Academic Achievements of Children in Immigrant Families

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This paper examines the associations between children's immigrant generation status and academic achievements in the kindergarten and first-grade years. This issue is imperative given the rapidly changing demographic profiles of U.S. immigrant children who, over the last two decades, increasingly migrate from Latin America and Asia. This new generation of immigrants presents challenges for comprehending the developmental trajectories of these children, given unique cultural traditions and attitudes compared with the earlier European immigrants. What we understood about immigrants several decades ago will not necessarily render us a thorough understanding of the current cohort of immigrants. Furthermore, the majority of the literature on immigrants has mainly focused on the experiences of young adolescents, with relatively scant research on young children (preschool-age or school-age) (Board on Children and Families, 1995). Yet, a large body of research has demonstrated the importance of experiences in the early childhood years to an individual's later cognitive and social development (for review see Shonkoff & Phillips, 2000). In addition, the majority of existing studies on immigrants have used cross-sectional approaches, which has made it difficult to explain the time-dependent effects of a variety of factors that are important to the experiences of children in immigrant families.

This paper examines the developmental experiences of young children of immigrants by considering a variety of individual, family, home environment, neighborhood, and school characteristics that have been found to be important to children's development. Specifically, using a longitudinal dataset with a large, contemporary sample of children from the Early Childhood Longitudinal Survey-Kindergarten Cohort (ECLS-K) collected by the U.S. Department of Education, the academic achievements of native-born (i.e., third and later generations) and foreign-born (i.e., first- or second generation) children entering kindergarten in the fall of 1998/99 are examined. The present study includes the data available as of this writing, from the fall and spring of kindergarten and the spring of first grade in which the full sample of children were interviewed. Taking the above-mentioned factors into account allows us to explore the likely mechanisms by which immigrant status may be associated with child development.

The ECLS-K is well suited for this analysis because, in addition to collecting detailed data on family demographic and early child care, it also contains information on children's academic achievements along with a rich set of information on home and school environment. Specifically, children's academic achievement outcomes in the ECLS-K include language use and literacy, mathematics, and general knowledge. In addition, a variety of contextual factors are included, such as parental involvement with the child's school, home educational practices, teacher's as well as school administrator's demographic background and qualifications, school academic learning environment, and neighborhood safety and resources. The study sample consists of approximately 17,000 children for whom information was collected on at least one outcome variable at each assessment point (fall kindergarten, spring kindergarten, and spring first-grade) and for whom the information was available on their country of origin and immigrant

status. Approximately 17% of the ECLS-K sample are identified as either first- (3%) or second-generation (14%) immigrants.

Ordinary Least Square (OLS) regression was used to estimate the associations between immigrant status and children's academic achievements while controlling for an extensive set of child, parent, family, neighborhood, and teacher and school characteristics. Because schools were the primary sampling unit in the survey, in all analyses the Huber-White method was used to correct for standard errors. To address two concerns about 1) the possibility of obtaining biased estimates of a focal independent variable (in this case, child's immigrant generation status by country of origin) due to the omission of some measures related to both children's immigrant status and cognitive outcomes, and 2) making cross-racial/ethnic comparisons between early and later generations may not be appropriate given the diversity of historical backgrounds and experiences within the U.S. and that these differences may lead to different academic achievements among various immigrant and ethnic groups in the first place, three empirical approaches were employed: (1) a rich set of factors related to individual, parental, family, home environment, and neighborhood and school characteristics that may help explain the associations between immigrant status and children's academic achievements were considered; (2) a change model was examined to see whether or not the learning pace for academic achievements during kindergarten and first grade may differ by immigrant status; and (3) separate analyses were conducted on Latin-American only and Asian only children to disentangle the differences between immigrant status and ethnic groups.

The empirical results indicate that, compared to the third and later generations non-Hispanic white children, first- and/or second generation children from regions in Russia/Eastern Europe, Asia, and Africa had significantly higher reading and math scores, while first- and/or second-generation children from Latin-America had significantly lower scores. In contrast, all first- and second-generation children had significantly lower general knowledge test scores compared to third and later generations non-Hispanic white children. The differences in academic achievements are largely explained by parental and family characteristics, although the neighborhood and school environments, and to a lesser extent, home environment, matter as well for some groups of first- and second-generation children (e.g., Mexico). Results further indicate that first- and/or second-generation children from Asia or Africa acquired reading and general knowledge skills over the kindergarten and first-grade years much faster than did third and later generations non-Hispanic white children. There is also evidence that, despite lower overall scores, second-generation children from Mexico acquired math skills faster than did third and later generations non-Hispanic white children during the kindergarten and first-grade years. Research and policy implications are discussed.

References:

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