow-ups)

Sample in SB 1,138	+	Sample in SMA 1,353	=	Total 2,491
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Bird, H. R., Canino, G. J., Davies, M., Duarte, C. S., Febo, V., Ramirez, R., Hoven, C., Wicks, J., Musa, G., & Loeber, R. (2006). A study of disruptive behavior disorders in Puerto Rican youth: I. Background, design and survey methods. *Journal of the American Academy of Child and Adolescent Psychiatry*, 45(9), 1032-1041.

2.

VULNERABILITY OF IMMIGRANT CHILDREN

- **Definition:** Children of immigrants born or not in the host country
- No single factor can explain vulnerability to MH problems.



Dynamic interaction of the circumstances surrounding the migration
(Guranacciam, 1977)

Context of exit

Characteristics of the migrant family

Characteristics of the host country or community & its service system

3.

VULNERABILITY



- Migration in itself is not necessarily related to mental health problems, it is the circumstances associated with the migration experience that are related.
- Children *do not make the choice* to migrate, do not have the same expectations as parents, *learn the language much faster, and acculturate or assimilate faster than parents.*
- Intergenerational conflict occurs more often with girls around the dating period.
- Parents tend to view becoming "Americanized" with becoming sexually promiscuous (Suarez-Orozco et al., 2001).

4.

VULNERABILITY OF GIRLS

Latino girls are much more restricted than boys to go out and given more responsibilities; this creates more conflict.

The *Boricua Study* exemplifies the risk of migrant girls:

- The biggest difference between the rates of antisocial behavior (ASB) in the Bronx and San Juan was in the girls; those in the Bronx were at twice the risk for ASB and internalizing disorders as compared to girls in San Juan.
- The risk in girls over time in San Juan declined while in the Bronx increased (Bird et al., 2007).



5.

FAMILISM AS PROTECTIVE



Familism at baseline was protective of ASB over time (2years later) in the Boricua study mostly in girls and in boys 5 to 9 years but not the older group of boys at follow-up (10 to 16) (Morcillo et al., 2011).

The more restrictions and parental monitoring of girls vs. boys in adolescence may be related to their lower risk of ASB in this period.

6.

OTHER PROTECTIVE FACTORS

Children of migrants who *are less likely* to develop a *mental health problem* are...

political refugees

educated

have higher SES in their country of origin

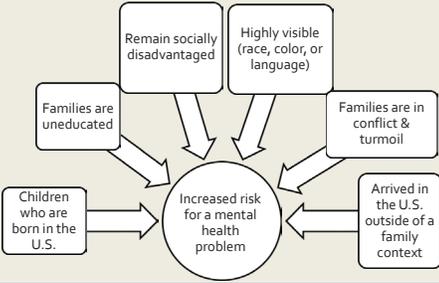
white

come to live with family in the host culture or to an ethnic enclave of their cultural origin

Ethnic enclave can either increase or decrease MH problems in children

7.

RISK FACTORS OF MIGRANT FAMILIES



Poor schooling, discrimination, and violent neighborhood augment exponentially the risk for a disorder.

8.

RISK FACTORS

Factors that increase the risk given the presence of other contextual and family risk factors.

Length of stay in the U.S.

Substance abuse

Unprotected sex

Delinquency



Children of migrants (62%) experience long-term separation from at least one of their parents.



It takes years before the families are reunited. Only 20% of the children in their sample came to the U.S. as a family unit (Suarez-Orozco & Suarez-Orozco, 2001).

9.

RISK FACTORS: FAMILY SEPARATION

Long separation creates resentment and often family conflict, especially if the child is sent before and becomes acculturated or is not treated well by the distant relative.

If the child is separated at an early age, the family conflict is even greater with receiving a child who hardly knows them.

Separation also undermines parental authority and family cohesion, two important protective factors.

Children often become translators for parents in their dealings with the outside world; this also undermines parental authority. Exp. physical punishment

10.

RISKS: ACCULTURATIVE STRESS IN THE BORICUA STUDY

Youth acculturation was not associated with either internalizing or antisocial behavior (Duarte et al., 2006).

Parental and youth acculturative stress (*different aspects of stress related to the process of acculturation*) was associated with internalizing and ASB symptoms in both sites with the effects on internalizing symptoms decreasing over time only in Puerto Rico.

Stress associated with the acculturation process might be more important in increasing the risk than the process of acculturation or assimilation per se.

11.

RISK: EXPOSURE TO VIOLENCE AND DISCRIMINATION

Many immigrant children come from poor families and end up living in poor inner-city neighborhoods that are infested with high crime rates and poor schools.

As a consequence, they frequently become the victims of violence and prejudice, especially if they are of color.

Boricua data show deleterious effects of violence in children from the Bronx.

12.

MEASURE OF COMMUNITY VICTIMIZATION BORICUA STUDY

Assessed	The items ascertain whether	Violent exposure in the community involved
<ul style="list-style-type: none"> • By youth reports of the Exposure to Violence Questionnaire (Richters & Martínez, 1993) 	<ul style="list-style-type: none"> • The exposure happened to the youth • The youth saw it happen or • The youth heard it happen 	<ul style="list-style-type: none"> • Being chased by a gang • Being threatened by someone with serious physical harm • Being beaten up or mugged • Being sexually assaulted • Being attacked or stabbed, etc.

Occurrence of violence was counted for analysis only when it was reported by the young person him/herself.

13.

MEASURE OF FAMILY VIOLENCE

Family physical abuse was measured with items from

- Parental Discipline Scale (Goodman et al., 1996)

Items used—asked the youth how many times they were

- Hit with something like a belt, a hairbrush, a stick, or some other hard object; hit with a fist or kicked hard; beat up very hard; or hurt so badly that they were cut or had bruises on their body

Cronbach's Alpha

- In the study was 0.76

14.

TABLE: WEIGHTED PREVALENCE OF ADOLESCENT CUMULATIVE EXPOSURE (AGES 11 TO 17) TO VIOLENCE TYPE BY SITE AND GENDER

Puerto Rico (N=735)									
Violence Exposure	Female			Male			Total		
	N	%	(95% CI)	N	%	(95% CI)	N	%	(95% CI)
Any Type of Violence	84	24.8	20.1-30.2	162	40.4	35.2-45.8	246	32.9	29.2-36.8
Neighborhood Violence	62	17.9	13.7-23.0	120	30.2	25.5-35.3	182	24.2	20.8-27.9
Physical Abuse	30	8.9	6.1-12.9	75	19.1	15.2-23.6	105	14.2	11.7-17.1

Notes:
 • The effect of gender for all violence exposure variables was highly significant ($p < .001$) for the total sample and individually for each site.
 • The effect of site for Any Type of Violence and Physical Abuse was significant ($p < .01$) for the total sample and individually for males and females.
 • The effect of site for Neighborhood Violence was significant ($p < .05$), for the total sample and males. Results for females were not significant.
 • All significance tests were conducted using Wald F-test statistic (SUDAAN Software, Release 10.0).

15.

TABLE: WEIGHTED PREVALENCE OF ADOLESCENT CUMULATIVE EXPOSURE (AGES 11 TO 17) TO VIOLENCE TYPE BY SITE AND GENDER

Bronx (N=591)									
Violence Exposure	Female			Male			Total		
	N	%	(95% CI)	N	%	(95% CI)	N	%	(95% CI)
Any Type of Violence	96	33.9	28.1-40.2	161	52.2	47.3-57.1	257	43.4	39.6-47.3
Neighborhood Violence	65	22.7	18.2-27.9	118	38.5	33.9-43.3	183	30.9	27.3-34.7
Physical Abuse	51	18.2	13.7-23.9	91	28.9	24.7-33.5	142	23.8	20.4-27.4

Notes:
 • The effect of gender for all Violence Exposure variables was highly significant ($p < .001$) for the total sample and individually for each site.
 • The effect of site for Any Type of Violence and Physical Abuse was significant ($p < .01$) for the total sample and individually for males and females.
 • The effect of site for Neighborhood Violence was significant ($p < .05$) for the total sample and males. Results for females were not significant.
 • All significance tests were conducted using Wald F-test statistic (SUDAAN Software, Release 10.0).

16.

