Teen pregnancy and neighborhood norms: Connecting ethnic isolation and teen birth rates among Massachusetts Latinas

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Presenter Disclosures

Sarah Rustan

(1) The following personal financial relationships with commercial interests relevant to this presentation existed during the past 12 months:

“No relationships to disclose”
Latinas and Teen Birth

- Latinas demonstrate high teen birth rates (MDPH 2012)
  - Latina teens aged 15-19
  - 49 per 1,000 Latina teens in Massachusetts
  - 44% decrease since 2000, but still higher than other racial/ethnic groups
  - Puerto Ricans, the largest Latino group in the Northeast, have particularly high teen birth rates
- Contributing cultural norms
  - Significance of motherhood (Torres & Cernada 2003)
  - Role of religion (Villarruel 1998)
Neighborhood Context

- Ethnic concentration: The proportion of each census tract that is Latino
  - Ethnically concentrated neighborhoods linked to health outcomes, both positive and negative (Baker & Hellerstedt 2006)
- Ethnic isolation: The likelihood that minority members only regularly interact with one another is measured using Massey and Denton’s isolation index
  - Cultural health behavior norms more likely to persist in ethnically isolated neighborhoods (Macintyre et al. 2002; Roy et al. 2013)
Research Hypotheses

▸ Hypothesis 1: Latina teen birth rates will be higher in areas where the Latino population experiences higher rates of ethnic concentration or ethnic isolation.

▸ Hypothesis 2: There will be a stronger relationship between ethnic isolation and increases in Latina teen birth rates than between ethnic concentration and Latina teen birth rates.
Geography

- Massachusetts focus: Boston, Lawrence, Worcester, Springfield
Research Methods

- Birth Certificate Data from the Massachusetts Department of Public Health
  - Teen birth rate
  - Latina teen birth rate
- U.S. Census Data from the 2010 Decennial Census
  - Ethnic concentration
  - Ethnic isolation
- Primary data from *Por Ahí Dicen*
  - Puerto Rican mothers in Springfield, MA
  - Preliminary data, $N = 170$
Ethnic Concentration and Latina Teen Birth Rates

Simple Regression Results

- Ethnic concentration significantly predicted Latina teen birth rates, $\beta = 148.3$, $p < .001$

- Ethnic concentration explained a significant proportion of the variance in Latina teen birth rates, $R^2 = .584$
Ethnic Isolation and Latina Teen Birth Rates

Simple Regression Results

▸ Ethnic isolation significantly predicted Latina teen birth rates, \( \beta = 133.9, p < .05 \)

▸ Ethnic isolation explained a significant proportion of the variance in Latina teen birth rates, \( R^2 = .127 \)

▸ Ethnic concentration explained more variance in Latina teen birth rates than ethnic isolation
Preliminary Results from *Por Ahí Dicen*

- High incidence of teen pregnancy among respondents’ families
  - 67% of respondents were teen mothers
  - 66% were born to teen mothers
- Respondents tended to have family-centric social networks
  - 34% of respondents listed only family members in their primary social network
Discussion

- There are statistically significant relationships with both ethnic concentration and ethnic isolation and increased teen birth rates among Latinas in Massachusetts
  - Ethnic concentration is a better predictor of Latina teen birth rates than ethnic isolation
- Among Latinos, the strong focus on family known as *familismo* may exacerbate the effects of ethnic concentration by further limiting exposure to extra-familial behavioral health norms
- Teen pregnancy prevention programs need to address local cultural and contextual factors that influence behavioral health norms at multiple levels
  - Individual, familial, neighborhood
Next Steps

▪ Examine relationship at a smaller geographic area
  ▪ Census tracts
▪ Incorporate other tract-level predictors from census
  ▪ E.g. % high school graduate or less, % poverty
▪ Analyze final data from *Por Ahí Dicen*
Bibliography


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