

## The Psychological and Educational Impact of Immigration-Induced Maternal Separation on Children

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*Academic achievement among immigrant children is of concern to researchers, educators, and policy-makers. A weakness identified in this research area is the assumption that children's immigration experiences (IE) are monolithic. My work highlights maternal separation as a source of diversity among immigrant children. Some children migrate with their mothers, while others do not. The present study assessed the educational and psychological outcomes of three IE using data from the Children of Immigrants Longitudinal Study. Results suggest that IE may, in part, explain the differential outcomes of immigrant children. Collaborative efforts between researchers and practitioners are needed to develop interventions based on the awareness of children's IE in order to aptly address the needs of this vulnerable population.*

**Keywords:** Academic success, children left-behind, maternal separation, parachute kids, psychological adjustment

*El rendimiento académico de los niños inmigrantes es motivo de preocupación para investigadores, educadores y dirigentes políticos. Uno de los puntos débiles de este campo de investigación es la presuposición de que las experiencias de inmigración de los niños son monolíticas. Nuestro trabajo señala la separación materna como origen de las diferencias entre niños inmigrantes: algunos niños emigran con sus madres en tanto que otros no. El presente estudio ha evaluado los resultados educativos y psicológicos de tres tipos de experiencias de inmigración utilizando datos procedentes del Estudio Longitudinal de Hijos de Inmigrantes. Las conclusiones apuntan a que la experiencia de la inmigración puede explicar en parte las diferencias de resultados entre niños inmigrantes. Es preciso potenciar la colaboración entre investigadores y profesionales para desarrollar intervenciones basadas en el conocimiento de las experiencias de inmigración de los niños con el fin de atender adecuadamente las necesidades de esta población vulnerable.*

**Palabras clave:** Éxito académico, niños “dejados atrás”, separación materna, niños paracaídas, ajuste psicológico

### Introduction

Immigrant children in the United States represent the fastest growing demographic (Tienda & Haskins, 2011). Their adaptation has consequences for the nation's social and economic fabric. Much of the literature compares immigrant children to the native stock on academic achievement, health, and psychological well-being (Portes & Rumbaut, 2001). Other scholarship discusses the diversity in socio-

economic background and origin countries of the new generation of immigration children (Zhou, 1997). The rise in female- and child-led migrations, and their potential for maternal separation has brought to the fore even more heterogeneity in children's immigration experiences.

The new economics of migration broadens our thinking on decision-making within immigrant families. Many families from low-income countries pursue migration in an effort to diversify risks and resources (Stark, Oded & Bloom, 1985), as well as secure household economic stability (Massey et al., 1993). The global demand for female labor (Federici, 1999) has meant that women are becoming the first to migrate. As of 2013, 48% of international migrants were women (UN Population Division, 2013), typically from Latin America, the Caribbean (Morrison, Schiff, & Sjöblom, 2007), and some Asian countries like the Philippines (Samonte, 2003). These recent estimates point to a feminization of migration, which refers both to the rapid increase of women in immigration and the near equivalency in male and female migration rates (Donato, 1993). Paradoxically, women are employed in care work while their children remain behind (Gündüz, 2013).

An importantly unanswered research question relates to the outcomes of immigration children who experience maternal separation in immigration compared to those who do not. Children left behind are children from migrant household with mothers overseas. Left-behind children have been documented in Mexico (Dreby, 2007, 2010), the Philippines (Parreñas, 2005), Caribbean and Latin America (Crawford-Brown, 1999; Suárez-Orozco, Bang, & Kim, 2011). Research shows poor school performance (Gindling & Poggio, 2012), anxiety and depressive symptoms (Suárez-Orozco et al., 2011), behavioral problems (Hewage, Bohlin, Wijewardena, & Lindmark, 2011), and health problems (Rajan & Nair, 2013; Wen & Lin, 2012) as a consequence of immigration-induced maternal separation.

