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Immigration Stress, Social Support, and Adjustment in the First Post-Migration Year:
An Intergenerational Analysis¹

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Abstract

In this study of 429 newly immigrant children (age 7-18) and their parents, we addressed generational variation in the stresses related to immigration. We also assessed whether child and parent psychological adjustment varied as a function of high versus low levels of stress and social support. Finally, we examined the comparability of effects across participants from different countries. Participants originated in Argentina, Colombia, Cuba, Haiti, and the English-speaking West Indies. Children generally reported more immigration stress than did parents, although parents were more likely to have economic worries. Higher levels of stress significantly compromised the adjustment of both children and parents. The availability of social support to the family facilitated adjustment, but was more effective for parents than for children. Stress and support levels varied, but links between stress, support, and adjustment were mostly comparable across country-of-origin groups.

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A fundamental premise of most life span theories is that development over the life course involves adaptation to the normative and non-normative events encountered over one's lifetime (Baltes, Lindenberger, & Staudinger, 1998; Elder, 1998). From a life span perspective, immigration is a profound non-normative life transition, requiring extensive adaptation (Coll & Magnusson, 1997; Laosa, 1997; Rumbaut, 1997; Suárez-Orozco & Suárez-Orozco, 2001). A myriad of stressors often accompany migration, including loss of family, home, and country, along with social and economic problems.

Exponential increases in the influx of immigrant families in recent years have moved the issue of post-migration adaptation to the foreground. The U. S. population currently includes over 33 million foreign-born individuals, constituting more than one of every 10 U. S. residents (Larsen, 2004). Of the nation's 3,300,000 foreign-born youth (age 5-19), over a third have arrived between 1995 and 2000 (U. S. Census, 2000). The future of the nation resides in these youth (Suárez-Orozco & Suárez-Orozco, 2001) and an intensive effort is needed to learn all that we can about the adaptation of immigrant children and the adults accompanying them.

As for other major life transitions (Bronfenbrenner & Morris, 1998; Elder, 1998), both personal characteristics and contextual factors will play a role in immigrant adaptation. Personal factors include the developmental life stage and ethnicity of the individual. Contextual factors include the socioeconomic status, circumstances of migration, and receiving context of the immigrant family, including the amount of social support or social capital available to the newcomers. The capacity of individuals to cope with transitional circumstances is facilitated by

the presence of social support (Kahn & Antonucci, 1980; Cohen & Wills, 1985; Levitt, 2005). However, the stresses of immigration intensify the need for social support at a time when the act of migration itself is likely to disrupt the individual's support network (Siantz, 1997; Waters, 1997).

For the most part, life stage differences in response to immigration have not been studied and research is especially lacking on the reactions of children versus adults to their post-migration milieu (Barr & Lacey, 1998; Coll & Magnusson, 1997; Fuligni, 1998). Intra-familial intergenerational comparisons provide a means to examine life stage variation in a way that minimizes extraneous variance (Levitt, Weber, & Guacci, 1993), by focusing on family members who share many personal and contextual characteristics. Immigration is a process that may have multiple and diverse ramifications across generations within the family system, but we know very little about similarities or differences in the way immigration is experienced by children and adults within the family.

We do know that there are marked variations in migration circumstances, socioeconomic status and receiving contexts across immigrant groups (Rumbaut, 1997; Portes & Rumbaut, 2001; Suárez-Orozco & Suárez-Orozco, 2001; Zhou, 1997). Families migrate for various reasons, including the pursuit of economic opportunity and relief from political persecution and violence in their homelands. In general, today's immigrants are more likely to belong to groups classified as ethnic minorities in the U. S. These newcomers encounter more entrenched prejudice and discrimination and fewer opportunities for economic advancement in comparison to those in earlier waves of European immigration (McLoyd, 1998; Portes & Rumbaut, 2001; Suárez-Orozco & Suárez-Orozco, 2001; Zhou, 1997). Additionally, some families settle in established ethnic enclaves where other family members may have preceded them. These families are likely to have

more support (or social capital) available to them than those migrating to communities with few persons from their countries of origin.

Although many immigrants adapt successfully to their new settings, others may experience considerable psychological distress (Fuligni, 1998; Hernandez & Charney, 1998; Suárez-Orozco & Suárez-Orozco, 2001, Vega, Kolody, & Valle, 1987). Studies comparing the well being of different immigrant groups suggest that adaptation may be uneven across time for groups migrating to more versus less hospitable contexts (Rumbaut, 1997; Zhou, 1997). However, researchers have not assessed the initial adaptation of immigrant families within the first year of their arrival. Most conclusions regarding immigrant adjustment are based on individuals who have resided in the U. S. for several years prior to assessment. Sampling foreign-born individuals years after their arrival may gloss over hardships experienced by these individuals in the early stages of adaptation. Furthermore, those who experience difficulty in adapting and return to their home countries despite the circumstances that drove their departure are not represented in these samples.

