

# **Early Education, Poverty, and Parental Circumstances among Hispanic Children: Pointing Toward Needed Public Policies**

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## **Abstract**

This article presents findings from two research projects concerning the educational achievement and well-being of Hispanic children. The first set of findings is from the first-ever study to calculate high school graduation rates for children with different levels of reading skill in third grade, by race-ethnicity and poverty experience. This research analyzes data from the 1979 National Longitudinal Survey of Youth (NLSY79) and is funded by the Annie E. Casey Foundation. The second set of findings draws on indicators from the Foundation for Child Development's Child Well-Being Index (CWI), which is the nation's most comprehensive measure of the overall well-being of children. Results for these indicators presented here measure poverty, median family income, Prekindergarten enrollment, and NAEP fourth-grade reading test scores (for data sources, see Hernandez & Napierala, 2012). Additional indicators measure parents' educational attainments and fluency in speaking English. Finally, policy and program initiatives are recommended to improve the educational achievement and outcomes of Hispanic and other children, and to increase the economic security and well-being of their families.

## **Introduction**

This article presents findings for Hispanic children from two research projects. The aim is not to test specific theoretical hypotheses. Instead, the goal is to present new findings from research studies that describe important aspects of the lives of Hispanic children, compared to other children, with regard to early education, family economic circumstances, and parental circumstances. Detailed descriptions of the data and methodologies used in these research projects are available in the citations provided.

Two main sets of research findings are discussed here. One set of findings from the first-ever study to calculate high school graduation rates for children with different levels of reading skill in third grade, by race-ethnicity and poverty experience. This research analyzes data from the 1979 National Longitudinal Survey of Youth (NLSY79) and is funded by the Annie E. Casey Foundation. The second set of findings draws from a study using indicators from the Foundation for Child Development's Child Well-Being Index (CWI), which is the nation's most comprehensive measure of the overall well-being of children. Results present here for these indicators measure poverty, median family income, Prekindergarten enrollment, and NAEP fourth-grade reading test scores.

Additional indicators measure parents' educational attainments and fluency in speaking English. Finally, policy and program initiatives are recommended to improve the educational achievement and outcomes of Hispanic and other children, and to increase the economic security and well-being of their families. Results presented here are statistically significant at the .05 level or better, unless indicated otherwise.

## **The First Years of Education, Poverty, and High School Graduation**

The minimal milestone for children to reach is high school graduation, if they are to transition successfully into the labor force as young adults. Formal education that begins early in the lives of children can play a critical

role in ensuring children's long-term educational success. It is particularly important that children become proficient readers, but lacking access to high-quality early education and obstacles posed by limited economic resources can slow or block the progress of children. This section presents new research focused on these issues.

### **Third Grade Reading Skills**

Third grade is a pivot point in a child's education, because third grade marks the point when children shift from "learning to read" to "reading to learn." Until about third grade, teachers and students spend a great deal of time in the task of learning to read. But then the educational process with regard to reading pivots 180 degrees. After third grade, elementary school curricula generally assume that children have achieved a mastery of reading. The focus shifts to using these reading skills to learn about other topics. As a result, students who have not mastered their reading skills by third grade will be at a substantial disadvantage, compared to other students, as they move further through elementary school, and beyond.

The new study of how third grade reading skills are related to high school graduation began with a review of results from the National Assessment of Educational Progress (NAEP), which served as a guide for classifying children by reading skill level. The NAEP found in 2009 that only about one-third of fourth-grade students are proficient readers, that is, only one-third read at or above grade level (Annie E. Casey Foundation, 2010). One might plausibly assume, or hope, that most children would be reading at or above grade level. However, it turns out that about two-thirds of fourth-graders read below grade level, that is, they are reading below the proficient level. Among students who are not proficient readers, NAEP finds that one-third are reading at the basic level, and one-third are reading below the basic level.

