The schooling of migrant children across contexts: US- and Mexican-born children of Immigrants in the United States and Mexico

I. Introduction:

The study of migration and children's well-being is often focused on the children left behind in the receiving context or the impact of parents' migration on children born in the community of settlement. Yet, even in the case of long-term flows of migration such as those between the United States and Mexico, there is limited understanding of the variations in outcomes among children who migrate. "Despite the large-scale and sustained migration flows between Mexico and the United States in the 20th century, little is known about children's health across different types of Mexican families that have a range of binational experiences." (Donato & Duncan, 2011: 714). This dearth of knowledge about the fate of children of migrants in Mexico is particularly notable for one of the fastest growing groups of children: US born children living in Mexico. By 2010, foreign born residents in Mexico represented around 1% of the population. This represented a tripling in the size of the foreign born population in 20 years. Over half of the foreign born residents in Mexico in 2010 were children under age 15 (INEGI, 2012). Research on this subgroup is timely given the multiple factors in the US—the recession, the increasingly hostile immigration laws being passed at the state level—that are likely to lead to an increase in this population (Zentano, 2011). These children occupy a unique niche in the transnational realm (Orellana, et al., 2001; Zúniga, & Hamann, 2009) because they are migrants themselves and yet, more often than not, are living with family members who are natives to the children's country of settlement. This turns the more traditional intergenerational pattern of migration and the attendant expectations for incorporation among immigrant youth somewhat on its head.

This paper compares school enrollment patterns among this growing group of children, the US born children in Mexico, and compares these patterns to those observed among Mexican born children in Mexico; we also compare the patterns of school enrollment among US born children of Mexican immigrants and Mexican born children of Mexican immigrants in the United States. We might expect US born children in Mexico to fare similarly to other Mexican children of returning migrants. It seems likely that these two groups of children face similar constraints imposed by having family members absent but they may also reap similar rewards in the form of remittances from internationally migrating relatives. Alternatively, we might expect there to be more barriers to school enrollment for US children in Mexico than their Mexican born counterparts in Mexico regardless of the migration status of their families in general. Families can face difficulties navigating school enrollment procedures for their foreign born children in Mexico (Medina, 2012). If this is the case, the educational progress of US born children in Mexico may lag behind Mexican born children regardless of the migration experience of other household members. And, we might expect to observe a reversal such that US born children of Mexican immigrants in the United States have an enrollment advantage over the Mexican born children of Mexican immigrants in the United States. There is considerable variation in the educational outcomes among immigrants in the United States by age as well as a significant age pattern to school enrollment in general so it will be important to consider the possibility whether 'nativity' differentials in school enrollment in Mexico and the United States persist across age groups.

Although exact numbers are difficult to determine, Rendall and Torr (2008) estimated that 10% of second generation Mexican American children (i.e., children born in the United States to Mexican immigrant parents) spend at least some of their childhoods in Mexico (Rendall & Torr, 2008). The Census numbers, combined with anecdotal reports of increased school enrollment on the Mexican side of the border, indicate that this number is still growing (Medina, 2012). The majority of US born children living in Mexico are likely children of relatively recently returned migrants. The majority of their parents are Mexican born who lived for some period of time in the United States. For these returning families, there may be significant structural barriers to enrolling their US born children in school in Mexico if families do not or cannot produce required documentation for the children (Medina, 2012). Mandatory schooling in Mexico now extends into secondary education suggesting the majority of children under age 15 or so

will be attending school (Creighton & Park, 2010). Lags in school enrollment among US born children before age 15 in Mexico may be indicative of these barriers.

Similar structural barriers to school participation may become similarly acute among the Mexican born children of Mexican immigrants in the United States (Abrego & Gonzolas, 2010; Crosnoe, 2005). Overall, Mexican immigrants tend to have fewer years of completed education than Mexican Americans (White & Glick, 2009; Landale, Thomas & Van Hook, 2011). But, this varies by age at arrival and location of schooling as well. For example, many Mexican immigrants who arrive in the United States as adolescents do not enroll in school in the United States at all (Oropesa & Landale, 2009). Among immigrants from Mexico to the United States, approximately one third of those who arrived before age 12 failed to earn a high school diploma as compared to two thirds of those who arrived between ages 12 and 18 (Baum & Flores, 2011). Immigrant youth who arrive at older ages and do not enter school in the receiving country, on the other hand, often do not fare as well (Rumbaut, 2004). In this case, we might expect the age pattern of school enrollment to be reversed such that the Mexican born children of immigrants in the United States have similar levels of school enrollment until they reach older ages.

Based on the previous research on schooling in Mexico and educational pathways among child migrants, we use nationally representative data to test hypotheses about school enrollment among US born children living in Mexico. We model school enrollment among children age 5 – 17 in households throughout Mexico and the United States. The models consider the importance of place of birth (U.S. vs. Mexico) once we control for household resources that may also be important predictors of school attendance. Further, we expect school enrollment to decline around age 15 for all children in Mexico because this is around the age at which compulsory education is completed in Mexico (Rendall & Torr, 2008). We expect the age pattern in enrollment to be different in the United States where school attrition (or non-enrollment) is expected to be more prevalent among the Mexican born at older ages.