TABLE: ASSOCIATION OF ADVERSE OUTCOMES WITH CUMULATIVE VIOLENCE

Outcome Variable	Violence (Unadjusted)		Violence (Adjusted)	
	Odds Ratio	(95% CI)	Odds Ratio	(95% CI)
Disruptive Behavior	1.86	(1.41-2.46)	1.84	(1.37-2.46)
Antisocial Behavior	2.25	(1.88-2.69)	2.22	(1.84-2.69)
School Expulsion/Suspension	1.57	(1.33-1.86)	1.48	(1.26-1.74)
Internalizing Disorder	1.59	(1.27-1.99)	1.61	(1.26-2.05)
ADHD	1.39	(1.11-1.73)	1.23	(0.96-1.58)

Notes:
 • All odds ratios were significant ($p < .01$), except for the odds ratio for ADHD in the Adjusted model.
 • The Adjusted model controlled for site, gender, poverty level, & propensity scores.
 • All odds ratios were estimated using multivariate logistic regression (SUDAAN Software, Release 10.0).

17.

CONCLUSIONS

Fortunately most children are resilient so that at any given moment most children have good mental health.



Children of immigrants, particularly if they are born in the U.S., are at particular risk because of many factors.

Most important is exposure to stress of acculturation—a host country that does not welcome them.

The immigrant paradox does not work for them, they were not inoculated in their country of origin if they were born in the U.S., and expectations are different from their parents.

18.

CONCLUSIONS



Poor immigrants are:

- Forced to live in poor segregated neighborhoods
- Forced to go to poor schools
- Exposed to violence and discrimination.

CONTEXT is important in determining risk of victimization and risk for mental health problems since in Boricua study children in the Bronx were more exposed to victimization than youth in Puerto Rico and were more likely to develop a psychiatric disorder and ASB.

19.

Measuring Social and Cultural Dimensions of Child Health: A Clinical Perspective

Yeshashwork Kibour, Ph.D.

Clinical Psychologist and Associate Director of Clinical Training, American School of Professional Psychology, Argosy University, Washington, DC

Dr. Kibour shared the stories of individual immigrant children to highlight the following issues:

- The impact of a parent's immigration status on mental health and the need to monitor immigration status over time
- The insufficiency of English-language fluency, SES, and exposure to U.S. culture in predicting health outcomes
- The importance of studying fathers and monitoring family separations
- Bullying of refugee children
- The need to screen refugee children for mental health problems, learning problems, exposure to war and other traumas, and the effects of exposure to refugee camps
- Racial discrimination and religious intolerance
- The role of cultural perspectives in child development and health
- The impact of parenting styles that are incompatible with the needs of U.S.-born children
- How culture affects the ways parents react to observed negative childhood behaviors

Dr. Kibour suggested that the National Children's Study consider collecting information about the following:

- Immigration status and migration stories of parents, siblings, and primary caregivers
- Children's and parents' biopsychosocial functioning, using a bioecological view of health
- Maternal health before, during, and after migration, including prenatal care
- Parenting style
- Culturally rooted understandings of health
- Indicators of resiliency
- Language environment of the home
- Age at migration and arrival to the United States

The Study could use focus group interviews and community participation to find creative ways to obtain information about immigrant status.

OBJECTIVES

- Provide a clinical perspective on the cultural dimensions of child health
- Identify social characteristics unique to immigrants that contribute to parental distress or child stress levels
- Measurement suggestions

1.

THE STORY OF YARED



- Parent's immigration status
- Need to monitor immigration status over time
- Interaction between immigration status and mental health for both parents and children
- Insufficiency of English fluency, SES, and exposure to U.S. culture in predicting overall health outcomes for some immigrant families

2.

THE STORY OF BETHLEHEM

- Exploring the role of fathers as primary caregivers
- Monitoring the impact of family separation over time



3.

II GUDE'S STORY

- Mental health screening
- Academic and learning problems
- Screening for exposure to war and other traumas



- Screening for impact of direct/indirect exposure to refugee camps
- Racial discrimination
- Religious intolerance

4.

THE STORY OF PATRICIA



- The role of cultural perspectives on child development and health
- The impact of a parenting style that is incompatible with the needs of U.S.-born children of foreign-born parents
- Exposure to the U.S. culture that negatively impacts child health
- The role of culture in the way the parents react to observed negative childhood behaviors
- Proximity vs. access to community support

5.

SUGGESTED DATA MEASURES



- Immigration status and migration stories of parents, siblings, and primary caregivers
- Global assessment of a child and parent's biopsychosocial functioning by using a bioecological view of health
- Maternal health before, during, and after migration including prenatal care

6.

SUGGESTED DATA MEASURES



- Parenting style
- An assessment of culturally rooted understandings of health
- Indicators of resiliency
- Language environment of the home
- Age at migration and arrival to the U.S.



7.

MEASUREMENT SUGGESTIONS

- Focus group interviews
- Eliciting community participation
- Creativity in obtaining information about immigration status

8.

Discussion

Yonette Thomas, Ph.D.

Associate Vice President for Research Compliance, Howard University, Washington, DC

Dr. Thomas summarized the following major points from the presentations. (Please note that suggestions for the Study are the opinions of the speakers, not the Study leaders.)

- Conceptualization should drive measurement.
- Acculturation can be a long-term adaptation, and the Study should focus on life trajectories.
- Risk and protective factors should be considered and are driven by context.
- Culture should be assessed at a deeper level.
- Immigration affects family dynamics and feelings of belonging and well-being.
- Some immigrant children live in two cultural spheres.
- Key measures include acculturation, ethnic identity, and ethnic pride.
- Discrimination plays a role in racial and ethnic socialization.
- Factors related to immigration affect family norms and the parent-child relationship.
- Culture should be measured at the family, neighborhood, and community levels.
- The context of migration and social support networks can play an important role.
- Fear of acculturation can lead to intergenerational conflict.
- Familism should be measured on a continuum.
- The social environment is important.
- Legal status can have a significant impact on a family, and it must be measured.

Speakers also identified possible key variables that the Study should measure. (Please note that suggestions for the Study are the opinions of the speakers, not the Study leaders.)

- Dr. Castro suggested acculturative stress, self-concept as an immigrant, self-esteem or ethnic identity, the quality of the parent-child relationship, and relationships with the community.
- Dr. Canino suggested immigration status, the reason for migration, risk and protective factors, the context of immigration, and emotional and mental health.
- Dr. Kibour said that the current paradigms for measuring mental health may not apply to immigrants. The Study should assess global functioning and collect immigrants' stories.

Discussants also made suggestions for how data should be collected over the life course. (Please note that suggestions for the Study are the opinions of the speakers, not the Study leaders.)

- Dr. Castro said that the Study should create a safe environment and trust.

- Dr. Canino said that Study instruments should change with the age of the child.
- Dr. Kibour said that some data collection should be qualitative to examine deeper levels of meaning and context. The language and race of the interviewers could be matched with those of the families.

One participant noted that information about parent-child relationships could be collected for all children. Dr. Castro described a study he conducted on children of drug users that examined parental expectations and children's desire to do what their parents told them to do.

It was suggested that the Study ask about mental health status in a way that does not suggest an *a priori* idea that children of immigrants have mental health problems. Dr. Canino suggested measuring functioning rather than symptoms. Children who are not functioning well emotionally are likely to have a psychiatric disorder. Mental health could be measured during transitional periods, and the NIH Patient-Reported Outcome Measurement Information System scales could be used to assess mental health.

Dr. Thomas added that parent-child relationships had to be informed by the acculturation process.

Chapter 8: Participation of Immigrants in Research Studies

Experience from the Hispanic Community Health Study—Study of Latinos

Larissa Avilés-Santa, M.D., M.P.H.

Project Director, Hispanic Community Health Study/Study of Latinos (HCHS/SOL), NHLBI, NIH, Bethesda, MD

Dr. Avilés-Santa, the project officer for the HCHS/SOL, explained that the study's primary goals are to identify the following in U.S. Hispanic/Latino groups of diverse backgrounds:

- The prevalence of cardiovascular and pulmonary disease and other conditions
- The prevalence of factors that protect from or increase the risk for cardiovascular and pulmonary disease and other conditions
- All-cause mortality and the incidence of fatal and nonfatal cardiovascular and pulmonary events

Community-based random sampling was used to recruit a sample size of 16,000 Hispanics ages 18 to 74 at four field centers in San Diego, the Bronx, Chicago, and Miami. Racial/ethnic identity was self-identified, and participants were asked about country of birth for themselves, parents, and maternal and paternal grandparents. They were also asked about specific place of birth, years living in the United States, and history of living in other countries.