Given these facts, this study divides the sample into thirds, reflecting the different reading skills in the NAEP results. High school graduation rates for these three groups are calculated from the 1979 National Longitudinal Study of Youth (NLSY79), because this is the only nationally representative survey that has tested the reading skill of third graders, and then followed these same children into young adulthood. Rates are calculated for graduating from high school on-time, that is, graduating by age 19, for children who have never been poor during the study, and for those who have experienced at least one year of family poverty, separately for Hispanics, Whites, and Blacks. The sample is 3,975 children born between 1979 and 1989 to mothers who were in the age range of 22 to 32 years (for additional information, see Hernandez, 2011).

### **Third Grade Reading Proficiency and High School Graduation**

Overall, 88 percent of the children in this study graduated from high school by age 19, while the remaining 12 percent did not. Graduation rates vary enormously for children with different reading skills in third grade. Among proficient readers, only 4 percent failed to graduate, compared to 16 percent of those who were not reading at grade level at that age. Among those not proficient in reading, 9 percent of those with basic reading skills failed to graduate, and this rises to 23 percent for those with below basic skills (Hernandez, 2011).

Hispanic children are much less likely to be reading proficiently than White children. Results are presented here for Hispanic students tested by NAEP, separately for those who were and were not classified by their schools as English Language Learners. In 2011 (NAEP, 2011), 56 percent of White students not classified as ELL were not reading proficiently in fourth grade, compared to 74 percent and 95 percent, respectively, among Hispanic students who were not and who were classified as English Language Learners (NAEP, 2012). Between 1998 and 2011, the improvements in reading proficiency rates among students not classified as English Language Learners were slightly larger for Hispanic students than for White students, at 10 versus 7 percentage points, but substantially smaller at 3 percentage points for Hispanic students who were classified as English Language Learners.

The new study using NLSY79 data found that among children not reading proficiently that Hispanic children were nearly twice likely as White children to not graduate from high school, at 24 percent versus 13 percent (Figure 1). Thus, Hispanic students who have not mastered reading in third grade are 11 percentage

points less likely to graduate from high school than White students with similar reading skills. Only about 4 percent of White students who read well in third grade failed to graduate from high school, compared to 9 percent of Hispanic students, a difference that is not statistically significant (Hernandez, 2011).

### **Reading Proficiency, Poverty Experience, and High School Graduation**

Poverty contributes further to high rates of not graduating from high school. Hispanic children in 1994 experienced poverty rates 3-4 times greater than White children. The official, federal poverty rates for Hispanic children with U.S.-born parents and those in immigrant families, respectively, were 37 percent and 44 percent in 1994, compared to 12 percent for White children with U.S.-born parents. By 2010, poverty rates had declined for Hispanic children with U.S.-born parents and those in immigrant families, respectively, to 28 percent and 40 percent, while the rate for White children with U.S.-born parents remained unchanged. Despite these improvements, by 2010 poverty rates for Hispanic children in native-born and immigrant families continued to be 2-3 times greater than for White children in native-born families.

Because poverty rates pertain to specific years, and because from one year to the next some children live in families whose income rises above the poverty threshold, while others live in families whose income drops below the poverty threshold, the proportions of children who over an extended period of time spend at least one year in poverty are even higher. Because NLSY79 data were collected every other year, it is possible to ascertain whether a child lived in a poor family in at least one of five years between second grade and 12<sup>th</sup> grade. Based on these data, 49 percent of Hispanic children lived in a poor family for at least one year, compared to 31 percent for White children. The proportions would be even higher if it had been possible to determine the poverty status of children for every year between 3<sup>rd</sup> and 12<sup>th</sup> grade. Thus, more than one-half of Hispanic children and more than one-third of White children experienced at least one year of poverty during their school years.

Among the large numbers of children who experience family poverty, many are not reading proficiently by third grade. This proportion who experience poverty and are not reading proficient in third grade in the NLSY79 sample is four-in-ten for Hispanic children at 41 percent, compared to two-in-ten at 22 percent for White children. Among children who experience family poverty and who are not proficient readers in third grade, the percent not graduating from high school is 33 percent for Hispanic children, substantially higher than the 22 percent for White children. The rates are about one-half as large, but still substantial, for children with poverty experience who did read proficiently in third grade, at 14 percent for Hispanic children, compared to 11 percent for White children. Thus, children in poor families are in double jeopardy: They are more likely to have low reading test scores, and at any reading skill level, they are less likely to graduate from high school.