II. Data and Methods:

The Mexican data for this study comes from the 2009 Encuesta Nacional de la Dinámica Demográfica (ENADID), a nationally representative household survey conducted by Mexico's Instituto Nacional de Estadística y Geografía (N = 343,887). Face-to-face interviews were used to collect information on fertility, mortality, migration and other socio-demographic characteristics such as marital status, education, employment, and ownership of consumer goods. The ENADID also includes information on all household members. The data include information on migration status of all members even if they are absent from the household. After restricting our sample to children between the ages of 5 and 17, we excluded children born in countries other than Mexico or the United States (n = 78) and children missing data on any of the study variables (n = 179), resulting in a final sample of 88,371 children. The US data for this study come from the 2006-2010 American Community Survey (ACS), a household survey conducted in the United States as a replacement for information that used to be available in the 'long form' of the decennial Census. We limit our sample to children between the ages of 5 and 17 who live in households in which the householder is of Mexican origin.

We are able to identify many of the same variables in both surveys. Our primary outcome of interest is school enrollment for all household members between the ages of 5 and 17. The vast majority of children ages 5-17 are currently enrolled in school in Mexico (89.2%) with even higher enrollment across these ages in the United States (94.5%). But there are significant decreases in enrollment observed by age and nativity in both countries.

Independent variables for the preliminary analysis include country of birth (Mexico or the United States). Children born in other countries are not included in the analyses. Note that we refer to these children as US-born and Mexican-born in both countries for consistency. The US-born children in the United States are all children of Mexican origin (i.e. they are also correctly identified as second or higher generation Mexican Americans in the United States).

We also include several measures that are likely to be associated with school enrollment. First, we consider the migration experience for the children's households overall. For the ENADID sample, our

preliminary analyses rely on a single measure indicating whether any household member moved to the U.S. in the last five years (1 = *yes*; 6.04%). For the ACS sample, our preliminary analyses rely on a single measure indicating whether any member of the child's household moved to the United States in the last five years (1 = yes; 2.20%). We also consider the availability of other resources. These measures include household size (total number of individuals living in the home) available for both data sources. We also identify the education level of the head of household for the ENADID sample and for the child's mother in the ACS sample. There is a great deal of variation in household economic conditions across Mexico and represented in the ENADID dataset. To capture the status of the entire household, we follow prior research that also employed the ENADID (Azevedo, Lopez-Calva, and Perova 2012) and construct an asset index using principal components analysis. Items included roof made of solid material, non-dirt floor in majority of home, access to water, use of fuel other than firewood for cooking, flush toilet, refrigerator, washing machine, car, phone line, and computer. Higher values indicate greater assets and material well-being for the household (M = 2.17, SD = .81). For the ACS sample, our preliminary analyses rely on a single measure for whether the household income is within 185% of the official US poverty line based on family size (yes = 59%). Finally, we include demographic characteristics of the children themselves and available for both the ENADID and ACS samples. Child age is a continuous measure in years (M = 11.15 in the ENADID and M = 10.80 in the ACS). We also include an indicator for child gender (1 = *male*, 50.9% male in the ENADID and 52.0% male in the ACS). Gender differentials in education have decreased considerably in Mexico but the timing of school leaving may still vary somewhat by gender (Creighton & Park, 2010).

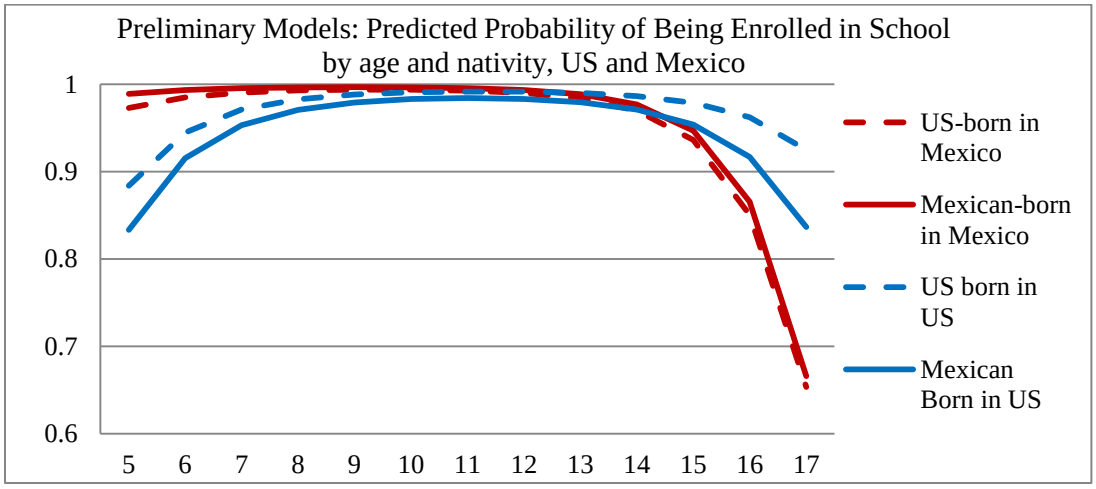
Our preliminary analyses are conducted in STATA which allows for appropriate consideration of the clustering of children within households as well as the clustering of households within neighborhoods; a consideration for the ENADID sample only. All ENADID models were estimated with Stata's command for fitting multilevel modeling with binary response variables (i.e., xtmelogit), with *students* serving as Level 1, *households* serving as Level 2, and *neighborhoods* serving as Level 3. Analyses with the ACS are conducted with simple logistic regression models.