Dr. Avilés-Santa described the characteristics of the cohort; 79 percent of participants were born outside the United States and its territories.

Recruitment and retention for the HCHS/SOL involved:

- A large number of staff and consideration of logistical factors such as scheduling shifts
- Consideration of the staff's age, experience, and knowledge about cultures and communities
- Staff training and certification in recruitment skills and study procedures
- Strong community relations and partnerships
- Publicity through every possible media and through recruitment videos left with participants
- Weekly telephone calls with the recruitment team for problem-solving

A number of factors affected participation:

- Self-identity was an issue—for example, how participants responded to the term "Hispanic."
- Legal status was not collected but may be collected in a later phase of the study.
- Confidentiality was assured on consent forms and during interactions.
- Targeting Hispanics was viewed positively by some, negatively by others.
- Some people thought the study was a scam.

- Some people were concerned about experimentation.
- Genetic research and the use of genetic information were explained to participants in detail.
- People had varying beliefs about health and disease.
- The benefits and risks were explained to participants in detail.
- Some physicians were unaware of the study and told patients not to participate.
- Participants were reimbursed for transportation and other expenses, but reimbursements were not used as incentives.

The retention rate for the study was more than 85 percent due to the participants’ experiences during the exam visit, trust, and continuity/staff retention. The study collected contact information for two or more people who did not live in the household to track participants who moved. The study maintained contact with participants through telephone calls, newsletters, holiday cards, community fairs and events, and ancillary studies. Mobile telephones, email, and websites also were used for retention and followup.

Dr. Avilés-Santa clarified that the study screened more than 100,000 households to recruit 40,000 participants. Based on census tracts, study leaders expected all households screened to be Hispanic households, but not all of them were.

THE HISPANIC COMMUNITY HEALTH STUDY (HCHS)/ STUDY OF LATINOS (SOL)

- A special review panel reviewed the applications.
 - Recruit 4,000 participants at each Field Center
 - Identify a Hispanic/Latino group that would be >50% of the local cohort, and at least a secondary Hispanic/Latino group
 - Incorporate all the variables in the research plan
 - Strong interaction with the local community
 - Career development plan for Hispanic/Latino investigators
- Proposals for four Field Centers and a Coordinating Center were selected.
- Contracts were awarded according to merit in 2006.

1.

PRIMARY GOALS



- To identify the *prevalence of cardiovascular and pulmonary disease and other conditions* in U.S. Hispanic/Latino groups of *diverse backgrounds*
- To identify the *prevalence of factors that protect from or increase the risk for cardiovascular and pulmonary disease and other conditions in diverse U.S. Hispanic/Latino groups*
- To identify *all-cause mortality and the incidence of fatal and nonfatal cardiovascular and pulmonary events* in diverse U.S. Hispanic/Latino groups

2.

16,000 PARTICIPANTS IN FOUR FIELD CENTERS

Community-based, random sampling representative of the local community

- Ages: 18-74 years
 - 6,000 ages 18-44 years
 - 10,000 ages 45-74 years
- Target sample of 4,000 persons per Field Center who self-identified with any of the following Hispanic/Latino backgrounds:

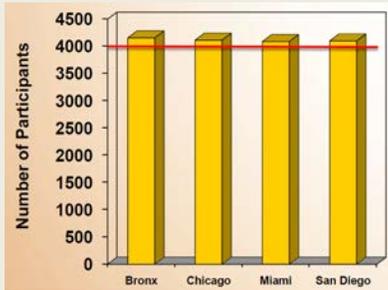
– Mexican/Mexican American	– Dominican
– Puerto Rican	– Central American and South American
– Cubans	– Other Hispanics/Latinos

3.



4.

**PARTICIPANTS BY FIELD CENTER
JUNE 30, 2011 = 16, 458**



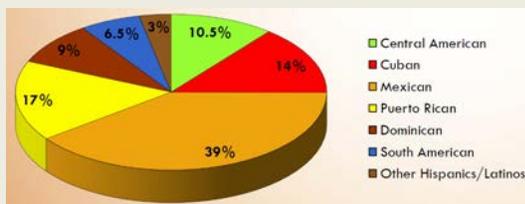
5.

IDENTITY AND MIGRATION

- Self-determined
- Country of birth
 - Self
 - Parents
 - Paternal grandparents
 - Maternal grandparents
 - Place of birth
- Years living in the U.S.
- History of living in another country before living in the U.S.

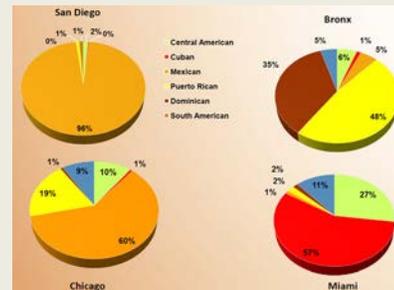
6.

**DISTRIBUTION OF THE COHORT
ACCORDING TO HISPANIC BACKGROUND**



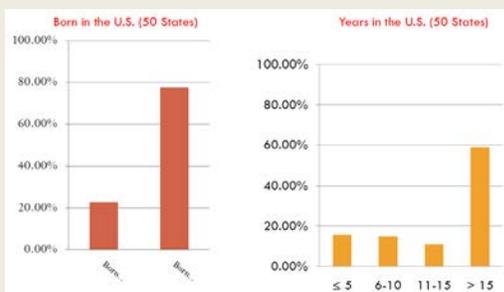
7.

**DISTRIBUTION BY HISPANIC / LATINO
BACKGROUND AND SITE**



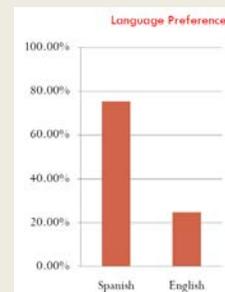
8.

**HCHS/SOL TARGET POPULATION:
DISTRIBUTION OF BASELINE
CHARACTERISTICS**



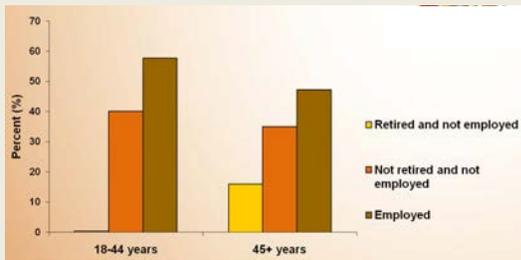
9.

**HCHS/SOL TARGET POPULATION:
DISTRIBUTION OF BASELINE
CHARACTERISTICS**



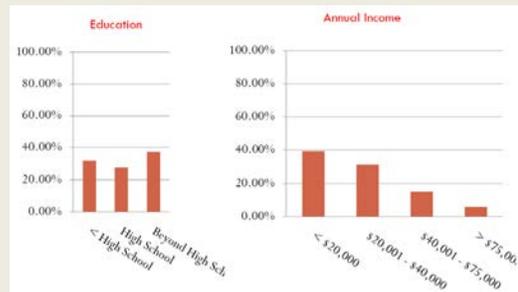
10.

DISTRIBUTION OF STUDY COHORT BY AGE AND EMPLOYMENT STATUS



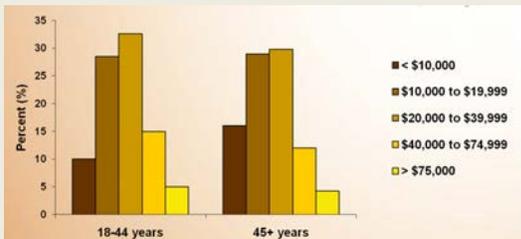
11.

HCHS/SOL TARGET POPULATION: DISTRIBUTION OF BASELINE CHARACTERISTICS



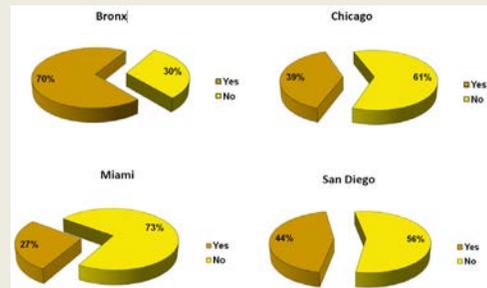
12.

DISTRIBUTION OF STUDY COHORT BY AGE AND HOUSEHOLD ANNUAL INCOME



13.

HEALTH INSURANCE: 18-44 YEARS



14.

HEALTH INSURANCE COVERAGE: 45-74 YEARS



15.

HOW DID WE GET HERE?

16.

