

Literature on Poverty and Student Achievement

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INTRODUCTION

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There are a significant number of research papers that have been published in recent years about the relationship between poverty and student achievement. To select the empirical studies and meta-analyses for inclusion in this bibliography, Hanover Research primarily relied on JSTOR, a digital library of academic journals and related publications. Hanover searched for research studies pertaining to the interaction of poverty and socioeconomic status (SES) with achievement and other outcomes related to learning. While the most relevant research was selected for inclusion in this bibliography, the currency of the research was also taken into consideration.

This bibliography represents studies with a variety of foci and conclusions, presenting a wide range of research examining poverty and achievement. For example, some studies aimed to examine the effects of multiple demographic factors on learning, but controlled for socioeconomic status in an attempt to disentangle variables such as race and poverty. Other studies looked at certain educational outcomes or programs, but relied on data from a large sample of low-SES students. Still another type of research we found had to do with socioeconomic status and its relationship with early childhood and child psychology. We include several of these studies since SES was an important factor in the research despite a focus on particular programs or aspects of learning and development.

Only a few studies we found had findings that did not demonstrate a negative impact of poverty on achievement (specifically school poverty level in the case of one study by Meyers, Kim, and Mandala). Although the interaction of poverty and SES with other family and school environmental factors has been demonstrated to be very complex, the vast majority of research indicates that student and school poverty has a negative impact on achievement.

ANNOTATED BIBLIOGRAPHY

- Abbott, Martin L., Jeff Joireman and Heather Stroh. "The Influence of District Size, School Size and Socioeconomic Status on Student Achievement in Washington: A Replication Study Using Hierarchical Linear Modeling." Washington School Research Center (November 2002).
 - Using state test scores of 4th and 7th graders in Washington, this study found that "the negative relationship between school poverty and achievement is stronger in larger districts" and that "the effect of school level poverty on achievement is smallest when both the district and school are small."

- Alexander, Karl L., Doris R. Entwisle and Linda S. Olson. "Schools, Achievement, and Inequality: A Seasonal Perspective." *Educational Evaluation and Policy Analysis* 23.2 (Summer 2001): 171-191.
 - Alexander, Entwisle and Olson examine a panel of Baltimore students to determine the relationship between students' socioeconomic status, achievement, and out-of-school environment, particularly during the summer months. The analysis demonstrates the impact summer learning loss has on low-income students in comparison to higher-income peers.

- Beck, Audrey N. and Clara G. Muschkin. "The Enduring Impact of Race: Understanding Disparities in Student Disciplinary Infractions and Achievement." *Sociological Perspectives* 55.4 (Winter 2012): 637-662.
 - The authors evaluate to what extent race gaps in educational outcome stem from family and demographic characteristics and from school characteristics, using administrative school records from North Carolina. The authors determine that students' family and demographic characteristics are the most important factors in determining the achievement gap, and the distribution of students across schools with differing racial composition, school sizes, teacher qualifications, and poverty levels also help explain gaps. However, the gaps between each of the races are largely unexplained by these compositional differences.

- Burchinal, Margaret, Laurence Steinberg, Sarah L. Friedman, Robert Pianta, Kathleen McCartney, Robert Crosnoe, Vonnie McLoyd and NICHD Early Child Care Research Network. "Examining the Black-White Achievement Gap Among Low-Income Children Using the NICHD Study of Early Child Care and Youth Development." *Child Development* 82.5 (September/October 2011): 1404-1420.
 - The authors examine the black-white achievement gap in children's reading and mathematics achievement from 4.5 years old through fifth grade, in a sample of 314 low-income American youth followed from birth. An achievement gap was first detected at age three, and the gap is largely explained by differences in family,

childcare, and educational experiences. The authors recommend early intervention to reduce racial gaps at home and in school.

- Davis-Kean, Pamela. "The Influence of Parent Education and Family Income on Child Achievement: The Indirect Role of Parental Expectations and the Home Environment." *Journal of Family Psychology*, Vol. 19(2), (June 2005): 294-304.
 - This study looked at parental education and income, its relationship with parents' beliefs and behaviors, and how this indirectly affects children's achievement. The author found that socioeconomic factors were related indirectly to children's academic achievement through parents' beliefs and behaviors, although this relationship was different by racial group. Parents' years of schooling also was found to be an important socioeconomic factor.

- Duncan, Greg J. and Katherine A. Magnuson. "Can Family Socioeconomic Resources Account for Racial and Ethnic Test Score Gaps?" *The Future of Children*, Volume 15, Number 1 (Spring 2005): 35-54.
 - This study examined whether different socioeconomic factors among families of different races and ethnicities account for racial gaps in school readiness among preschoolers. The research found that socioeconomic resource differences accounted for about half of the standard deviation of the differences in school readiness.

- Harding, Heather R., Lois Harrison-Jones and Howard M. Rebach. "A Study of the Effectiveness of Supplemental Educational Services for Title I Students in Baltimore City Public Schools." *The Journal of Negro Education* 81. 1, Special Focus: Adolescent Discipline, Cultural Compatibility, and Academic Achievement in Education (Winter 2012): 52-66.
 - The authors examine whether Supplemental Educational Services (SES) programs, intended to improve learning outcomes of at-risk students, significantly improved student academic achievement in Baltimore City Public Schools, utilizing a quasi-experimental research design to compare SES participants and non-participants.