In the current study, we explore the issue of life stage variation in the post-migration experiences of divergent immigrant groups by analyzing parallel data from children and parents participating in a larger study of adaptation in Caribbean and South American children. Immigrant groups targeted for the study were selected to differ in socioeconomic characteristics and receiving contexts, but not to be so heterogeneous that we couldn't address cultural influence. Specifically, participants originated in Argentina, Colombia, Cuba, Haiti, and several English-speaking West Indian countries. The latter were mostly from Jamaica, but, to obtain a sufficient number of West Indians in the sample, we also included children from the Bahamas, the Cayman Islands, Dominica, and Trinidad and Tobago. Although hailing from different countries, West

Indian immigrants have much in common, including relatively high educational and economic status, in addition to English language proficiency (Kasinitz, Battle, & Miyares, 2001).

Large and recent waves of Argentinean and Colombian migration to the local area, coupled with a near total absence of information regarding South American immigrants to the U.S., prompted inclusion of these groups. These Spanish-speaking groups share linguistic characteristics with the Cuban group, but are less well established in the area. Cubans, Haitians, and West Indians hail from small island nations in the Caribbean and have established communities in the U. S., but the receiving context is more favorable for Cubans and West Indians than it is for Haitians (Portes & Rumbaut, 2001).

Differences are apparent across all of the groups in the conditions that prompted their migration. The large influx of Argentineans has followed a collapse in Argentina's economy. Colombian migration is driven largely by an increase in guerilla violence and economic problems in that country. Cubans often migrate to escape political and economic oppression. The near anarchy and extreme poverty in Haiti in recent years has prompted much of the Haitian migration. West Indian immigrants often seek economic or educational opportunities in the U. S. Despite variations in the circumstances precipitating and following migration, however, the process of immigration issues a major challenge to the life trajectories of the individuals involved.

The present study is unique in addressing the initial adaptation of immigrant children and parents in the first year following migration. The focus of this report is on the psychological adjustment of these newly immigrant children and their parents, in relation to the stressors accompanying the migration experience, and in relation to the amount of social support available to the family. Our analyses address four research questions:

1. Are the stresses of immigration comparable for parents and children? That is, do

children and parents experience the same amounts and types of stress or are there life stage differences in the stressors accompanying immigration? Children may be more stressed because they have little control over the events of migration. On the other hand, the pressures of immigration may weigh more heavily on the adults who are responsible for the post-migration well being of the family. Thus, we made no specific prediction regarding the extent to which children versus adults would report hardships related to immigration.

2. Does immigration stress relate to child and parent adjustment difficulties? Given the inherently disruptive nature of this major life transition, we anticipated that the stresses associated with immigration would have a significant effect on the initial adjustment of both children and their parents.

3. Does social support help? A number of researchers emphasize the role of social support or social capital as a facilitator of immigrant adaptation (Portes & Rumbaut, 2001). Support may have either a direct or moderating (buffering) effect on adjustment (Cohen & Wills, 1985). Both possibilities were addressed in this research.

4. Are the levels of stress and support and the effects of stress and support on adjustment comparable across immigrant groups? Given the differing circumstances of migration and variations in post-migration contexts across country-of-origin groups, we anticipated that these groups would differ with respect to their experience of stress and availability of support. However, stress and support effects on adjustment were expected to be consistent across groups.

Method

Sample and Procedure

The current analyses are based on a sub-sample of 429 participants with both child and parent data, drawn from a larger study of immigrant child adaptation (N = 622). The child

participants (224 male, 205 female) were drawn from a population of newly matriculated elementary (grades 3-4), middle (grades 6-7), and high school (grade 9) students attending public schools in Miami-Dade County, Florida. Students born in the target locations who had resided in the U. S. for less than one year were given study information, along with parent permission and child assent forms, by an interviewer fluent in their native language. The interviewer set a return appointment time, and, if the student returned a signed consent form, interviewed the student individually, in a quiet school location. The mean interview time was 44 minutes.

The children in the sample ranged in age from 7 to 18 years, with a mean age of 8.83 (SD = 0.84) in the elementary school group, 11.81 (SD = 1.21) in the middle school group and 15.23 (SD = 1.17) in the high school group. Of the 429 participants, 104 were born in Argentina, 91 in Colombia, 100 in Cuba, 89 in Haiti, and 45 in the West Indies. The numbers of Argentines, Colombians, and, at some grade levels, Cubans and Haitians entering the school system exceeded the numbers needed for the study. In those cases, potential participants were drawn randomly from among the population.

