Migration, living arrangements and poverty among Puerto Rican-origin children:
Puerto Rico and the United States
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Abstract (150 words)

Recent linkages between migration experiences, living arrangements and poverty are poorly understood for Puerto Rican-origin children. Despite very high poverty rates (58 percent for island-resident children and 32 percent for U.S.-resident Puerto Rican children), high levels of migration between the United States and Puerto Rico and high levels of single parenthood, Puerto Rican-origin children are often excluded from research on children, families, poverty and immigrants (Mayol-Garcia and Burd 2018). This research will use data on Puerto Rican-origin children ages 0-17 living in Puerto Rico and the United States to examine the ties among poverty, family migration and living arrangements. Family migration will combine information on place of birth, residence one year ago and current place of residence. Logistic regression models predicting household poverty will be run using American Community Survey and Puerto Rico Community Survey 5-year 2012-2016 estimates. The findings will be evaluated regarding prior research.

Extended Abstract

Statement of the problem:
Living in poverty as a child can greatly restrict the resources available to children while growing up. Puerto Rican-origin children residing in Puerto Rico and in the United States live in poverty at higher rates than other groups. For example, in 2015, 58 percent of Puerto Rican-origin children in Puerto Rico lived below the poverty threshold, Puerto Rican-origin children in the United States had a poverty rate of 32 percent while the U.S. national child poverty rate was 20 percent (Mayol-Garcia and Burd 2018; Semega, Fontenot and Kollar 2017). These statistics alone identify Puerto Rican children as a highly vulnerable group. Yet, Puerto Rican children experience a double exclusion in social science research.

First, Puerto Ricans living on the island are excluded from studies and reports on poverty, children and their families in the United States because the island is a U.S. territory, which does not receive most population surveys as states do. [2,3] Who children live (or do not live) with can tell us important things about their lives, opportunities and struggles. Numerous studies show that family arrangements in which a parent is absent, such as through divorce or single parenting, are linked to negative child outcomes (Amato 2005). Many of these living arrangements co-occur with other sources of disadvantage. For example, single parents are more likely than married parents to have low education, low income, to be younger and to be part of an ethnic/racial minority. By 2015, Puerto Rican children became as likely to live with a single mother (40 percent) as with two married parents (39 percent),

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[2] The U.S. Census Bureau relies on data from the Current Population Survey to derive official national level poverty estimates and national annual family estimates. This survey is not conducted in Puerto Rico or any other U.S. territories.

[3] Puerto Rican-origin people living in the 50 states and D.C. are included in the national U.S. estimates.

which may also be associated with limited family resources (Mayol-Garcia and Burd 2018).[4] Thus, the Puerto Rican origin child population may be considered a highly vulnerable group that would benefit greatly from research on the distribution, characteristics and dynamics of poverty.

Second, Puerto Rican-origin children are often left out of research on immigrants and their families because Puerto Ricans are not foreign born. All people born on the island of Puerto Rico, a U.S. territory since 1898, are U.S. citizens by birth. Yet, Puerto Ricans have highly mobile lives moving back and forth between the U.S. mainland and the island of Puerto Rico, to the extent that one researcher has called Puerto Ricans a "Nation on the Move" (Duany 2002). Apart from legal status, the experiences of Puerto Ricans moving to and from the U.S. is quite similar to those of other immigrant groups. Like other immigrants, many Puerto Ricans also move to the United States for economic opportunities and experience culture shock.

One study that used 1990 Census data points out that Puerto Rican immigrants to the U.S. mainland show lower child poverty rates, in fact corroborating that migration may benefit these families (Oropesa and Landale 2000). In contrast, return migration to the island was associated with higher poverty rates for children. This is the only study to date that has applied an origin-destination approach to study the intersection of family, migration and poverty among Puerto Rican children. However, since 1990 drastic changes in the distribution and size of the Puerto Rican population have occurred, particularly after the economic crisis of the late 2000s. Now over half of the Puerto Rican-origin population live on the U.S. mainland (Hugo Lopez and Velasco 2011). Furthermore, the Puerto Rican-origin child population on the island decreased 27 percent between 2006 and 2015, while the Puerto Rican-origin child population in the United States increased by 28 percent (Mayol-Garcia and Burd 2018). This stems from differences in migration and fertility patterns. As a result, recent linkages between family migration experiences and poverty are poorly understood for Puerto Rican children.

Additionally, the devastation produced by the 2017 hurricanes Irma and Maria continues to change the Puerto Rican population. This study will provide a baseline on the impact that migration and living arrangements have on Puerto Rican-origin children's poverty status, against which future changes can be measured.

This study will address several gaps in the literature. Specifically, this study will provide updated information on the socioeconomic wellbeing of Puerto Rican-origin children. This study applies a destination-origin framework by using information from children living in Puerto Rico and children living in the U.S. mainland. In particular, this research will examine the linkages between poverty, family migration and living arrangements among Puerto Rican-origin children.

Research Questions:

1) How is poverty status related to Puerto Rican-origin children's living arrangements and family migration experiences?

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[4] Estimates of children with two married parents and a single mother were not statistically different from each other.

2) Do these connections differ between Puerto Rican-origin children living in the United States and Puerto Rico?

Data and Methods:

I will use the American Community Survey (ACS) and Puerto Rico Community Survey (PRCS) 5-year estimates for 2012-2016, which provide nationally representative demographic, social and economic information about the U.S. and P.R. resident populations. These data also include information on place of birth, current place of residence and residence one year ago. Children ages 0-17 who are the child of the householder will be the main focus of this paper. These youth are categorized as Puerto Rican based on responses to the detailed survey question asking whether respondents are Hispanic or Latino. They may be of any race. All further mentions of children in this paper are Puerto Rican-origin children of the householder under the age of 18.