RECRUITMENT

- Staff
 - Adequate number
 - Staggered shifts
 - Age
 - Sound judgment and experience
 - Knowledge of the community and environs
 - Training and certification
 - Language and cultural proficiency

17.

RECRUITMENT

- Community relations and partnerships
 - Structure
 - Resources
 - Insight and collaboration from community organizations



18.

RECRUITMENT

- Publicity
 - Radio and TV
 - Local newspapers
 - Video



19.

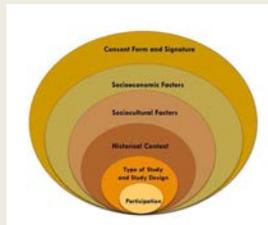
RECRUITMENT

- Reinvention
 - Evaluation and reevaluation of strategies
 - Evening and Sunday shifts
 - Part-timers
 - Weekly calls
 - Problem solving
 - Idea generating

20.

RECRUITMENT

- Self-identity
- Legal status
- Law enforcement
- Confidentiality
- Target population: pros and cons
- Scams
- Research: Experimentation?
- Genetics research
- Health versus disease
- Benefits versus risks
- Health care providers
- Reimbursement



21.

RETENTION AND FOLLOWUP

- Experience during exam visit
- Trust
- Continuity
 - Same staff
- Contact information
 - Two or more persons who do not live in the same household



22.

RETENTION AND FOLLOWUP



- Opportunities to contact participants
 - Calling during the evening, night, or weekends
 - Newsletters
 - Holiday and birthday cards
 - Health fairs
 - SOL Family Day activities
 - Ancillary studies

23.

RETENTION AND FOLLOWUP



- Annual response rate of 85%
- Update personal information
- Personal contact
- Mobile telephone
- Email
- Participants' website
 - <http://www.saludsol.net>
- Social networks
- Return of research results
 - Participant's test results
 - Research findings

24.

RETENTION AND FOLLOWUP

- Reinvention
 - Evaluate and reevaluate
 - Brainstorm
 - Feedback

25.

SUMMARY

- Context
 - Do not assume you know everything
 - Consult the experts and the local community
 - Continuous education and learning
- Staff
 - Number
 - Personal and professional qualities and qualifications
- Multiple approaches for effective and successful recruitment and retention
 - Simultaneous implementation
 - Best practices
- Frequent evaluation and reevaluation

26.

Chapter 9: Immigrants: Global Economies and Children's Well-Being

The Looming Transition to Diversity in Western Societies: Challenge and Opportunity

Richard Alba, Ph.D.

Distinguished Professor of Sociology, City University of New York Graduate Center,
New York, NY

Dr. Alba explained that, during the next 25 years, the United States and Western European countries will face a demographic transition to a much more diverse working-age population. This transition is due to the aging of the baby boom generation and the maturation of diverse youth cohorts that include many people who have grown up in immigrant homes. He reviewed population pyramids for different countries that compared 2009 data with population estimates for 2035.

Immigration tends to be bimodal. High-status immigrants bring high levels of education and professional qualifications, and their children often excel in Western schools. Low-status immigrants bring low levels of education and take low-skill jobs. They often come from former colonies and are racially and/or religiously distinct, and their children face difficulties in Western schools. Large portions of immigrants in Western countries are low-status immigrants.

Integration—in the sense of preparation to function in the work force in ways that are similar to well-trained natives—is a challenge. Without integration, the economic, social, and political vitality of Western societies are at risk as mainstream populations shrink.

School-taught skills, such as literacy, are reasonably well measured by international surveys, such as the Programme for International Student Assessment (PISA). It is more difficult to measure credentials due to variability across systems, but credentials are critical outcomes that qualify individuals in the labor market. Across Western societies, there are consistent differences in skills tests and credentials between native students and the children of low-wage immigrants. There are also large gaps between the PISA reading scores of native children and second-generation immigrants whose parents do not have secondary-school credentials.

Situations in which minority individuals can improve their status without appearing to threaten the majority population—called non-zero-sum mobility—create opportunities for ethno-racial fluidity. For example, the period from 1945 to 1970 was a period of mass assimilation in the United States. The exit of the baby boom generation from the labor market raises the possibility of non-zero-sum mobility over the next 25 years. However, mobility may not occur on the scale of the post-World War II period due to greater economic inequality and changes in the education system toward greater inequality and declining teacher quality.

Demographic changes among core workers on Wall Street show that the proportion of white men has declined and the proportions of minority and foreign-born workers have increased. However, white men continue to monopolize the economic rewards even as their numbers shrink.

A participant asked about the blending of populations in the United States and Europe. Dr. Alba said that there are high rates of intermarriage, and that children of intermarriages may not feel a strong separation from mainstream society. Mixed-origin populations will be increasingly important and difficult

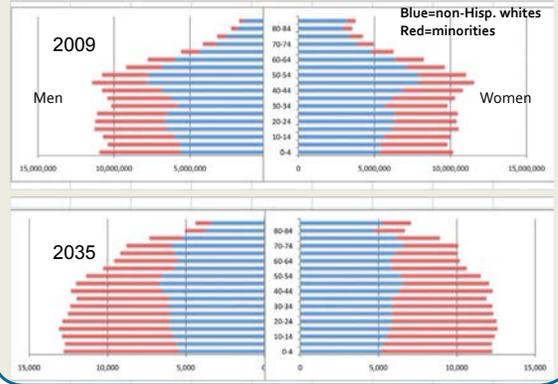
to capture. In response to a question about intermarriages, Dr. Alba noted that when marriages between Asians and whites occur between white men and Asian women, many mixed Asian/white children do not carry Asian names.

A HISTORIC JUNCTURE FOR THE WEST

- Because of immigration, all Western societies are facing a demographic transition to a much more diverse working-age population.
- During the next quarter century, this transition will result from a conjunction of two forces:
 - The exit from the work force of the large, heavily native, baby boom cohorts born after World War II.
 - The maturation of very diverse youth cohorts, containing many who have grown up in immigrant homes.

1.

U.S. POPULATION, PRESENT & FUTURE (PROJECTED)



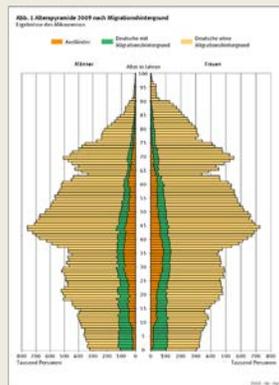
2.

GERMANY, 2009

Light orange = Native Germans

Dark orange = Foreigners

Green = Naturalized and second generation



3.

IMMIGRANT-ORIGIN YOUTH ELSEWHERE

- In the Netherlands, young people of immigrant origins account for almost a quarter (22.5%) of youth under the age of 21 (Statistics Netherlands, 2009).
- In France, about one-sixth (17%) of all children are growing up in immigrant homes.
- In the United Kingdom, the proportion of all children who come from immigrant families is also about one-sixth.
- In Spain in 2009, 24% of babies had at least one parent who was a foreigner.

4.

NOT ALL IMMIGRATIONS ARE THE SAME

- Immigration tends to be bimodal.
- High-status immigrants bring high levels of education and professional qualifications—Indians in G.B. and U.S.—and their children often excel in Western schools.
- Low-status immigrants bring low levels of education and take low-skill jobs. They often come from former colonies and are racially and/or religiously distinct—such as North Africans in France—and their children face difficulties in Western schools.

5.

LOW-STATUS IMMIGRATIONS AND THE SECOND GENERATION

- Two-thirds of immigrant-origin children in the Netherlands have non-Western origins; most are in families that come from former colonies or Morocco or Turkey.
- Sixty percent of such children in the U.S. have Latin American or Caribbean origins.
- Half of immigrant-origin children in France have African backgrounds.

6.

THE CHALLENGE OF INTEGRATION

- Meaning of “integration” in this context: Young people of minority origins are prepared to function in the work force in ways that are similar to those of well-trained natives.
- Without integration, the economic, social, and political vitality of Western societies are at risk, as mainstream populations shrink.

7.

DIMENSIONS OF EDUCATIONAL OUTCOMES

- School-taught skills, such as literacy: reasonably well measured by international surveys, such as PISA.
 - The basis for various international reports, with certain problems of inference as a consequence
- Credentials acquired: more difficult to measure because of differences across systems and variability of data.
 - But credentials are a critical dimension of outcomes because of their role in qualifying individuals in the labor market.
 - There is not a one-to-one correspondence between skills and credentials, in part because of “long route” taken by some in the second generation.