Parent surveys were taken home at the time of the interview and parents returned them by mail. We followed up with telephone calls for surveys that were not returned and offered parents the option of answering by phone. (However, only 27 of the 429 parents answered the survey by phone.) Of the parents who completed surveys, most (70%) were mothers or, in a few cases, mother figures (grandmothers, aunts, etc., N = 20); 30% were fathers or father figures (grandfathers, uncles, etc., N = 7). Parents had a mean of 12.46 (SD = 3.81) years of education. Children in most (71%) of the families were eligible for the free/reduced price lunch program at their schools. There were disparities by group in both education and free/reduced lunch eligibility. Colombian parents had the most years of education (M = 14.09, SD = 3.36), followed by Cubans

($M = 13.27$, $SD = 2.79$), Argentinesans ($M = 12.26$, $SD = 3.38$), West Indians ($M = 12.08$ $SD = 3.21$), and Haitians ($M = 9.96$, $SD = 4.89$), $F(4, 396) = 15.29$, $p < .0001$. Haitian children were also more likely to be eligible for the lunch program (82.7%), followed by Cubans (78.6%), Argentinesans (71.3%), Colombians (58.8%), and West Indians (54.8%), $\chi^2(4, N = 407) = 19.63$, $p < .0001$. Children were given university T-shirts or pens for participating and parents were given \$25 supermarket gift certificates for returning the parent surveys.

At the end of the school year, we asked a teacher of each child participant to complete a rating of the child's school adaptation. Teachers were given \$5 supermarket gift certificates for each completed rating. Teacher ratings were received for 266 (62%) of the children. Subsequent analyses involving teacher-rated school adaptation were conducted separately for this sub-sample.

Measures

Measures of immigration stress were included in both the child interview and the parent survey. The availability of social support to the family was assessed on the parent survey. (Child perceptions of social support were assessed, but were largely unrelated to the measures employed in this study). Measures of depression, psychological symptoms, and self-concept in the child interview assessed child adjustment, along with the index of school adaptation completed by the child's teacher. Measures of parent affect and life satisfaction were included on the parent survey.

Project staff members fluent in the languages and dialects of the participants translated the measures in teams, working in conjunction with the authors. This was an iterative process in which at least two team members translated and back-translated each measure. Group meetings were held to resolve translation disparities and to ensure that the translated items were comparable across languages.

Immigration Stress. Our measure of immigration stress is a checklist of stressors related

specifically to immigration. Items on the scale tapped the domains of social disruption (leaving family and friends, not having relatives or friends nearby), experiences of prejudice and discrimination (unfair treatment because of skin color or country of origin), adjusting to new circumstances (meeting new people, trying to make friends, living in new surroundings) difficulties being understood culturally and linguistically (teachers and others not understanding one's speech or culture), and family issues (family arguments, worries about money, and problems with knowing how to do things in the U. S.). The list was derived from both the literature on immigration and the experiences of the many immigrant students working on the project. The present analyses include 19 items that were parallel for children and parents. Specifically, we asked participants, "Have any of these things been hard for you since you moved to the United States?"

Alpha reliability for this scale was .74 for children and .83 for parents. Within country of origin groups, reliability coefficients for the child stress scale ranged from .65 for the Haitian group to .79 for the West Indian group. Coefficients for the parent stress scale ranged from .78 for Argentineans to .86 for Colombians and West Indians.

Social Support. Social support availability was assessed on the parent survey with four items, asking: "How many people would help if a sick child needed to be picked up from school?" "How many people would help if your family did not have money to pay bills?" "How many people in the U. S. do you confide in?" and "How many people could help you obtain needed information?" Except for the "confide" item, these questions were adapted from the Suárez-Orozcos' Longitudinal Immigrant Student Adaptation project (in progress). Responses on the 5-point scale could range from "No One" to "6 or more." The mean of these items was the index of support availability. Alpha reliability was .79 for this measure, with intra-group coefficients

ranging from .76 for the Cuban group to .86 for the West Indian group.

Child Adjustment. Depression was measured with the short 10-item form of the Kovacs (1985) Children's Depression Inventory. Scores range from 1 to 3, with higher scores indicating more depression. Alpha reliability was .64 (ranging from .49 for Cubans to .73 for Argentines). Psychological symptoms were assessed with a checklist adapted from one designed specifically for use with immigrant students by the Suárez-Orozcos (in progress). This 22-item checklist covers a range of symptoms related primarily to depression and anxiety. Alpha reliability was .79 (ranging from .74 for Argentines to .86 for Colombians). Self-concept was indexed with an abbreviated 6-item version of the Harter (1985) self-concept scale, adapted to an interview format. Scores range from 1 to 6, with higher scores indicating more positive self-evaluation. Alpha reliability was .39 (ranging from .23 for Haitians to .54 for the West Indian group). The teacher-rated school adaptation measure (Alexander, Entwistle, & Dauber, 1993) is a 14-item scale assessing interest and participation, attention span and restlessness, and cooperation and compliance. Scores range from 1 to 6, with higher scores signifying better adaptation. Alpha reliability was .85 (ranging from .78 for Haitians to .87 for the Colombian and West Indian groups).