The consequences for Hispanic children are particularly profound, because they are more likely than White children to experience family poverty and to not read proficiently, and among the larger proportion of Hispanic children who experience both, the chances of not graduating from high school are substantially higher for Hispanic children than for White children (31 percent versus 22 percent).

### **PreK-3<sup>rd</sup> Education and Hispanic Prekindergarten Enrollment**

These findings point toward the need to improve the educational experiences of children, and especially Hispanic children, for the years leading up to third grade. High-quality Prekindergarten programs can play a critical role in raising reading skills by third grade, because they can dramatically expand the time that children devote to learning the cognitive and socioemotional skills needed to become reading proficient. During the elementary grades, children spend three full years in school by the end of third grade. In addition, for many children Kindergarten brings this up to 3 ½ or 4 years depending on whether they attend half-day or full-day Kindergarten. However, if children begin Prekindergarten at age 3 in a full-blown PreK-3<sup>rd</sup> program, they increase the total to a much longer six years in school (see below for discussion of the components of PreK-3<sup>rd</sup> programs). This greatly expands the amount of time available for teachers and for children to work together on

developing children's reading skill.

Beginning with these earliest years of education, high-quality early education programs have been found to promote school readiness and educational success in elementary school and beyond (Gormley, Phillips, & Gayer, 2008; Haskins & Rouse, 2005; Heckman & Masterov, 2007; Lynch, 2004; Reynolds et al., 2011). Hispanic children of immigrants with limited educational attainments and limited English proficiency, in particular, may be especially likely to benefit from such programs (Gormley, 2008).

However, Hispanic children are less likely than others to be enrolled in Prekindergarten. In 2009, for example, Prekindergarten enrollment for Hispanic children ages 3-4 was 40 percent overall, at 42 percent for those with both parents born in the U.S., and 38 percent for Hispanic children in immigrant families with at least one immigrant parent, compared to 55 percent for White children with U.S.-born parents.

Particularly low rates of Prekindergarten enrollment for Hispanics are found for Mexican-origin children both in immigrant families and with U.S.-born parents and for children in immigrant families from Central America (Hernandez, Denton, & Macartney, 2011). These Hispanic children account for 79 percent of Hispanic children aged 3-4, and of these this 79 percent 28 percent are Mexican-origin children with U.S.-born parents, 44 percent are Mexican-origin children in immigrant families, and 7 percent are children in immigrant families from Central America.

### **Why Prekindergarten Enrollment is Low for Hispanics**

One plausible reason for low Prekindergarten enrollment that is sometimes cited, particularly for Hispanic immigrants, is a more familistic cultural orientation. The idea is that immigrants from familistic cultures may prefer child-care provided at home by parents or other relatives, instead of by non-relatives in formal settings. There are, however, alternative, socioeconomic barriers that can limit enrollment.

Early education programs may cost more than parents can afford to pay, or the number of openings available locally may be too small to meet the demand. Although federal and state governments have policies that are intended to reduce or eliminate such difficulties for poor families, these policies are severely underfunded. Also, available programs may lack home language outreach, or they may lack teachers with a minimal capacity to speak to a child in the home language. In addition, parents with limited educational attainments may not know how to access early education programs, or may not be aware that these programs can foster school success for their children.

A recent study has estimated the extent to which enrollment gaps separating White children with U.S.-born parents, on the one hand, from immigrant or race-ethnic minority children, on the other, can be accounted for by socioeconomic barriers or cultural preferences (Hernandez, Denton, & Macartney, 2011). Altogether, for Mexican-American children in immigrant families and with U.S.-born parents, as well as children in immigrant families from Central America, the results indicate that socioeconomic barriers can account for at least one-half and perhaps all of the enrollment gap separating them from White children with U.S.-born parents, while most estimates indicate that cultural influences play a comparatively small role in accounting for the gaps in low Prekindergarten school enrollment for these groups (Figure 2).