III. Preliminary Results and Discussion

The results of the preliminary models predicting the school enrollment of children between the ages of 5 and 17 in the United States and Mexico confirm that nativity and age are important factors in the enrollment patterns in both contexts. In the bivariate, U.S.-born children have significantly higher levels of school enrollment than their Mexican-born counterparts in both Mexico and the United States consistent with previous research (Torr and Rendall, 2008). Adding household migration (i.e. whether anyone in the household had migrated between the two countries in the last five years) and child age to the model, U.S.-born children exhibited *lower* levels of enrollment than Mexican-born children in Mexico while the nativity differential in the United States was reduced but persisted. These differences are somewhat explained by the greater likelihood that U.S.-born children live in migrant-sending households (18.55%) compared to Mexican-born children (5.90%) in Mexico while the opposite is the case in the United States where Mexican born children are the most likely to live in recent migrant households. In both the United States and Mexico, having recent migration in the household is associated with a lower likelihood of school enrollment overall (see Kandel & Kao, 2000; Kandel & Massey, 2002).

Once the remaining control variables are included to help account for demographic variability and selection, the lower enrollment levels of U.S.-born children compared to Mexican-born children remains statistically significant in Mexico and the lower enrollment among Mexican-born children persists in the United States.

Our final model provides a preliminary test for our hypothesis that the disadvantage in school enrollment among US born children in Mexico will be concentrated at the younger ages. At older ages, where school leaving is more normative, we expected fewer differentials. This model differs from the prior model by including an interaction term between child's age and nativity.



The figure above presents the predicted probabilities of school enrollment among children in the United States and Mexico based on the models that include the multiplicative interaction between nativity and child age. There is a slower and less uniform entrance to formal schooling in the United States than in Mexico with slower attrition in the United States as well. And, although the predicted probabilities appear similar in the figure, the regression model indicates that child age significantly moderated nativity differences in enrollment. Interpreting this interaction by estimating enrollment for U.S.- and Mexican-born children varying in age (i.e., one standard deviation below and above the mean) suggests that the Mexican-born advantage in enrollment is greater among younger children than older children in Mexico. In the United States, U.S. born children maintain an advantage in school enrollment at all ages. These preliminary results suggest that children born in the United States living in Mexico in 2009 are somewhat less likely to be enrolled in school than their Mexican born peers once we adjust for the younger age composition of the US born children. Further, it appears that this disadvantage would be even larger if the US born children were not over-represented among households with more assets and better educated household heads. This suggests some preliminary support for the hypothesis that US born children encounter some structural barriers to school enrollment that are not shared by their Mexican born counterparts in Mexico. In the United States, on the other hand, Mexican born children lag behind US born children in school enrollment at all ages. Mexican born children in the United States enter school more slowly and attrite from school more quickly than those born in the United States.

IV. Future

We plan multiple enhancements to this paper for IUSSP. First, we will add multilevel modeling to the analysis of the ACS data to account for clustering (note that given the large sample size of the ACS, these results are not likely to change after adding these random effects). Second, we plan additional hypothesis tests that make full use of our data to enrich our findings. For example, we will reanalyze both datasets with greater attention to family and household composition and parental absence (Dreby, 2010; Nobles, 2011; Onoda, 2007). The preliminary results indicate a negative relationship between living in a household with recent migration experience and school enrollment in both contexts. However, this may differ quite a bit once we consider the presence or absence of immigrant parents in the households. Mexican born children in migration sending households in Mexico and the United States may be likely to experience an absent parent than their US born counterparts. In addition, both the ACS and ENADID contain geographic information on the region of households. It is likely that in areas in Mexico with high rates of emigration, the returns to education are low: there is a lack of local employment opportunities, and employment in the United States is not likely to reward additional education. Thus we expect regional variation in Mexico on school enrollment. This regional effect, however, may differ by nativity: US born children in Mexico could be rewarded by higher education because if they migrated back to the US, they could use their education to obtain legal employment. Thus the disadvantage in school enrollment of living in a high emigration area would be stronger for Mexican born children, compared to US born children living in Mexico.

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