Parent Adjustment. Parent adjustment was assessed with two measures. The Bradburn (1969) Affect Balance Scale is a widely used measure of positive and negative affect in community-based samples. Scores range from 1 to 10, with higher scores indicating more positive affect. Alpha reliability was .64 (ranging from .56 for Haitians to .74 for Colombians). Life satisfaction was measured with a single item index, "How satisfied are you with your life as a whole these days" (Campbell, Converse, and Rodgers, 1976). Scores range from 1 to 7, with higher scores indicating greater life satisfaction.

Results

Analyses addressed the comparability of stress for children and parents, the effects of stress on adjustment, and the role of social support in facilitating adjustment. The results of these analyses are described in the following sections. Each set of analyses included immigrant group as a factor and findings regarding inter-group comparisons are included within each section.

Preliminary analyses indicated that there were no significant differences by grade level in the child stress or adjustment measures. Gender effects were minimal and including gender of child or parent in the analyses did not result in any substantive change in the reported findings.

Consequently, grade level and gender were not included as factors in the final analyses.

Are the stresses of immigration comparable for children and parents?

To assess whether parents and children differed in the amount of stress they reported, we conducted an analysis of variance of the parent and child stress scales (SPSS [1990] MANOVA) with generation (parent, child) as a repeated factor and group as a between factor. The analysis yielded a main effect of generation, $F(1, 424) = 32.40, p < .0001$. Children ($M = 8.94, SD = 3.76$) reported significantly more stress than parents ($M = 7.43, SD = 4.15$). Table 1 indicates the numbers and percentages of parents and children reporting each type of stress, along with the results of nonparametric comparisons between parent and child for each item (SPSS [1990] Sign test). (Parentheses within an item enclose modifications of the item for use on the parent survey). The prevalence of children experiencing each type of stress exceeded that of parents for most measures, with the notable exception of worries about money. Parents were far more likely to report worries about money than were children.

Insert Table 1 about here

This analysis also yielded a main effect of group, $F(4, 424) = 8.89, p < .0001$, and a generation by group interaction, $F(4, 424) = 3.68, p < .007$. As Figure 1 depicts, the greatest divergence between parents and children in stress levels occurred within the Argentinean and Colombian groups, with the least divergence occurring within the Cuban and Haitian groups. Haitian families in general had the highest levels of stress. Simple effects tests indicated significant differences between Argentinean children ($M = 9.51, SD = 3.86$) and their parents ($M = 6.90, SD = 3.72$), $F(1, 424) = 26.42, p < .0001$, as well as between Colombian children ($M = 8.89, SD = 4.04$) and their parents ($M = 6.52, SD = 4.17$), $F(1, 424) = 18.86, p < .0001$.

Insert Figure 1 about here

Follow up Sign tests indicated that Argentinean children and parents differed in the frequency with which they reported hardship in leaving family and friends, making new friends, meeting new people, speech and cultural ways being misunderstood by teachers and people in general, family fights and disagreements, experiencing prejudice related to ethnicity and skin color, and learning English (children more than parents), along with family worries about money (parents more than children). Colombian children and parents differed with respect to expressed hardship in leaving friends, making new friends, neighborhood conditions, meeting new people, cultural ways being misunderstood by teachers and people in general, family disagreements, and prejudice related to skin color (children more than parents), in addition to family worries about money (parents more than children). In general, as can be seen in Figure 1, Argentinean and Colombian parents (along with West Indian parents) reported less stress than did parents in other groups, whereas their children reported relatively high stress levels that approached (and did not differ significantly from) those of Haitian children.

Does stress affect adjustment?

To assess the relation of immigration stress to adjustment, we created high and low stress groups of children and parents by dividing the sample at the median for each generation and performing MANOVAs on the adjustment measures by stress level and group. There were significant main effects of stress on all of the child and parent adjustment measures. Children evidenced greater depression, more symptoms, lower self-concept, and poorer school adaptation under high stress conditions. Parents reporting more stress had significantly diminished affect and life satisfaction. Means, standard deviations, and F values for these main effects of stress are included in Table 2.

Insert Table 2 about here

The analyses of child adjustment also yielded a significant main effect of group for symptoms, $F(4, 415) = 3.87, p < .005$, and significant group by stress interactions for symptoms, $F(4, 415) = 3.34, p < .01$, and for self-concept, $F(4, 415) = 2.43, p < .05$. The interactions are depicted in Figure 2. Simple effects tests within groups indicated that symptoms were higher for all groups under high stress conditions compared to low stress conditions. Stress level effects on self-concept were significant for all but the Haitian group, although the effect on self-concept was marginal ($p < .07$) for the Cuban group. Tukey follow-up tests within stress levels (SPSS [1990] Oneway) indicated that there were no significant differences among groups at low stress levels, but the Colombian and West Indian groups evidenced more symptoms than other groups when stress was high. No significant differences emerged among groups for self-concept in either the high or low stress conditions. There were no group differences in the parent adjustment measures.

Insert Figure 2 about here

Does support help?