Another type of maternal separation occurs when children initiate immigration first (Adserà & Tienda, 2012). Child-led migrations reasons are often unclear or unstated (Orellana, Thorne, Chee, & Lam, 2001). However, some existing work focuses on parachute kids, typically from affluent Asian families, who immigrate to the U.S. in early life to enroll in American schools and later attend American universities (Newman & Newman, 2009; Tsong & Liu, 2008). Parachute kids experience a fair deal of autonomy and little supervision (Zhou, 1998), potentially undermining the intent of their migration-achieving academic success and later economic mobility. Binci (2012) argues that the benefits of migration do not categorically outweigh the parental oversight and care needed for children's wellbeing and academic success.

Research in developmental psychology provides some reasonable expectations of the impact of immigration-induced maternal separation on children. Immigration brings many physical and social changes, in addition to cultural differences, and sometimes language barriers. As a result, child migrants sustain multiple disruptions, changes, and transitions, all of which have been linked to

adverse cognitive (Fomby & Cherlin, 2007) and socio-emotional (Evans & Wachs, 2010) development outcomes. Moreover, separation from one or both parents has been linked to the development of psychiatric disorders, like suicidal behavior, anxiety, and depression (reviewed in Bowlby, 1979). Therefore, a reasonable hypothesis is that children who experience maternal separation in immigration may have less academic success and greater psychological distress than children who migrate with their mothers.

This paper uses data from Children of Immigrants Longitudinal Study (CILS) to compare children of family, left-behind, and parachute, migration across three sending regions, Asia, Caribbean, and Central America, on measures of behavioral and emotional adjustment and academic performance and achievement. The main hypotheses are that left-behind and parachute children will demonstrate poorer psychological adjustment and educational outcomes than children of family migration.

### Method

Secondary data analyses are conducted using data from CILS (Portes & Rumbaut, 2001). The original study followed 5,262 immigrant children from adolescence ( $M = 14$  years old) to emerging adulthood ( $M = 24$  years old). In the present study, 2,294 mother-child dyads were excluded from analyses based on the following criteria: (1) missing information on birth country, (2) birth country listed as U.S. (3) Child not living with mother at time 1, (4) mother's years in U.S. is greater than child's age. Information on mother and child arrival year was needed to create the main independent variable. Children provided their year of arrival at time two. Mothers and children provided information on mothers' arrival year at different time points. Given slight discrepancies, mothers' responses were given preference where necessary. Another 740 cases were excluded for missing information on arrival year. The current sample ( $N = 1554$ ) consists of slightly more girls (55%), with an average age of 14.41 ( $SD = .864$ ).

The arrival year for mothers and children was subtracted from 1992 to indicate time in the U.S. Children's time in U.S. was then subtracted from mothers'. A positive result indicated the child came to the U.S. before the mother (parachute children;  $n = 299$ ). A negative result indicated the child came to the U.S. after the mother (children left behind;  $n = 319$ ). A zero result indicated mother and child migrated together (family migration;  $n = 936$ ). These three groups create the main independent variable, immigration experience (IM). Length of separation was calculated for children who endured separation by taking the absolute value of the difference between mother and child time in U.S. Age of separation was calculated by subtracting mother's arrival year from child's birth year. Sending region (SR) was determined using children's birth country. Although, seven regions were identified, this paper focuses on children from Asia ( $n = 647$ ), the Caribbean ( $n = 367$ ), and Central America ( $n = 389$ ).

Scores on Stanford Math and Reading Achievement tests, and grade point average in 1992 (time 1) and 1995 (time 2) provided data on children's academic abilities. Dropped out of high school, high school diploma and bachelor's degree variables provided information on children's academic achievement.

Behavioral adjustment was informed by children's responses to the following questions: (1) "I am seen as a trouble maker by other students" and "I got into a physical fight at school." Question one was measured on a four-point agreement scale, "Agree a lot," "Agree a little," "Disagree a little," "Disagree a lot." Question two was measured as "never," "once or twice," or "more than twice."