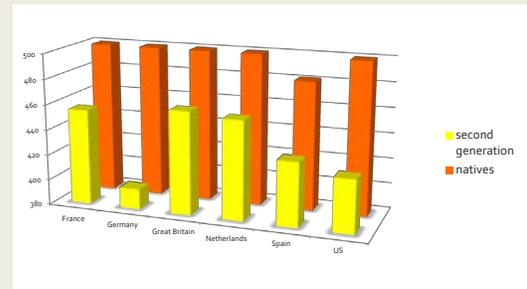
8.

ROUGH SIMILARITY OF OUTCOMES

- Consistent differences across societies on skills tests between native students and the children of low-wage immigrants
- Broad similarity across systems in credential differences
 - The British exception
- However, the U.S. does not come out well in these comparisons (despite its history as an immigration society); it is found at the bottom margin of the range of outcomes observed.

9.

PISA READING, 2000-2006



Note: Second generation is limited to children of parents without secondary school credentials

10.

CREDENTIALS OF NATIVE AND SECOND-GENERATION YOUTH IN SELECTED COUNTRIES

	no secondary credential	basic secondary credential	some post-secondary	university degree
Great Britain				
white British	6.9	57.3	9.2	26.6
Afro-Caribbean	7.8	67.4	10.6	14.2
Pakistanis/Bangladeshis	14.1	47.0	7.6	31.3
Netherlands				
native Dutch	9.5	10.0	14.7	65.8
Moroccans	29.1	15.5	24.3	31.1
United States				
males	-	-	-	-
Anglo natives	8.4	28.6	28.2	31.3
U.S.-born Mexicans	21.1	35.6	31.0	12.3
females	-	-	-	-
Anglos	6.0	21.0	33.2	39.8
U.S.-born Mexicans	16.0	29.7	37.0	17.4

11.

WHEREIN LIES THE OPPORTUNITY?

- Change = alteration to ethno-racial boundaries, not simply enhanced opportunities for some minority individuals
 - Example: mid-20th century assimilation of white ethnics
- My claim: Key is non-zero-sum mobility, which allows minorities to rise without threat to life chances of majority.
- Exodus of the baby boom from the labor market creates the prospect of non-zero-sum mobility during the next quarter century, into the 2030s.

12.

MASS ASSIMILATION, 1945-1970

- Young ethnics caught up socioeconomically to white Protestant counterparts.
 - Italians erased the education gap.
 - Quotas limiting Jewish presence in Ivy League were dropped.
- Marriage across ethnic and religious lines rose sharply.
- Ethnics accepted as white entered mainstream.
- Catholicism and Judaism became charter religions.

13.

A THEORY FOR SOLVING THE PUZZLE

- Non-zero-sum mobility
 - Rapid emergence of mass higher education
 - Transformations of occupational structure
- Socioeconomic mobility → Social proximity to mainstream whites
 - Post-war suburbanization
- Ideological change promoting moral parity of ethnics
 - Wartime journalism and post-war novels and films focus on military “melting pot” for whites

14.

SIMILARITIES AND DIFFERENCES BETWEEN PAST AND PRESENT

- Demographic changes brighten prospects for non-zero-sum mobility, but not on the scale of the post-war period.
- The present is a period of far greater inequality than were the post-war decades.
- The educational system has changed between then and now—e.g., greater inequality, decline in teacher “quality.”

15.

CORE WORKERS ON WALL STREET

		45 or older		31-44		30 or younger		Totals	
		2000	2005-09	2000	2005-09	2000	2005-09	2000	2005-09
whites	men	67.3%	63.7%	57.3%	52.4%	48.8%	45.8%	57.1%	54.4%
	women	19.7	19.4	20.5	16.3	22.7	18.9	21.0	17.7
blacks	men	2.2	2.3	3.3	3.8	3.1	3.7	3.0	3.3
	women	2.5	2.2	3.0	2.8	3.0	2.6	2.9	2.6
Latinos	men	1.8	2.1	3.3	4.2	4.3	4.8	3.2	3.7
	women	1.0	1.6	2.1	2.5	3.1	3.0	2.1	2.3
Asians	men	4.0	6.0	6.6	12.0	8.1	12.3	6.4	10.3
	women	0.8	1.9	3.2	4.9	4.5	7.0	3.0	4.4
Totals	men	75.8%	74.5%	71.0%	73.3%	65.7%	68.1%	70.6%	72.6%
	women	24.2	25.5	29.0	26.7	34.3	31.9	29.4	27.4

16.

PERCENT FOREIGN BORN AMONG WALL STREET CORE WORKERS

		45 or older		31-44		30 or younger		Totals	
		2000	2005-09	2000	2005-09	2000	2005-09	2000	2005-09
race/ethnicity									
whites		10.6	8.7	9.8	16.1	12.1	11.3	10.6	12.7
blacks		34.1	46.0	37.8	33.3	28.8	30.6	34.3	35.6
Latinos		38.9	44.9	34.3	34.9	26.7	30.1	31.7	35.4
Asians		91.2	85.2	84.5	80.3	65.3	61.8	77.6	76.1
gender									
men		16.1	17.3	20.2	28.2	20.5	21.6	19.2	23.6
women		18.3	21.0	21.4	33.4	24.0	29.4	21.7	29.0
Totals		16.6	18.3	20.6	29.6	21.7	24.1	20.0	25.1

17.

MEDIAN EARNINGS OF CORE WALL STREET WORKERS

		45 or older		31-44		30 or younger		Totals	
		2000	2005-09	2000	2005-09	2000	2005-09	2000	2005-09
whites	men	\$161,250	\$165,000	\$167,700	\$190,000	\$81,270	\$82,400	\$134,160	\$154,500
	women	107,070	115,350	102,200	104,940	67,080	72,100	90,200	100,000
blacks	men	83,850	100,000	92,880	93,000	51,600	58,710	70,950	90,000
	women	63,855	72,100	64,500	68,900	50,310	42,000	59,469	60,770
Latinos	men	77,400	102,000	96,750	103,000	64,500	82,500	77,400	99,910
	women	*	88,000	78,690	63,000	45,150	54,060	58,050	63,000
Asians	men	107,070	120,000	118,680	123,600	77,400	90,000	103,200	113,300
	women	*	101,760	90,300	115,320	74,820	77,380	82,560	100,000
Totals	men	\$149,350	\$154,500	\$154,800	\$154,500	\$77,400	\$82,400	\$129,000	\$137,000
	women	98,040	100,700	96,750	99,000	64,500	68,900	82,560	90,000

18.

Chapter 10: Ideas for Addressing the Health of Children of Immigrants in the National Children’s Study

Symposium presenters and discussants suggested ways that the National Children’s Study could capture data on the health of children of immigrants based on the research findings presented as well as their own expertise in conducting research on immigrants and health disparities. The concepts focused on three areas: conceptual issues, the study design and data collection process, and data or measures to be collected. In addition to the suggestions below, symposium participants noted that the National Children’s Study could consider providing opportunities for the scientific community to contribute expertise when addressing the challenges identified during the symposium. (Please note that suggestions for the Study are the opinions of the speakers, not the Study leaders.)

Conceptual Issues

- Consider ways to measure cohort changes, selective migration, and unhealthy assimilation to understand generational patterns and how survey responses may change over time.
- Include regular measurement of the social and physical environmental characteristics of the homes, neighborhoods, and communities of immigrant families to understand contextual influences over time.
- Collect data on the legal status of immigrants, and if not possible to do so, determine how this will affect the Study’s conclusions.
- Define health more broadly to include such outcomes as low education, teen pregnancy, and involvement in the juvenile justice system.
- Collect longitudinal physical and mental health information on mothers, fathers, and siblings to provide a fuller understanding of the home environment.
- Examine how stigma and marginalization affect health care-seeking behavior among immigrant parents and their children.

Study Design and Data Collection Process

- Consider developing community partnerships and obtaining supplementary samples of births to ensure that the National Children’s Study includes and adequately represents children of immigrant parents. It may be necessary to oversample immigrant populations that are small.
- Use the following methods to ensure confidentiality: maintain a Certificate of Confidentiality; ask indirect questions about legal status; use self-administered questionnaires; and use the two-card method, which can help statistically determine the number and characteristics of the undocumented.
- Consider direct assessments to measure child development. Study instruments should change with the age of the child. However, there should be consistent and regular measurement of health markers to allow for the examination of trajectories and development.
- Collect qualitative data to examine deeper levels of meaning and context.