These results may be surprising. But they are consistent with the strong commitment to early education in contemporary Mexico, where universal enrollment at age 3 became a national requirement in the 2008-2009 school year, although it has yet to be fully implemented (Yoshikawa et al., 2006). In fact, in 2005, 81 percent of children age 4 in Mexico were enrolled in preschool, substantially more than the 71 percent enrolled in preschool at age 4 among White children with U.S.-born parents in 2004. Given that preschool is less costly in Mexico than in the U.S., and given that poverty for the Mexican immigrant group in the U.S. is quite high, it is not surprising that the proportion enrolled in the U.S. for the immigrant Mexican group at 55 percent is substantially lower than the 81 percent enrolled in Mexico.

In sum, familistic cultural values are sometimes cited to explain lower early education enrollment among some Hispanic immigrant groups, but this research shows socioeconomic barriers can account for at least 50 percent, and for some groups, perhaps all of the gap. These results point toward the need for public policies that increase access to and the affordability of high-quality early education.

## Family Economic Circumstances

Results reported above highlight the critical role that economic resources play in ensuring that children have access to high-quality early education and health insurance. This section of the paper focuses on the economic resources available in the family homes of children, and on two key family circumstances that influence the magnitude of available resources.

### Median Family Income

The typical Hispanic child in the 2010 Current Population Survey lived in a family with a median annual income that was less than half as large as the median family income of White children with U.S.-born parents, at \$35,000 versus \$73,000. Compared to the average for Hispanic children, those with U.S.-born parents had a median family income that was \$6,000 higher, at \$41,000, while Hispanic children in immigrant families had a median family income \$4,000 lower than the average at only \$31,000. Overall, the typical White child with U.S.-born parents experienced a median family income that was an enormous \$32,000 greater than for Hispanic children with U.S.-born parents and an even larger \$42,000 greater than for Hispanic children in immigrant families. These findings point toward the need for public policies that will lead to increased family incomes for a large proportion of Hispanic children in both immigrant families and in families with U.S.-born parents.

### Parents' Education

The educational attainments of parents are important for a complex set of reasons. In the short run, parents with lower educational attainments tend to work at occupations that offer lower incomes, which limits the economic resources available to children in these families. It also has long been known that children whose parents have completed fewer years of schooling tend, on average, to themselves complete fewer years of schooling and to obtain lower paying jobs when they reach adulthood, compared to children whose parents have completed more years of schooling (Blau & Duncan, 1967; Featherman & Hauser, 1978; Sewell & Hauser, 1975; Sewell, Hauser, & Wolf, 1980).

The 2010 American Community survey indicates that 7 percent of White children with U.S.-born parents have fathers who have not graduated from high school. This more than doubles to 17 percent for Hispanic children with U.S.-born parents, and it increases seven-fold to an enormous 51 percent of Hispanic children in immigrant families (results for mothers are similar and are not reported here).

At still lower educational levels, parents whose education does not extend beyond the elementary level may be especially limited in knowledge and experience needed to help their children succeed in school. Immigrant parents often have high educational aspirations for their children (Hernandez & Charney, 1998; Kao, 1999; Rumbaut, 1999), but may know little about the U.S. educational system, particularly if they have completed only a few years of school. Parents with little schooling may, as a consequence, be less comfortable with the education system, less able to help their children with school work, and less able to effectively negotiate with teachers and education administrators. Among White children with U.S.-born parents, 1 percent have a father who has completed only 8 years of school or less, and this is somewhat higher at 3 percent for Hispanic children with U.S.-born parents, but this rises to nearly one-third (31 percent) for Hispanic children in immigrant families.

The comparatively high proportion of Hispanic children with U.S.-born parents who have not graduated from high school, and the even higher proportions of Hispanic children in immigrant families with parents who have limited educational attainments no doubt contribute to their comparatively low family incomes, as well as posing a challenge as parents seek to facilitate their children's success in school by helping with homework or by engaging the educational system. These findings point toward the need for public policies to foster increased education for many Hispanic parents.