Depression symptoms were measured by four items from the Center for Epidemiologic Studies Depression Scale: "I felt sad", "I could not get going, "I did not feel like eating," "I felt depressed." Children reported how often they felt the way described in each question as "rarely," (1 point) "some of the time," (2 points) "occasionally," (3 points) and "most of the time" (4 points). Respondents' points were averaged. High averages indicated high levels of depression

### Results

The mean length of separation for mother-child dyads was 2.25 years ( $SD = 2.05$ ) or roughly 19 months. Children left behind ( $M = 2.54, SD = 2.17$ ) had higher separation lengths than parachute children ( $M = 1.95, SD = 1.87$ );  $t(611.498) = 3.660, p < .001$ . The length of separation was significantly different across SR,  $F(2, 541) = 4.426, p = .012$ . Post-hoc pairwise comparisons determined that Caribbean children ( $M = 2.72, SD = 2.27$ ) had longer maternal separations than Asian children ( $M = 2.03, SD = 1.95$ ),  $p = .014$ . On average, children were separated at age six ( $M = 5.68, SD = 3.39$ ). Left-behind children ( $M = 4.98, SD = 3.11$ ) were separated significantly longer than parachute children ( $M = 6.42, SD = 3.51$ ),  $t(-5.377) = 595.187, p < .001$ . The mean age at separation for children left behind was almost 15 months lower than the mean age of separation for parachute children.

**Education outcomes.** A two-way ANOVA was conducted that examined the effect of IE and SR on time 1 GPA while controlling for gender. Figure 1 shows the significant interaction between IE and SR,  $F(4, 1384) = 2.756, p = .027$  on time 1 GPA. Analysis of simple main effects showed that time 1 GPA was significantly higher for Caribbean left-behind children than Caribbean children of family migration,  $p = .043$ . This interaction disappeared at time 2,  $F(4, 1384) = 2.250, ns$ .

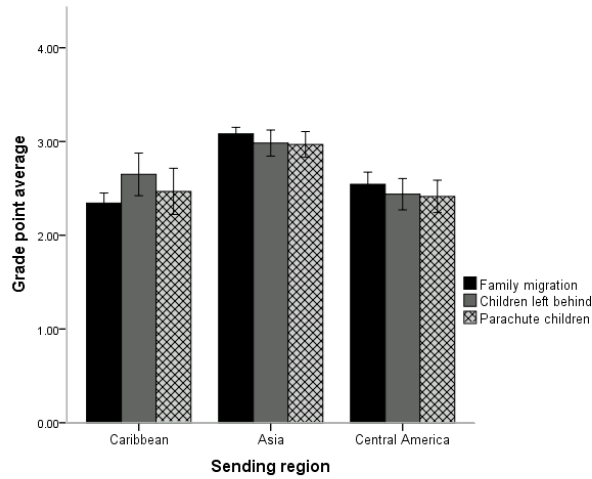


Figure 1. Mean grade point average (time 1) by IE and SR

Figure 2 illustrates the interaction effect of IE and SR on Stanford Math scores,  $F(4, 1209) = 3.739, p = .005$ . Simple main effects analyses revealed that Caribbean family migration and parachute children had significantly higher Stanford Math scores than Caribbean left-behind children,  $p = .024$  and  $p = .024$ , respectively. Central American children of family migration had higher scores than left-behind,  $p = .009$ , and parachute children,  $p < .001$ . Though there was a non-significant interaction between independent variables on Stanford Reading scores, analyses of simple main effects revealed a significant effect of IE on Stanford Reading scores across SR,  $F(2, 1204) = 4.003, p = .018$ . Caribbean family migration and parachute children had higher Stanford Reading scores than Caribbean left-behind children,  $p = .007$  and  $p = .023$ , respectively (see Figure 3).