- Develop practices to obtain valid data on legal status. Evidence shows that asking about legal status does not harm surveys, and questions on legal status can be handled in ways that minimize risks to participants that may help the National Children’s Study obtain valid data on legal status, including: asking about legal status indirectly, not asking about legal status at the first visit, providing assurances of confidentiality, and engaging with immigrant communities to build their trust in the Study.
- Repeat questions about citizenship and legal status over the course of the National Children’s Study as immigration statuses are complex and can change over time. Data about legal status will allow the Study to have a better understanding of the health of all children. Such knowledge will inform policy and help in evaluating health care reforms, and may lead to more effective prevention and treatment approaches.
- Collect data on siblings of the target child.
- Match the language and race of the interviewers with those of the families.
- Be careful in the use of language, such as avoiding offensive terms (e.g., “illegal aliens”) and assuring scale translations are reviewed carefully to account for culturally specific meanings of words or phrases.
- Evaluate how the media portray the undocumented population, which can affect participation in research and the ability of government studies to establish trust with participants. A supplemental study on images of immigrants in the media might inform National Children’s Study efforts to recruit immigrant parents and their children.

Data or Measures To Be Collected

- Collect data on *both parents* related to:
 - Country and place of birth
 - Generational cohort
 - Socioeconomic status in country of origin
 - Educational attainment and where education was attained
 - Health compared to citizens in country of origin
 - Reason for migration and the context of immigration
 - U.S. legal status and visa type
 - Length of residence in the United States
 - English-language proficiency
 - Immigration and migration stories
 - Maternal health and prenatal care before, during, and after migration

- Collect data related to *other aspects of immigration and health disparities*:
 - Multiracial identities (e.g., primary and secondary racial/ethnic identity)
 - Perceived discrimination
 - Cultural variables (“deep” cultural beliefs, values, and practices; the acculturation process; acculturative stress; and culturally specific understandings of health)
 - Resiliency
 - Self-concept as an immigrant
 - Ethnic identity
 - Self-esteem
 - Quality of the parent-child relationship
 - Parental stress, child stress, and family stress
 - Language environment of the home
 - Availability of linguistically accessible resources
 - Age at migration out of and into the United States
 - Track migrations within the United States
 - Social support networks
 - Relationships with the community
 - Composition of neighborhoods
 - Community cultures
- Collect data related to *family context*:
 - Location of all children in the family
 - Family structure appropriate to immigrant family and household patterns
 - Parenting by siblings, grandparents, and other extended family members
 - Children’s experience of separation from parents
 - Culturally competent measures of parent-child expectations, parenting beliefs and practices, home environments, and parent-child relationships
 - Family conflict and separation over time

Wrap-Up and Next Steps

Christine Bachrach, Ph.D.

Research Professor, Maryland Population Research Center, University of Maryland,
College Park, MD

Dr. Bachrach explained that a central question was how the National Children’s Study could ensure adequate representation of immigrant children and capture the essential determinants of their health trajectories. Children of immigrants compose a large and growing population, and their migration and incorporation experiences affect health and mortality. This group will drive racial and ethnic health disparities in the future. Currently, one in four children younger than age 8 has at least one foreign-born parent, but this ratio may be higher in the future.

Compared with children of native-born parents, birth outcomes and some indicators of physical health are better for children of immigrants. However, obesity rates are higher, and cognitive and socioemotional development scores are lower. The health advantages of immigrant children decline with time and generations. However, these differences are not monolithic—they vary over time, generation, countries of origin, race/ethnicity, and legal status.

The discussants suggested that the National Children’s Study:

- Take all necessary steps to ensure that the children of immigrants are represented, regardless of parents’ legal status. Strategies include probability sampling or oversampling, using birth records, community engagement, targeted strategies, following participants who move, and strong protection of confidentiality. Removing immigration questions was not recommended.
- Collect and update the following information for both parents and other family members: race and ethnicity, generational status, timing of migration, parental place of birth, visa status, language proficiency, where parents were educated, social status, and parents’ physical and mental health. Culturally competent measures of mental health should be used. Child development should be measured through direct observation.
- Capture information about the family context, including: nativity, legal status, and the location of all children in the family; measures of family structure appropriate to immigrant family and household patterns; parenting by siblings, grandparents, and other extended family members; children’s experience of separation from parents; culturally competent measures of parent-child expectations, parenting beliefs and practices, home environments, and parent-child relationships; and family conflict and separation over time. The Study could consider including other children in immigrant families as subjects.
- Capture information about the context of immigration, including discrimination, the availability of linguistically accessible resources, community cultures, social support networks, and the composition of neighborhoods. The Study also should track migrations within the United States.
- Examine important cultural variables, such as “deep” cultural beliefs, values, and practices; the acculturation process; and acculturative stress.
- Provide the scientific community the opportunity to contribute their expertise to solve the challenges the NCS must face if it is to understand the health of all America’s children.

- Collect information about legal status, which affects child health, assimilation, and policies. Evidence shows that asking about legal status does not harm surveys, and the question can be handled in ways that minimize risk to participants. The Study could ask about legal status indirectly, engage communities and build trust, not ask at the first visit, provide assurances of confidentiality, and offer protections. Data about legal status will allow the Study to better understand the health of all children, may affect policies and the evaluation of health care reform, and may lead to more effective prevention and treatment approaches.
- Invite a speaker to present findings and ideas from this symposium at the National Children’s Study Federal Advisory Committee meeting on January 24, 2012, or at other upcoming Study meetings. The Study also should provide opportunities for the scientific community to contribute expertise to address the challenges the symposium has identified.

The participants also discussed the following issues:

- Data should be collected on racial and ethnic attitudes of all children and parents. It is important to see how the majority community responds to increasing diversity.
- Immigration statuses are complex and can change over time.
- How the media portrays the undocumented population can affect participation in research and the ability of government studies to establish trust with participants. A supplemental study could examine images of immigrants in the media.
- The Study should be careful in its use of language, avoiding terms such as “illegal aliens.”
- The Study should include measures of parental stress, child stress, and family stress. The measures do not need to be specific to immigrants.
- Stress inventories have been developed to measure stress related to acculturation, such as intergenerational conflict. A more general stress instrument would miss factors that are specific to immigrants.
- The Study should examine how stigma and marginalization affect health care-seeking behavior.

WHAT DOES A STUDY LOOKING AT THE CAUSES OF HEALTH DIFFERENCES/TRAJECTORIES OF AMERICAN CHILDREN NEED TO DO IN ORDER TO:

- Ensure that immigrant children are adequately represented?
- Capture essential determinants of the health trajectories of immigrant children?

1.

WHY IS THIS IMPORTANT?

Jenny Van Hook:

Children of immigrants compose a large and growing population. Their unique migration and incorporation experiences are strongly related to health and mortality, so this group will almost certainly drive racial and ethnic health disparities in the future.

...and major impact on overall picture of health of U.S. children

2.

CHILDREN OF IMMIGRANTS AND THE FUTURE

- 25% of all children under age 8 have at least one foreign-born parent



- Percentage likely higher among the youngest children!
- Foreign born women 2x as likely to be of childbearing age

3.

HEALTH & IMMIGRANT CHILDREN

- Children of immigrants have different health trajectories than children born to native-born parents.
 - Better on birth outcomes and some indicators of physical health
 - Worse on obesity and cognitive and socioemotional development
 - Health advantages “unravel” with time and generations
- Differences not monolithic: they vary over time, generation, with country of origin, race/ethnicity, legal status

4.

SUGGESTIONS

- Take all necessary steps and develop innovative approaches to ensure that the children of immigrants are fully represented in the study, regardless of parental legal status
- How, given challenges?
 - Probability sampling (oversampling?)
 - Use birth records as basis for some part of sample
 - Community engagement
 - Targeted strategies for recruiting sampled eligibles
 - Follow movers
 - Strong protection of confidentiality
 - NOT an effective approach: Removing immigration questions from study

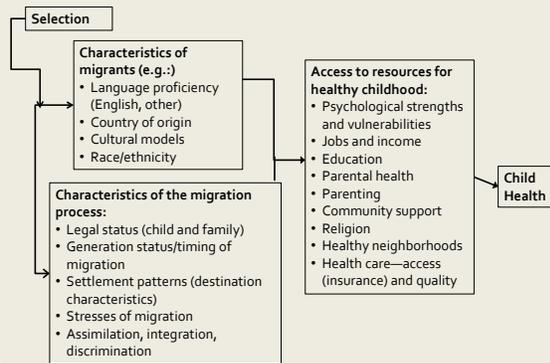
5.