To address this question, we created a high versus low support variable by dividing the social support measure at the median. We then assessed whether parent and child stress differed as a function of differential levels of support. Main effects of support availability were found for both children and parents. For children, those in the lower support group had greater stress ($M = 9.36$, $SD = 3.78$) than did those in the higher support group ($M = 8.58$, $SD = 3.70$), $F(1, 427) = 4.62$, $p < .04$. Parents with lower support were also more stressed ($M = 8.20$, $SD = 4.44$) compared to parents with higher support ($M = 6.78$, $SD = 3.78$), $F(1, 427) = 12.70$, $p < .0001$. There were no group effects in these analyses. Thus the effects of support on stress were consistent across groups.

Next we assessed both direct and moderating effects of support on parent and child adjustment by including the dichotomized stress and support measures as independent variables, along with group, in child and parent MANOVAs with the adjustment measures as dependent variables. Only one significant main effect emerged for child adjustment. Children in families with greater support availability had higher school adaptation ($M = 4.83$, $SD = 0.81$) than did children with less support ($M = 5.04$, $SD = 0.74$), $F(1, 264) = 5.00$, $p < .04$. There were no interactions by stress or group in any of the analyses of child outcomes.

In the analysis of parental affect and life satisfaction, there was a significant main effect of support on affect balance, $F(1, 403) = 17.52$, $p < .0001$. The main effect of support on life satisfaction was not significant, but there was a significant interaction of stress and support, $F(1, 403) = 4.21$, $p < .05$. Support levels made no significant difference under low stress conditions

(for high support, $M = 4.04$, $SD = 0.70$ and for low support, $M = 4.14$, $SD = 0.71$). However, when stress was high, those with higher support were more satisfied ($M = 3.94$, $SD = 0.74$) than were those with lower support ($M = 3.76$, $SD = 0.68$).

An interaction of group by support also emerged for life satisfaction in this analysis of support effects on parent adjustment, $F(4, 403) = 3.21$, $p < .02$. The interaction indicated that a direct effect of support on life satisfaction emerged only for the Haitian group. Haitian parents with more support were more satisfied ($M = 4.16$, $SD = 0.73$) compared to Haitian parents with less support ($M = 3.69$, $SD = 0.74$), $F(1, 421) = 10.63$, $p < .001$.

We finally assessed whether there were group differences in the amount of support available to families. A support availability by group ANOVA revealed significant differences by group in support availability, $F(4, 424) = 4.49$, $p < .001$. The highest levels of support were reported by West Indian parents ($M = 3.02$, $SD = 0.98$), followed by Cubans ($M = 2.81$, $SD = 0.74$) and Colombians ($M = 2.67$, $SD = 0.76$), with Haitian ($M = 2.54$, $SD = 0.79$) and Argentinean ($M = 2.51$, $SD = 0.81$) parents reporting the least availability.

Discussion

In this study, we explored life stage differences in the experience of stress and the operation of social support among immigrant groups varying in socioeconomic characteristics and receiving contexts, by comparing parent and child generations within newly immigrant families. We specifically asked four research questions: (1) are the stresses of immigration comparable for parents and children; (2) does immigration stress diminish child and parent adjustment; (3) does the availability of social support facilitate adaptation, and (4) to what extent do the findings vary by immigrant group? The findings relative to each of these questions are discussed in the following sections.

Are the stresses of immigration comparable for parents and children?

Our findings suggest that both parents and children experience considerable amounts of post-migration stress, but children reported significantly more stress than parents overall and more in most areas except for monetary worries. This pattern of effects may be related to children's inability to control their migration. Uncontrollable and unanticipated events are more likely to be experienced as stressful than those under the individual's control (Pearlin, 1999; Schulz, Wrosch, & Heckhausen, 2003). Parents' markedly greater concern with monetary worries likely reflects the realistic economic peril that many immigrant families face when they arrive and the heavy responsibility that parents often carry with respect to finding work and providing for their families. This parental concern with meeting basic needs may override concerns with social disruption and other hardships of immigration that are more salient to children.

Does stress affect adjustment?

The stresses associated with immigration are clearly and strongly related to psychological adjustment in both children and parents across a range of measures reflecting parent and child adaptation. This finding affirms the disruptive nature of this major life transition and the need for personal and contextual resources to facilitate the family's ability to cope with post-migration difficulties.

Does social support help?

The availability of social support was linked to reduced stress and better adjustment in both parents and children, although the effect on adjustment was limited to school adaptation for the child participants. The weaker effect of support for children may reflect a general developmental lag between children and adults in the effectiveness of social support. Children more than parents may also have difficulty compensating for support resources, particularly

friendships, lost when the family migrates. Another possibility is that children's initial post-migration stress is so high that the available support is insufficient to offset its effects, particularly with regard to internalized adjustment difficulties (depression, self-esteem, and other internalized symptoms). Children may function well in school with added support, but it may not make them feel better in the initial phases of adaptation. As they become more accustomed to their social milieu and develop new friendships, the support derived from these relationships may be more comforting.