## Parents' English Fluency

Insofar as parents are less than fully fluent in English, they also may experience difficulty finding well-paid work, and they may experience barriers to engaging schools on behalf of their children. The 2010 American Community Survey indicates that only 0.2 percent of White children with U.S.-born parents do not have an English fluent parent in the home. This rises to 5 percent for Hispanic children with U.S.-born parents and jumps to 58 percent for Hispanic children in immigrant families. Thus, limited English fluency may have a small comparative effect on the parental income and parental school engagement for Hispanic children with U.S.-born parents, but it has a potentially large impact for Hispanic children in immigrant families. These findings point toward the need for public policies to ensure that schools and other public and private agencies reach out to many Hispanic immigrant parents in Spanish, and also for public policies to facilitate the learning of English by Hispanic immigrant parents who have moved to the U.S. seeking success economic and educational success for themselves and their children.

## Public Policies to Improve Education and Economic Well-Being

The findings presented here point toward two arenas where public policies are needed to improve educational outcomes for children. First, high-quality PreK-3<sup>rd</sup> education is critical to improving the reading skills of children by third grade, and therefore to increasing high school graduation rates. Second, it is important to increase education and income among parents. Particularly promising are dual-generation programs that link high-quality PreK-3<sup>rd</sup> education with sector-based work force development program for parents which provide high-quality job training for high demand-occupations that provide good, middle-class incomes (for additional policy recommendations in each of these policy arenas see Hernandez, 2012).

## The PreK-3<sup>rd</sup> Approach to High Quality Education

High-quality Prekindergarten programs are critical to raising reading proficiency levels by third grade. But many young Hispanic (and non-Hispanic) children are not enrolled. The expansion of public policies, such as state-based Prekindergarten or Head Start, is essential to increase access to and the affordability of Prekindergarten for these children. To really make a difference, this must high-quality Prekindergarten education.

But this is only the critical first step. Programs that are continued into elementary school with high quality are most likely to be sustained in their long-term effects (Brooks-Gunn, 2003). In other words, the approach most likely to have the maximum positive effect in the long-term is one that is aligned and coordinated for children ages 3 to 8 (Bogard & Takanishi, 2005). This idea, which has become known as the PreK-3<sup>rd</sup> approach to education, incorporates five key components: (1) alignment of standards, curricula, and assessment connected across grades from Prekindergarten through third grade, (2) features of school organization that include voluntary full-day Prekindergarten for all three- and four-year old children, (3) qualified teachers who are prepared specifically to teach at any grade from Prekindergarten to third grade, (4) research-based approaches to creating classrooms that are effective learning environments, and (5) teachers and parents working together to foster the educational success of children (Foundation for Child Development, 2013).

**Return on investment in PreK-3<sup>rd</sup>.** Specific policies can be crafted to foster and ensure the implementation of these features of a successful PreK-3<sup>rd</sup> educational system. How much difference does a high-quality PreK-3<sup>rd</sup> program make? Increased skills and success for children can lead to very large, long-term benefits, not only for children but also for society as a whole. A recent study of an integrated PreK-3<sup>rd</sup> approach implemented in Child-Parent Centers in Chicago found improved educational outcomes. For every \$1.00 invested in the first 4-6 years of school, there was long-term societal return of \$8.24 (Reynolds, 2011). This is an enormous long-term return on investment.

There are, of course, costs associated with implementing high-quality PreK-3<sup>rd</sup> education. In the Child-

Parent Centers, for Prekindergarten the additional cost per year is about \$1700, with a total cost per child of \$5,000 per year. For K-3 the additional cost per child is about \$1200 per year. The return on these significant, but small, investments is enormous at 18 percent for Prekindergarten over the long-term, and 10 percent for the early elementary school years' investments.