WHAT IS NEEDED TO UNDERSTAND THE HEALTH TRAJECTORIES OF IMMIGRANT CHILDREN?

- Factors unique to the immigrant experience
- Factors uniquely shaping health trajectories among immigrant groups

6.

AN INTEGRATED BUT IMPERFECT MODEL



7.

CONTENT IDEAS

- Race and ethnicity
 - Use the OMB questions and supplement with primary identification—essential for comparability
- Generational status
 - Good question—Don’t change a thing!
- Timing of migration
 - Do not rely on American Community Survey question; might consider question tied to developmental stage? Clarify what you mean (in light of multiple movements across border)
- Parental place of birth
 - Country-level detail very important—much variation by country, even within same continent

8.

MORE CONTENT IDEAS

- Visa Status
 - Unanimous Yes (more later)
- Language Proficiency
 - Very important, need at family level at least

....

Above consistent with prior ideas

Also:

- Get information for both parents, other family members
- Update measures over time

9.

MORE CONTENT IDEAS

- Where parents were educated
- Social status, health relative to others in origin country, "migration story"
- Parental physical and mental health, over time
 - Culturally competent measures for mental health
- Measure child development through direct observation

10.

FAMILY CONTEXT

- Nativity, legal status, and location of all children in family
- Ensure family structure measures appropriate to immigrant family and household patterns
- Capture parenting by siblings, grandparents, other extended family members
- Children's experience of separation from parents
- Culturally competent measures of parent-child expectations, parenting beliefs and practices, home environments, parent-child relationships (e.g., parental authority)
- Family conflict and separation over time
- Include other children in family as study subjects?

11.

"CONTEXTS OF RECEPTION"

- Not just immigrants assimilating to new context, contexts integrating immigrants – Yolanda Padilla
 - Discrimination
 - Availability of linguistically accessible resources
 - Community cultures
 - Social support networks?
 - Racial/ethnic/immigrant composition of neighborhoods (ethnic enclaves)
- Contextual factors affecting child health
- Track mobility over course of study (returns to origin country, movement within U.S.)
- Individual's perceived "fit" with community

12.

CULTURAL VARIABLES

- Study "deep" cultural beliefs, values, practices that influence families, child development, and health
 - Ethnic/immigrant identity and pride; family traditionalism, conceptions of child development and behavior, gender norms, parent-child relations, parenting beliefs
 - Interpretation of health and well-being; food preferences
- Study the acculturation process, what affects it, and different patterns (resistance, biculturalism)
- "Acculturative stress" (captured previously?)

13.

VISA STATUS

The Elephant in the Room:

- Why it's crucial
- Can you ask it?

14.

WHY IS LEGAL STATUS CRUCIAL?

- High proportions illegal among foreign born:
 - Over half of Mexicans, up to 77% of C/S Americans illegal
 - “Huge shares of births will be to out-of-status parents”
 - One in three children of Latino origin live with an undocumented parent
- Legal status directly affects many factors affecting child health (visa stress, deportation, access to health insurance and services; access to jobs and income, family stability, “habits of illegality” [Jasso])

15.

WHY IS LEGAL STATUS CRUCIAL?

- This is the group of immigrant children most “at risk”
- Omitting legal status will result in incorrect answers (omitted variable bias)
- Assimilation occurs differently for people in different statuses
- Necessary for informing policy (more later)

16.

CAN WE ASK LEGAL STATUS?

- A story about sex
- 10 years ago, answer less clear; now a firm scientific base to support “YES”
- Evidence from government (SIPP) and non-government surveys (LAFANS, CHIS, NIS) that asking question does not harm survey; refusal rates to questions similar to nonsensitive questions
- Can handle in ways that minimize risk to survey and participants

17.

ASKING LEGAL STATUS

- Do not ask undocumented directly; identify as unspecified “other” (see SIPP, LAFANS)
 - Two-card method: good for aggregate measures but no individual data (does not solve problem for NCS?)
- Engage communities and build trust around this issue
- “Don’t have to ask at first visit,” but must update over time
- Assurances of confidentiality
- Protections behind the assurances
 - Restricted data
 - Identity firewalls
 - Certificate of confidentiality
 - Obtain status as statistical unit of federal government?

18.

VALUE TO THE NATIONAL CHILDREN’S STUDY OF ALL THE ABOVE SUGGESTIONS

1. Getting the science right:
 - a. Understand health of *all* American children
 - b. Understanding the factors that produce different levels and trajectories of health among different groups of children
2. Policy payoffs:
 - a. Policies affecting investment in children
 - b. Policies affecting immigration and legal status
 - c. Policies affecting integration of immigrants
 - d. Evaluating health care reform
3. Effective prevention and treatment approaches

19.

NEXT STEPS

- Dr. Maddox: “The discussion cannot stop at this meeting.”*
- Next NCS Advisory Board meeting January 24, 2012
 - The NCS should invite a key speaker at this conference to the Advisory Board to present a summary of findings and recommendations.
 - Provide the scientific community the opportunity to contribute their expertise to solve the challenges the NCS must face if it is to understand the health of all America’s children (NCS form committee??)

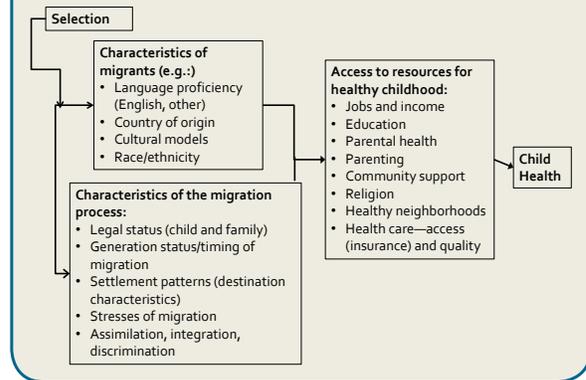
20.

DISCUSSION

- What did I miss? Get wrong?
- Racial ethnic attitudes asked of all children and families
- There are semi-legal statuses—keep in mind
- Status changes over time
- Media context—impact on participation (and kids)—language used in media?
- Use appropriate language in study
- Stress as intervening mechanism—need measures—child, parent, family
- Stigma and marginalization

21.

AN INTEGRATED BUT IMPERFECT MODEL



22.

Chapter 11: Symposium Summary

The National Children's Study Symposium, *Health Disparities Among Children of Immigrants*, was convened to shed light on the health issues facing immigrant children and to help ensure that the Study represents this population and their unique concerns. The symposium brought together more than 100 researchers, program administrators, agency staff, and health advocates to discuss current health research related to immigrants and immigrant children in the United States and to suggest strategies for their inclusion in the National Children's Study.

Research findings were presented on how social and economic factors (e.g., socioeconomic status, visa issues, legal status, acculturation, and English-language proficiency) contribute to health outcomes among immigrant children, as well as which health issues are of concern to specific immigrant groups. Presenters also highlighted how the experience of immigration varies across specific immigrant groups (e.g., immigrants from different parts of Asia, Africa, the Caribbean, and parts of Latin America) and how these differential experiences may lead to disparities in the types of health issues encountered by immigrants and their children in the United States. In addition, presenters and participants discussed methodological issues related to immigrant survey participation, including best practices for measuring health outcomes in diverse immigrant communities and methods to enhance immigrant recruitment and retention in research studies.

The researchers presenting at the symposium also noted several key gaps in immigrant research. These include gaps in our knowledge of specific immigrant groups and their communities, as well as gaps related to methodological issues in conducting research with immigrants. In terms of knowledge, more needs to be learned about how the health of all family members is related to a child's health as well as how immigrant generational patterns relate to health, how the marginalization of immigration affects health-seeking behaviors, and how legal status changes over time and its implication for health and health research. In terms of methodological issues, gaps noted by researchers included how best to gather information on legal status, whether to oversample to ensure adequate coverage of immigrant children, and how to assure confidentiality to increase immigrants' willingness to answer questions.

This symposium represents an important step toward ensuring the adequate representation of immigrant children in the National Children's Study. Moving forward, the challenge for the Study staff will be to consider carefully the information presented and the issues noted as they design and implement the Study so it includes the children of immigrants. These actions will contribute to making the National Children's Study a valuable resource in addressing the health and well-being of all children in the United States, including those born to immigrants.