First, descriptive statistics of the Puerto Rican-origin child population and their families will be provided and discussed separately by place of residence. Second, the results of several logistic regression models predicting household poverty status by considering different family and householder characteristics using Puerto Rico data will be shown. This will facilitate the analysis of characteristics linked to child poverty in Puerto Rico, including family migration experiences and living arrangements. Third, these same models will be run for the child population residing in the United States and will allow for a more detailed analysis of the poverty for Puerto Rican-origin children in this country. Fourth, logistic regression models predicting child poverty will be run on a full, pooled sample of Puerto Rican-origin children residing in both the United States and Puerto Rico, so a more comprehensive picture can be built about Puerto Rican-origin children's socioeconomic wellbeing. Sensitivity analyses will be conducted when children live with two parents to test whether the best model fit is achieved when using householder parental information or information from whichever parent has the highest level of education.

The dependent variable in all models will be **household poverty status** consisting of a dummy variable which identifies whether children live in households up to 125 percent above the poverty threshold, or 125 percent of the poverty threshold and higher. I use 125 percent of the poverty line to create the categories since reports and studies on poverty note that households with proximity to the poverty line are substantively similar to those in poverty (Bishaw and Benson 2017).

Two measures of living arrangements will be included in the analysis. Children's **living arrangements** will be classified as children living with two married parents, children living with a cohabiting parent, children living with their mother only and children living with their father only. For reasons stated in the limitations part of this study, children who do not live with at least one parent and children who are not the child of the householder are excluded from the analysis. The parent's cohabiting partner may or may not be the child's second parent; for simplification purposes we label this group of children as living with cohabiting parents. Some children living with their mother only or father only may be living with a parent married to an absent spouse who is stationed overseas with the armed forces, or is incarcerated, for example.

An indicator of the **presence of grandparents** in the household will also be included in the analysis. Children who live with householders whose parents are also present, will be identified as living with a

grandparent. Living arrangements measures of grandparents overlap with the living arrangements measures of parents described above. So, for example, a child living with a grandparent may be living with two married parents, two cohabiting parents, mother only or father only.

Regarding the migration portion of this paper, we will combine information on place of birth and residence one year ago (ROYA) of the householder and children of the householder to develop a **family migration** variable with five categories. We restrict this study to children of the householder because we can capture migration information of at least one parent and their child. Zero-year-old children are excluded because they do not have values for their ROYA.

In **Puerto Rico** we identify five groups of children:

1. P.R. Nonmigrants: Families where the child and the householder were born and lived one year ago in P.R.

2. P.R. Long-term immigrants: Families where the child and the householder were born in the U.S. and lived one year ago in P.R.

3. P.R. Recent immigrants: Families where the child or the householder lived one year ago in U.S. and they were born in the U.S.

4. P.R. Return migrants: Families where the child or the householder lived one year ago in U.S. and they were born in P.R.

5. Abroad: Families where the child or the householder were born abroad (other than P.R. or the U.S.) or lived abroad one year ago.

In the **United States** we also identify five groups of children:

1. U.S. Nonmigrants: Families where the child and the householder were born and lived one year ago in the United States.

2. U.S. Long-term immigrants: Families where the child and the householder were born in the P.R. and lived one year ago in the United States.

3. U.S. Recent immigrants: Families where the child or the householder lived one year ago in P.R. and they were born in P.R.

4. U.S. Return migrants: Families where the child or the householder lived one year ago in P.R. and they were born in the U.S.

5. Abroad: Families where the child or the householder were born abroad (other than P.R. or the U.S.) or lived abroad one year ago.

Other variables that will be included in the analysis are **householder characteristics** (educational attainment and participation in the labor force) and **interactions**. I will rely on information from one parent only; specifically, the householder will be the reference parent. Models that are limited to one place of residence will include evaluations of interactions between family migration and living arrangements. Models that include a pooled sample of children in Puerto Rico and the United States will include interactions between place of residence and family migration first, and place of residence and living arrangements second.

This research is limited in several ways. Due to the complicated nature of the family migration measure, this study excludes children in subfamilies (not children of the householder), children with no parents present and children living in group quarters. These children may be particularly vulnerable due to more complex or unstable living arrangements, and would greatly benefit from future research on them. U.S. Census Bureau data provide information at the time of interview but not at the time of migration. For example, we know the poverty status of households after they have migrated, but not when they decided to move. Potentially, poverty could have been a factor in motivating migration. Selection into migration may play a role but due to the cross sectional nature of the data, cannot be fully accounted

for or measured. Also, poverty status is updated annually for changes in cost of living using the Consumer Price Index, but does not take into account regional or state differences (Bishaw and Benson 2017).

Expected results:
This project is a first step toward assessing the relationship between current migration trends and living arrangements and Puerto Rican-origin children's poverty rates for both those who live in Puerto Rico and those in the U.S. mainland. Methodologically speaking, this research benefits from using nationally representative data for the sending and receiving populations.

Some expected results for this study are discussed here. Based on previous research, family migration to the United States may be associated with a lower likelihood of living in poverty, particularly long-term family migration. Similarly, I expect family migration to Puerto Rico will be associated with a higher likelihood of living in poverty, particularly recent family migration to the island. Single parenthood (mother or father) is expected to be associated with a higher likelihood of living in poverty, while the presence of grandparents in the household will be associated with a lower likelihood of living in poverty. There will be significant interactions between poverty, family migration and living arrangements in PR and the US.

Next steps include using ACS 2018 data, expected to become available in December 2019, to compare to pre-hurricane Maria levels for understanding and measuring the impact that the deadly hurricane season of 2017 had and continues to have on the lives of the Puerto Rican population.

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