Social support was more effective in facilitating parent adjustment. Support availability had a direct positive effect on parent affect, and a moderating effect on life satisfaction. The moderating effect is the classic buffering effect: Support did not differentiate life satisfaction under low stress conditions, but when stress was high, life satisfaction was enhanced for parents if they had more support. Thus, in general, support was clearly helpful to parents weathering the stresses of immigration, but support was less effective in promoting the adjustment of their children.

Are the effects comparable across immigrant groups?

With regard to the total stress reported by the child-parent dyads, Haitian parents and children reported the greatest number of stressors. This is not surprising given the conditions under which Haitian families migrate and the harsh nature of their receiving context. Although there are many exceptions, on average, Haitians are poorer and less educated than those in the remaining groups in our study. Colombians were most likely to have been exposed to violence in their home country, but many Haitians also experienced violence prior to migration. These difficulties are compounded exponentially by the extraordinarily harsh and discriminatory treatment of Haitian immigrants by the U. S. government, which contributes to a devaluation of

Haitians by others in the community and across the U. S. (Stepick, Stepick, Eugene, Teed, & Labissiere, 2001).

The greatest discrepancies in the amount of stress reported by children and parents occurred in the two South American groups. There were significant generational differences in the frequencies of reported stressors between children and parents from Argentina and Colombia. The stress levels of Argentinean and Colombian children were nearly comparable to those of Haitian children, but Argentinean and Colombian parents reported significantly fewer stressors than did Haitian parents.

These results suggest that the receiving context of the school is more stressful for the South American children, compared to the employment and community context of their parents. Although little information is available on immigrant Argentineans and Colombians per se, Portes and Rumbaut (2001) found South American immigrants, in the aggregate, to be better educated and wealthier than those migrating from Cuba or Haiti. Thus, they are often able to live in better neighborhoods and to have more opportunities for employment. However, these groups have only recently arrived in great numbers and their children were more likely than those in the remaining groups to be in schools where few of their peers were from their same countries. They were also more likely to be in schools where fewer children speak Spanish. Thus, the South American children reported relatively high levels of prejudice, in addition to the stresses of social isolation accompanying loss of family and friend networks as a result of migration.

Aside from inter-group differences in frequencies of immigration stress experiences, there was a difference among groups in the availability of social support. West Indian parents reported the highest levels of support. As observed by Kasinitz et al. (2001), migration to the U. S. is a near-normative experience for many West Indian families, as is serial migration, whereby new

migrants are likely to have been preceded by other family members. Indeed, the West Indian participants in our sample frequently cited joining other family members as a reason for migration. Thus, these individuals are likely to have an already existing support system when they arrive. Furthermore, the socio-economic status of West Indians is higher than average among the local immigrant population and these individuals may have greater resources to establish and maintain supportive networks. High levels of involvement with extended family networks are also common among persons of African descent (Wilson, 1986).

The lowest levels of support were found for the Haitian and Argentinean groups. Although serial migration and extended family involvement are relatively common for Haitian families, as well as for English speaking West Indians, the difficult receiving conditions and poor socioeconomic status of Haitian immigrant families may act to limit the social capital available to them, along with curtailing their ability to provide support to others within their social networks (Stepick et al., 2001). Perhaps because of the lesser availability of support to Haitians as a group, along with their greater exposure to stress, higher levels of support were particularly effective in facilitating life satisfaction among our Haitian parents. The rapid and substantial influx of Argentinean immigrants to the area is a recent phenomenon. Thus, Argentinean families are less likely than others to have an existing support network in the U. S., likely accounting for lower levels of available support within the Argentinean group.

As anticipated, the effects of stress and support were largely comparable across the diverse groups participating in the research, although Colombian and West Indian children reported more symptoms under high stress conditions than did those in the remaining groups. Perhaps the greater likelihood of pre-migration exposure to violence increased the susceptibility of Colombian children to post-migration stress. Also, the Colombian and West Indian families were less likely

to be eligible for the free/reduced lunch program, indicating that these groups were better off economically. Thus, for both Colombian and West Indian children, high levels of post-migration stress may contrast sharply with expectations engendered by the relative comfort experienced by other Colombians and West Indians. However, these conclusions are speculative and in need of confirmation in further research.

In general, stress markedly diminished the well being of both children and parents regardless of the family's country of origin. Higher levels of support were linked to lower stress within each of the groups studied. Support also facilitated the school adaptation of children, enhanced the affect of their parents, and buffered the effects of stress on parents' life satisfaction across these groups. These findings point to the importance of developing interventions to minimize the stress exposure and to enhance the social capital of newly immigrant families, regardless of their countries of origin.