Appendix: Symposium Participants

Presenters and Discussants (In Alphabetical Order)

Richard Alba, Ph.D., City University of New York Graduate Center

Larissa Avilés-Santa, M.D., M.P.H., National Heart, Lung, and Blood Institute (NHLBI), National Institutes of Health (NIH), U.S. Department of Health and Human Services (HHS)

Christine A. Bachrach, Ph.D., University of Maryland, College Park

Glorisa Canino, Ph.D., University of Puerto Rico Medical School

Randy Capps, Ph.D., Migration Policy Institute

Felipe Gonzalez Castro, Ph.D., M.S.W., University of Texas at El Paso

Rebecca Clark, Ph.D., National Institute of Child Health and Human Development (NICHD), NIH, HHS

Irma T. Elo, Ph.D., M.P.A., University of Pennsylvania

Jennifer Glick, Ph.D., Arizona State University

Steven Hirschfeld, M.D., Ph.D., Captain, U.S. Public Health Service, NICHD, NIH, HHS

Charles Hirschman, Ph.D., University of Washington

Margot Jackson, Ph.D., Brown University

Guillermina Jasso, Ph.D., New York University

Yeshashwork Kibour, Ph.D., Argosy University

Nancy S. Landale, Ph.D., Pennsylvania State University

Shana Alex Lavarreda, Ph.D., M.P.P., University of California, Los Angeles

Richard M. Lee, Ph.D., University of Minnesota

Maria Lopez-Class, Ph.D., M.P.H., NICHD, NIH, HHS

Yvonne T. Maddox, Ph.D., NICHD, NIH, HHS

Douglas S. Massey, Ph.D., Princeton University

Yolanda C. Padilla, Ph.D., University of Texas at Austin

Michael Rendall, Ph.D., University of Maryland, College Park

Elena V. Rios, M.D., M.P.H., National Hispanic Medical Association and National Hispanic Health Foundation

Lisa Smith Roney, M.P.A., Westat, Inc.

Yonette Thomas, Ph.D., Howard University

Jennifer Van Hook, Ph.D., Pennsylvania State University

National Children's Study Program Office Attendees

Marion J. Balsam, M.D.

Deb Blackshear

Ruth A. Brenner, M.D., M.P.H.

Jessica E. Graber, Ph.D.

Carl V. Hill, Ph.D., M.P.H.

Nancy Parfitt Hondros

Jennifer Kwan, Ph.D.

Colleen O. Lee, M.S.

Eric Lorenzo, Ph.D.

John Lumpkin, M.S., M.B.A.*

John Moye, Jr., M.D.

Christina H. Park, Ph.D., M.H.S.

Gitanjali S. Taneja, Ph.D.*

Kate Winseck, M.S.W.*

NICHD Division of Special Populations Representatives

Regina Smith James, M.D.

Anthony A. René, Ph.D.

Della Brown White, Ph.D.

National Children's Study Interagency Coordinating Committee Members

Sally P. Darney, Ph.D., Office of Research and Development (ORD), U.S. Environmental Protection Agency (EPA)*

Michael P. Firestone, Ph.D., Office of Children's Health Protection, EPA*

James J. Quackenboss, M.S., National Exposure Research Laboratory, EPA*

Study Center Representatives

Onesky Aupont, M.D., M.P.H., Ph.D., University of Massachusetts Study Center

Tina Cheng, M.D., M.P.H., Johns Hopkins University Study Center

Debra Cherry, M.D., M.S., University of Texas Southwestern Medical Center Study Center

Lisa Daniels, University of Minnesota Study Center*

Deborah W. Davis, Ph.D., University of Louisville Study Center

Nancy Erbstein, Ph.D., Northern California Center for the National Children's Study*

Nancy Fahrenwald, Ph.D., R.N., South Dakota State University Study Center*

Janice Gilliland, Ph.D., M.S.P.H., University of Utah Study Center*

Suzanne Hughes, Ph.D., Southern and Central California Study Center*

Ana Jacobs, M.S.Ed., Maine Study Center

Claudia A. Kozinetz, Ph.D., M.P.H., Baylor College of Medicine Study Center

Liz Lacy, Gateway Study Center*

Candi LeDuc, Gateway Study Center*

Stephanie McClure, Ph.D., Emory Battelle Morehouse Chattanooga Study Center

Elizabeth C. McFarlane, Ph.D., M.P.H., Hawaii Study Center

Gwendolyn S. Norman, R.N., B.S.N., M.P.H., Michigan Alliance for the National Children's Study

Tyra M. Pendergrass, M.P.H., Connecticut Study Center at Yale University*

Jeimy Rosado, New York-Northern New Jersey National Children's Study Center

Marie-Noel Sandoval, M.P.H., Wisconsin Study Center, Waukesha County Vanguard Center

Rizwan Z. Shah, M.D., FAAP, University of Iowa Study Center

Pamela Silberman, M.A., University of Utah Study Center

Nabetse Tapia, Pacific Northwest Center for the National Children's Study*

Vetta Thompson Sanders, Ph.D., M.A., Gateway Study Center*

Mayra Vargas-Rivera, M.D., University of Miami Study Center*

Nikki Weinstein, M.S.W., Gateway Study Center*

Carol Ewan Whyte, Maine Study Center*

Ada Wilkinson-Lee, Ph.D., M.S., Arizona Study Center

Other Attendees

Yadira Virginia Carrera Aguilar, M.D., M.P.H., Minister of Health Panamá*

Sonia Arteaga, Ph.D., NHLBI, NIH, HHS*

Ligia Artilles, National Institute on Minority Health and Health Disparities (NIMHD), NIH, HHS

Debbie Barrington, Ph.D., M.P.H., NIMHD, NIH, HHS

Donna Marie Behrens, M.P.H., George Washington University School of Public Health and Health Services

John Billy, Ph.D., Battelle Memorial Institute

Regina Bures, Ph.D., NICHD, NIH, HHS

Dorothy M. Castille, Ph.D., NIMHD, NIH, HHS

Ajay Chaudry, Ph.D., Urban Institute

Gelena Constantine, ORD, EPA*

Chris Crowell, Battelle Memorial Institute *

Lisa Cubbins, Ph.D., Battelle Memorial Institute

Muntu Davis, M.D., Alameda County Public Health Department*

Frances J. Dunston, M.D., M.P.H., Morehouse School of Medicine*

Mark Edberg, Ph.D., George Washington University

Jorge Gomez, M.D., Ph.D., National Cancer Institute (NCI), NIH, HHS

Linda W. Gordon, Ph.D., Citizenship and Immigration Services, U.S. Department of Homeland Security (retired)

Abigail Alexander Haydon, Ph.D., NICHD, NIH, HHS

Gwendolyn Hudson, Ph.D., M.P.H., EPA*

Kaleb Johnson, District of Columbia Department of Health*

Lisa Kaeser, J.D., NICHD, NIH, HHS

Rosalind King, Ph.D., NICHD, NIH, HHS

Susan Lin, M.S., Health Resources and Services Administration, HHS

Ivelisse Martinez-Beck, Ph.D., Administration for Children and Families (ACF), HHS*

Lynn Morin, National Institute on Alcohol Abuse and Alcoholism, NIH, HHS

Lynn Olson, Ph.D., American Academy of Pediatrics

Jennifer Park, Ph.D., Office of Management and Budget, Executive Office of the President

Devon Payne-Sturges, Dr.P.H., ORD, EPA*

Krista M. Perreira, Ph.D., University of North Carolina at Chapel Hill

Olga Acosta Price, Ph.D., George Washington University

Angela M. Prior, Ph.D., Epidemiology Solutions, LLC*

Joan Y. Reede, M.D., M.P.H., M.B.A., Harvard Medical School

Ann C. Rivera, Ph.D., ACF, HHS

Silvia Inez Salazar, NCI, NIH, HHS

Hina Shah, NORC at the University of Chicago

Susan Marie Viet, Ph.D., Westat, Inc.*

Roy Wade, M.D., Ph.D., M.P.H., University of Pennsylvania*

Michael White, Ph.D., Brown University*

Hinda Zlotnik, Ph.D., National Institute of General Medical Sciences, NIH, HHS

**Participated by video conference*

To learn more about the National Children's Study:
Web: <http://www.nationalchildrensstudy.gov>
Email: ContactNCS@mail.nih.gov
Phone: 1-877-865-2619

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