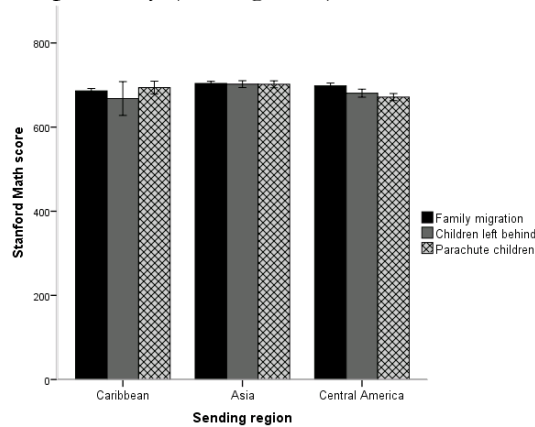


Figure 2. Mean Stanford Math scores by IE and SR.

A chi-square test found a significant association between IE and dropping out of high school,  $\chi^2(2) = 9.334, p = .009, Cramer's V = .080$ . Left-behind (6%) and parachute children (6%) were two times more likely to drop out compared to family migration children (3%). No association was found between IE and attaining a high school diploma or bachelor's degree, both  $ps > .05$ .

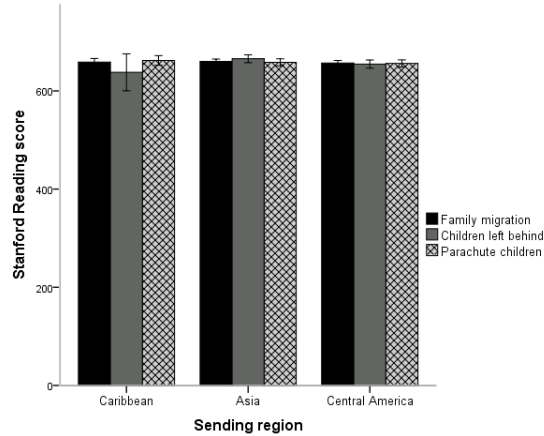


Figure 3. Mean Stanford Reading scores by IE and SR.

**Psychological adjustment.** A significant association between IE and fighting in school was found,  $\chi^2(4) = 11.644, p = .020, Cramer's V = .061$ . Roughly a fifth (21%) of parachute children and 16% of children left behind reported fighting in school whereas only 13% of family migration reported doing so. A significant association between IE and perceived troublemaker,  $\chi^2(6) = 21.113, p = .002, Cramer's V = .083$  was also found. Roughly 21% of parachute children agreed that others perceived them as troublemakers. Only 12% of family migration and 13% left-behind children reported the same.

A two-way ANOVA examined the effect of IE and SR on time 1 depression symptoms while controlling for gender. A significant interaction was found,  $F(4, 1382) = 2.554, p = .037$ . Figure 4 shows Caribbean left-behind children had higher time 1 depressive symptoms than Caribbean children of family migration,  $p = .008$ . This interaction disappeared at time 2,  $F(2, 1387) = 1.368, ns$ .

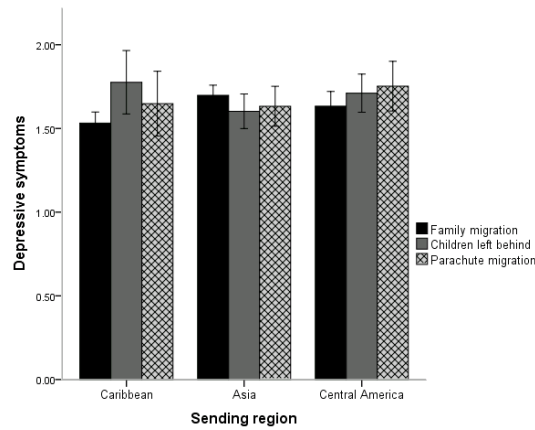


Figure 4. Mean Depressive symptoms (time 1) by IE and SR.