**Strategy for implementing PreK-3<sup>rd</sup>.** It is important to begin making these investments now. Prekindergarten and PreK-3<sup>rd</sup> are not luxuries. They are essential to meeting the early-learning needs of young children. Because high-quality education is critical, insofar as funds are available but limited, it may make sense to invest first in a smaller number of schools to develop high-quality programs, rather than spreading additional resources widely across lower-quality programs. After high-quality programs are implemented, these programs can serve as a model and can provide best-practice lessons and technical assistance to diffuse high-quality education more widely for ever larger numbers of children. (For additional information about the PreK-3<sup>rd</sup> approach, see Foundation for Child Development, 2012).

**Language instruction.** In addition, results presented here highlight the fact that special attention should be paid to English Language Learners. Children who learn English after their home language is established, typically around age three, can add a second language during the Prekindergarten and early school years. This bilingual skill leads to long-term cognitive, cultural, and economic advantages. A dual-language approach to teaching has been found to be effective for English Language Learners, while not having negative consequences for other students (Espinosa, 2013).

Even if Prekindergarten teachers are not fluently bilingual in a child's home language, they can introduce young English Language Learners to English. They can also adopt teaching practices that support home language development. Teachers who encourage the families of children to talk, read, and sing with the child in the parents' home language, and to use the home language in everyday activities, will foster the child's first language development even as the child is learning English (Espinosa, 2013).

In designing education programs for students who are English Language Learners, results from two studies are especially important. The first, conducted by psychologists, is the International Comparative Study of Ethnocultural Youth (ICSEY) spanning in 13 countries including the U.S. The second, conducted by sociologists, is the Children of Immigrants Longitudinal Study (CILS) of adolescents in southern California and southern Florida. These studies find that children in immigrant families who identify with and participate in the cultures of both the society of origin and the society of settlement, and who become fluent in both languages, adjust to the settlement society more successfully than do children with other patterns of acculturation (Hernandez, Macartney, & Blanchard, 2009; Phinney et al., 2006; Portes & Rumbaut, 2001; Sam, 2006).

## **Dual-Generation Strategy for Academic Success and Economic Well-Being**

It also is essential that public policies address the problems of low family income and poverty, because children in families with limited economic resources experience a variety of negative development outcomes, reflected in their cognitive and socioemotional development, educational achievements, and incomes during adulthood (Duncan & Brooks-Gunn, 1997; McLoyd, 1998; Sewell & Hauser, 1975). One very promising approach is a dual-generation strategy which links high-quality PreK-3<sup>rd</sup> education with sectoral job training for parents that leads to a credential for well-paid, high-demand occupations. This approach is more than just job training in three important ways.

First, it is sector-based. The idea is to identify occupations such as nursing, or high-tech jobs where there is a growing demand in the local labor market. These jobs should provide a clear path of credentials and skill improvement which lead to middle-class incomes.

Second, it is essential that the program include well-targeted family support and peer support services. To ensure that low-income and English Language Learner parents succeed, they need an extensive set of services ranging from English-language training, to peer-support activities, to financial assistance, to internships, and clear access to actual jobs in the local economy.

Third, this workforce development program should be linked with high-quality PreK-3<sup>rd</sup> education, because of the potential synergies between the two. For example, parents who see their children in a safe, high-

quality early education programs with caring and effective teachers will feel more comfortable in leaving their children while they participate in their own skill development, and ultimately in the labor market. By the same token, children who see their parents engaged in their own school work, studying and doing homework, are more likely to be motivated to succeed in school (for additional information about the dual-generation approach see Foundation for Child Development, 2012; for additional recommendations regarding investments in the economic well-being of children and families, see Hernandez, 2012.).

### **Conclusion**

In sum, many Hispanic children are not reading proficiently by third grade, many live in low-income or poor families, and many have parents with limited education. Because low reading skills and poverty lead to high rates of not graduating from high school, and because limited parental education can act as a barrier to children's educational success, these children are especially vulnerable, and it is critical that effective policies and programs be developed and implemented to provide the opportunity for these children to succeed in school and in life. This is important not only for these children and their families, but also to the larger society, and to the predominately white non-Hispanic baby-boom generation in particular, because the baby-boom generation will depend for their own retirement on the economic productivity of these children as they enter the labor force during the coming years.



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