- Howse, Robin B., Garrett Lange, Dale C. Farran and Carolyn D. Boyles. "Motivation and Self-Regulation as Predictors of Achievement in Economically Disadvantaged Young Children." *The Journal of Experimental Education* 71.2 (Winter 2003) 151-174.
 - This study sought to better understand "the roles of motivation and self-regulated task behavior for early school achievement differences among young, economically at-risk and not-at-risk children." The authors evaluated a total of 127 students, aged five to eight, and both at-risk and not-at-risk. Teachers and children reported comparable motivation levels for at-risk and not-at-risk children, but task-attention was lower for at-risk children. Additionally, younger at-risk children's attention-regulation abilities predicted achievement.

- Lee, Jung-Sook and Natasha K. Bowen. "Parent Involvement, Cultural Capital, and the Achievement Gap among Elementary School Children." *American Educational Research Journal* 43.2 (Summer 2006): 193-218.
 - Lee and Bowen evaluate the level and impact of five types of parent involvement on elementary school children's academic achievement by race/ethnicity, poverty, and parental educational attainment using a sample of 425 third through fifth graders. Parents with different demographic characteristics exhibited different types of involvement, and those practiced by parents from the dominant group had the strongest association with achievement.

- Lee, Valerie and David T. Burkham. "Inequality at the Starting Gate: Social Background Differences in Achievement as Children Begin School." Economic Policy Institute (2002).
 - This book contains a number of findings based on an analysis of the US DOE's Early Childhood Longitudinal Study Kindergarten Cohort, including: substantial differences by race and ethnicity in children's test scores as they begin kindergarten; the association of race and ethnicity with SES; the association of family structure and educational expectations with SES, race/ethnicity, and test scores; the strong relationship between SES and cognitive skills; and the fact that low-SES children begin school in systematically lower-quality elementary schools than do their more advantaged counterparts.

- Long, Mark C., Dylan Conger, and Patrice Latarola. "Effects of High School Course-Taking on Secondary and Postsecondary Success." *American Educational Research Journal* 49.2 (April 2012): 285-322.
 - The authors utilize panel data from a census of Florida public school students to examine the associations between students' high school courses and 10th-grade test scores, high school graduation, postsecondary matriculation, and postsecondary performance. The authors determine significant differences in the outcomes of students who take rigorous courses, and estimated effects are often larger for disadvantaged students and students attending disadvantaged schools.

- Lubinski, Sarah Theule. "A Closer Look at Black-White Mathematics Gaps: Intersections of Race and SES in NAEP Achievement and Instructional Practices Data." *The Journal of Negro Education* 71. 4 (Autumn 2002): 269-287.
 - Lubinski examines the black-white achievement gap in 4th, 8th, and 12th grade mathematics achievement and instruction, utilizing scores from the 1990, 1996, and 2000 NAEP. The study identified substantial black-white achievement gaps. An analysis of race and socioeconomic status with the 1996 data proved that controlling for socioeconomic status failed to account for much of the gap, and several instruction-related factors differed by race after accounting for socioeconomic status.

- McCoy, Leah P. "Effect of Demographic and Personal Variables on Achievement in Eighth-Grade Algebra." *The Journal of Educational Research* 98.3 (January – February 2005): 131-135.
 - McCoy investigated the effect of demographic variables and attitudes on the achievement of 107 eighth grade algebra students enrolled in four classes. Ethnicity, socioeconomic status, and attitudes significantly affected mathematics scores.

- Meyers, Samuel L., Jr., Hyeoneui Kim and Cheryl Mandala. "The Effect of School Poverty on Racial Gaps in Test Scores: The Case of the Minnesota Basic Standards Tests." *The Journal of Negro Education* 73.1 (Winter 2004): 81-98.
 - The authors use data from the 1996, 1998, and 1998 Minnesota comprehensive statewide testing of eighth grade students to determine whether black students have lower achievement than white students because they are more likely to attend high-poverty schools. The study found that school poverty did not explain test score gaps, in contrast to racial differences.

- Okpala, Comfort O., Amon O. Okpala and Frederick E. Smith. "Parental Involvement, Instructional Expenditures, Family Socioeconomic Attributes, and Student Achievement." *The Journal of Educational Research* 95.2 (November – December 2001): 110-115.
 - The authors evaluate the influence of parental involvement, socioeconomic status, and instructional supplies expenditure on the mathematics achievement of fourth grade students in a low-income North Carolina county. The study determined that free/reduced lunch enrollment was negatively related to student academic performance in mathematics, and that instructional supplies expenditure and parental volunteer hours were not statistically significant in explaining math scores.

- Ricciuti, Henry N. "Single Parenthood, Achievement, and Problem Behavior in White, Black, and Hispanic Children." *The Journal of Educational Research* 97.4 (March – April 2004):196-206.
 - Ricciuti examined whether negative effects of single parenthood not observed in six- to seven-year-old children emerged when they became 12 to 13 years old, as tracked by the National Longitudinal Study of Youth. Little to no evidence of systematic negative effects emerged at the later age, except for some isolated findings of lower vocabulary scores for the black cohort.

- Sirin, Selcuk R. "Socioeconomic Status and Academic Achievement: A Meta-Analytic Review of Research." *Review of Educational Research* Vol. 75 no. 3 (Fall 2005): 417-453.
 - This meta-analysis examined studies from 1990 to 2000, containing a total of 74 independent samples and 101,157 students. The results of this body of research demonstrated a medium to strong correlation between SES and achievement,

although the correlation is influenced by school level, minority status, and school location.

- Wilson, Clancie Mavello. "The Relation among Parental Factors and Achievement of African American Urban Youth." *The Journal of Negro Education* 78. 2 (Spring 2009): 102-113.
 - Wilson examines factors contributing to the scholastic achievement of African American urban youth through surveying 60 low-resource middle school parents and students. Questions addressed include the relationship of socioeconomic status to achievement, parents' relationships with and oversight of students, and parents' relationship to social support. The paper only discusses factors with significant relationships.

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