### Discussion

Recent immigrant children are more likely to have experienced maternal separation than immigrant children of the past. Approximately 30% of children who participated in Children of Immigrants Longitudinal Study endured maternal separation. This figure is on par with other estimates on parental separation in immigration (Suárez-Orozco & Suárez-Orozco, 2001), but adds a level of specificity by examining maternal separation and separating left-behind from parachute children.

Left-behind children were separated at younger ages and for longer periods than parachute children. Separation in immigration is driven by a combination of structural and personal factors (Dreby, 2010). The nature of American immigration policies is such that families remain separated longer than anticipated (Dreby, 2015). Dreby (2010) found in her sample of Mexican transnational families that parents' expectations for family reunification were thwarted by the realities of employment and economic instability. Relationships among parents and caregivers also impact separation lengths (Dreby, 2010). When support for migration is high, parents may prolong separation in order to meet their goals.

This paper contributed to the existing body of research on immigrant children by exploring the influence of children's immigration experience, as well as their regional origins, in order to better understand their outcomes. In terms of academic performance, children left-behind tend to do worse than their counterparts on achievement tests. However, in terms of grade point averages, children left-behind perform similarly, if not better. What this suggests is the need to depart from conventional measures of academic performance. Test scores may not capture the effects of maternal separation because they depend on both internal and external factors, and may be less sensitive to internal factors. Perhaps what is necessary are measures of cognitive ability, like executive function, which influence school

readiness and outcomes, but that are also susceptible to environmental input (Blair, 2010).

Separated children did not differ from children of family migration in academic achievement; however, they were more likely to drop out of high school. Others have found that when mothers are away, children are more likely to be truant (Gamburd, 2008). Additionally, for every month a child is left behind, the probability of dropping out increases by 50% (Giannelli & Mangiavacchi, 2010). More research is needed to better understand this relationship, but lack of oversight may be a contributing factor.

Psychological distress due to immigration-induced maternal separation has been documented (Suárez-Orozco, Todorova, & Louie, 2002). This study corroborates and extends those findings. Most strikingly, left-behind Caribbean children had higher depressive symptoms than Caribbean children of family migration. Given they are separated for the longest periods, it is unsurprising that this group would show such symptoms. In fact, some scholars have written on the negative outcomes of mother migration in the Caribbean (Crawford-Brown & Rattray, 2001; Pottinger & Brown, 2006). Caribbean countries are matriarchal (Chamberlain, 2003) and show a strong tradition of female-headed households (Barrow, 1996), potentially increasing the risk of psychological distress for these children.

Maternal separation is associated with both internalizing and externalizing behavior. Some found that teachers report children with migrant mothers as having more problem behavior than children with non-migrant mothers (Hewage et al., 2011). Children may act out in order to express dissatisfaction with parental migration (Dreby, 2007). In this sample, separated children demonstrated more fighting behavior and were more likely to report that others perceive them as troublemakers than children of family migration. Parachute children showed the most behavioral problems.

### **Future Directions**

Though some strides have been made, more questions remain, especially in regards to children left behind. Future research may seek to investigate the etiology of left-behind children's psychological distress, and the role of attachment in that process. Many have used attachment theory as a theoretical basis for examining left-behind children (Crawford-Brown, 1999), yet none have explicitly tested the attachment patterns of these children, and how they compare to children of family migration or their U.S. counterparts. Although children are left with relatives that may be in the child's attachment hierarchy, the loss of primary figure may be overwhelming. On the other hand, caregivers may provide adequate support. However, at reunification, children experience another loss, this time of the surrogate mother figure. Research in this area may help inform the way reunification policies are structured. Caution is taken when suggesting policy recommendations



given immigration policies involve bi-lateral state agreements. Nevertheless, what is clear is that more consideration of the family is needed when discussing immigration reform.

This work aimed to show another dimension of heterogeneity among immigrant children. It is important that immigrant children not be treated with the same broad brush, whether by policy-makers, researchers, or educators. The more work that is done to better understand the experiences of immigrant children, and its influence on their outcomes, the better able we will be to support their needs.

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