



Latino Young Children's Weight Changes: Examination of Individual, Family and School Factors

**Claudia Galindo, Judith Shinogle,
and Adele Kirk**

University of Maryland, Baltimore County – MIPAR

**Presented at the Salud America! Scientific Summit, San Antonio, September
2009**



Purpose

To describe obesity, physical activity and eating habits of Latino young children

To study the individual, family and school determinants.



SPECIFIC AIMS



- Describe the Latino population changes in key variables **over time** (kindergarten-fifth grade).
- Examine **variation** among Latino subgroups in key variables.
- Identify individual, family, and school factors that can explain differences across Latino subgroups.



Background



- The **obesity epidemic** has progressed especially for Latino students.
 - Importance of **poverty** and its effect on health outcomes.
 - **Diversity** of the Latino population.
 - **Immigrant paradox**: Conflicting theoretical frames of discussion empirical evidence.
-



Data: ECLS-K



Early Childhood Longitudinal Study Kindergarten Class of 1998-99

- **A representative sample of 21,000 students and 1,000 schools.**
 - **Information gathered at multiple times from 1998-2007.**
-



Sample Description



Race-Ethnicity / National Origin	
White, not Latino	11,659
Hispanic, any race	4,006
Mexican origin	1,715
Cuban origin	97
Puerto Rican origin	243
Central American origin	270
South American origin	147
Other Hispanic origin	182
National Origin unidentified	1,352
Black, not Latino	3,205
Asian	1,351
Other Race	1,136
Total	21,357

Based on kindergarten cohort



Key Dependent Variables



Weight: BMI, weight classification (normal, overweight, obese).

Physical activity: active/not active (dichotomous); frequency of activity (count data).

Eating habits: vegetable consumption, fruit consumption, sweet and sugary drink (count data).



Latino Subgroups



- **Country of origins:** Mexican, Cuban, South American, Central American, Puerto Rican, and Other
 - **Generational status:** first, second, and third +
 - **Socioeconomic status:** quintiles
 - **Home language:** only English, only Spanish, mostly Spanish, and mostly English
-



School measures



- **PE time, recess time, lunch time**
 - **Resources and facilities: gym, playground, school nurse**
 - **Safety: (unkempt areas, gangs, traffic, violent crime, drugs, vacancy).**
 - **Student composition: race/ethnic; poverty, immigration, language**
 - **Other controls**
-



Family characteristics



- **Eating together: breakfast & dinner**
- **TV rules: hours and how late**
- **Sport activities: whole family, individual child**
- **Neighborhood safety (safe to play outside, selling/using drugs, burglary/robbery, violent crime)**
- **Other controls**



Analytical Plan



- 1) Basic multivariate analyses:** OLS; generalized estimating equations; ordered logit; logit / probit; poisson /negative binomial.
 - 2) Multilevel regression models:** M. linear; M. logistic regression; and M. poisson.
 - 3) Change overtime:** fixed/random effects; logit/probit.
 - 4) Decomposition models:** linear and nonlinear; poisson type.
-



Dissemination Plan



Publications to communicate findings to colleagues, members of the community, and policy makers.

- **Advisory panel.**
 - **Presentations at national conferences and papers in academic journals.**
 - **Policy briefs through the Maryland Institute for Policy Analysis and Research website.**
 - **A forum to release the briefs with researchers, and local / national policymakers.**
-



Significance of Project



- **Focus on the most predominant minority group in the U.S while considering its diversity.**
 - **Provides information to develop policies and interventions targeted to young Latino children.**
 - **Contributes to reducing health inequalities by identifying mechanisms and policy levers that could decrease the gaps in health outcomes between Latino descendants and Whites.**
-



Gracias!