Limitations of the Study

This study is subject to limitations that generally adhere to both intergenerational and cross-cultural research. Comparing across age groups within the family serves to minimize extraneous variance that may affect cohorts of unrelated individuals, but we still cannot conclude that differences between the parent and child generation reflect age or life stage differences, as these are always confounded with period effects that impact generations differentially ("cohort effects") (Schaie, 1965). Problems of measurement equivalence and response styles come into play when comparing across age as well. Some of the variation in stress levels between parents and children may represent differences in the way parents and children interpret the questions or in their tendencies to respond candidly to the questions. Thus, our results suggest, but do not confirm, that there are life stage differences in response to migration. Longitudinal-sequential

multi-method research is needed to bolster the present findings.

Cross-cultural studies are also limited, especially with respect to issues of measurement validity and interpretive accuracy. We took great care with respect to the development and translation of measures for this research. We screened the interviews and surveys through a panel of advisors with expertise in research with immigrant and culturally variant populations, we pre-tested measures with children and adults from the groups represented in the study, we involved a number of assistants from the target groups in the development, translation, and fine-tuning of the study measures, to ensure that translations were equivalent and meaningful across groups. Nevertheless, we cannot be certain that these measures meant precisely the same thing to participants from different cultures or that they were equally reliable and valid across cultures. This inability to achieve consistency of measurement is likely reflected in the relatively low reliability of the self-concept measure for Haitian children and the absence of a link between self-concept and stress for this group.

Problems of interpretation enter when drawing conclusions based on inter-group comparisons. Although we have strong representation from these groups among persons involved with the project, along with the published reports about these groups that we reference, we are mindful that our conclusions about inter-group differences are filtered through our own potential biases, and must be confirmed through continued research and feedback from persons steeped in the particular cultures involved.

A third area of limitation is the direction-of-effects problem that plagues correlational research in general. Although it is likely that stress impacts adjustment negatively and support facilitates adjustment, counter-directional effects are possible. Those persons who are better adjusted may experience less stress and they may be able to garner higher levels of support. Thus,

longitudinal research is needed to clarify the present findings.

Summary and Conclusions

In sum, our findings provide the following answers to our research questions: (1) both parents and children experience a number of stressors in the months following migration, but children report hardships more frequently than parents in most areas assessed; (2) immigration stress has a significant impact on the initial post-migration adjustment of both parents and children; (3) the availability of social support is linked to reduced stress and more positive adjustment for both parents and children, but the effects of support on adjustment are stronger for parents; and (4) there are inter-group differences in stress and social support availability, but the effects of stress and support are largely comparable across the immigrant groups participating in this study. Further research is needed to corroborate these results, but the current findings support the conclusion that immigration is a highly stressful transition, regardless of the life stage of the immigrant. Interventions to facilitate the initial adaptation of immigrant children and their parents are clearly warranted.

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Table 1

Number and percent of children and parents answering "Yes" to each immigration stress item.

Immigration Stress Item	Child		Parent		Z
	<i>n</i>	(%)	<i>n</i>	(%)	
Has leaving friends been hard for you?	352	(82.4)	274	(64.2)	6.25*****
Leaving family members?	387	(89.6)	377	(87.3)	0.95
Trying to make new friends?	222	(51.4)	184	(42.6)	2.60***
Living in the neighborhood you live in now?	145	(33.6)	91	(21.1)	4.11*****
Living in the house you live in now?	141	(32.9)	117	(27.3)	1.80
Meeting people who are not from ... [Cuba, Haiti, etc.] (your country of origin)?	182	(42.4)	114	(26.6)	4.81*****
People not understanding the way you speak?	237	(55.4)	214	(50.0)	1.53
People not understanding ... ways of doing things (in your culture)?	219	(52.6)	128	(30.8)	6.41*****
Family members fighting or arguing with each other?	135	(32.4)	108	(25.9)	2.11*
Not having relatives nearby?	263	(61.0)	224	(52.0)	2.75**
Not having friends nearby?	234	(54.9)	198	(46.5)	2.43*
Family members worried about money? (Worries about money?)	147	(34.7)	299	(70.5)	9.83*****
Family members not knowing how to do things here in the U.S.?	164	(39.0)	170	(40.5)	0.38
Family members disagreeing about how to do things here?	136	(33.3)	102	(24.9)	2.63**
Teachers (or others at school) not understanding ... ways of doing things (in your culture?)	183	(43.9)	90	(21.6)	6.66*****
Kids not liking you or making fun of you (prejudice toward you) because you are ... (from your country)	165	(39.1)	112	(26.5)	3.93***
People treating you unfairly because of your skin color?	95	(22.4)	58	(13.6)	3.39***
Kids (people) from different places/countries fighting or arguing with each other?	166	(39.9)	131	(31.5)	2.50*
Having to learn English?	231	(54.5)	224	(52.8)	0.49

* $p < .05$. ** $p < .01$. *** $p < .001$. **** $p < .0001$.

Table 2

Effects of Immigration Stress on Child and Parent Adjustment

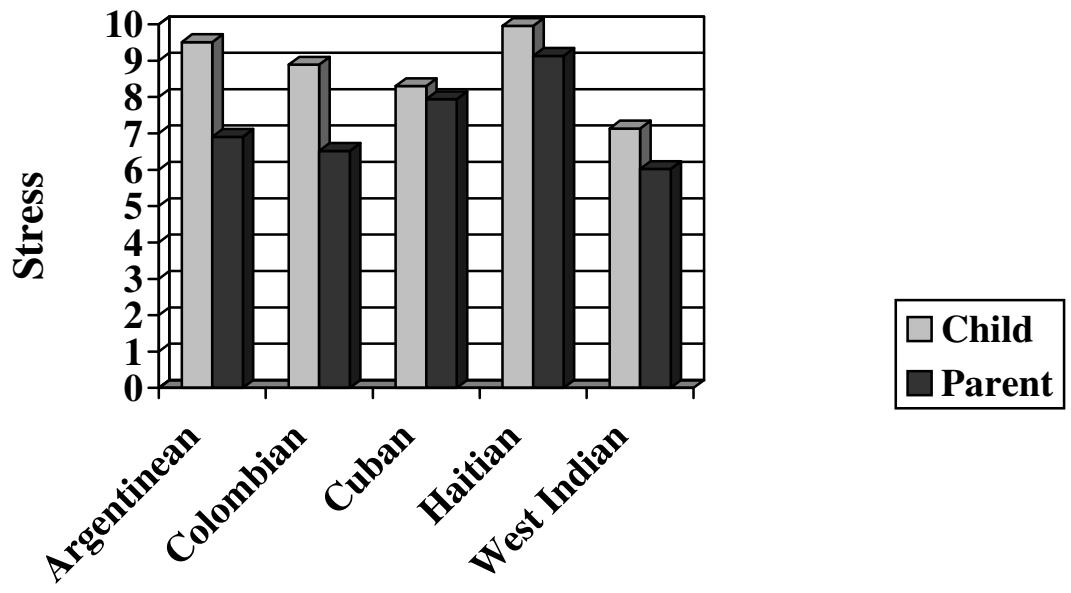
Adjustment Measure	Low Immigration Stress		High Immigration Stress		<i>F</i>
	M	(SD)	M	(SD)	
<i>Child</i>					
CDI	1.20	(0.21)	1.32	(0.25)	23.78 ***
Symptoms	4.73	(3.29)	8.10	(4.34)	80.48 ***
Self-Concept	4.27	(1.33)	3.50	(1.38)	30.12 ***
School Adaptation	5.02	(0.73)	4.83	(0.84)	4.54 *
<i>Parent</i>					
Affect Balance	7.02	(1.88)	6.05	(2.24)	19.39 ***
Life Satisfaction	4.08	(0.71)	3.85	(0.71)	8.10 **

* $p < .05$. ** $p < .01$. *** $p < .0001$.

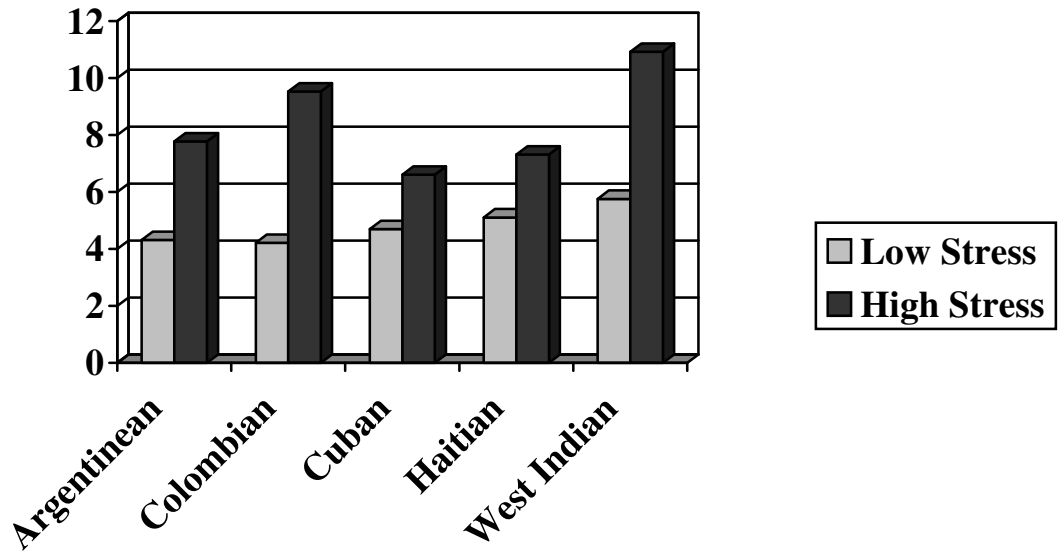
Figure Captions

Figure 1. Numbers of stressors related to immigration reported by parents and children within each group.

Figure 2. Symptom frequencies and self-concept scores as a function of high versus low immigration stress levels within each group.



Symptoms



Self-Concept

