The Effects of Early Education on Children in Poverty

Anna D. Johnson

Doctor of Education Student
Developmental Psychology
Department of Human Development
Teachers College, Columbia University

Introduction

Social scientists have posited that education can make a significant and long-lasting difference on the lives of children who experience poverty (Barnett, 1995; Brooks-Gunn, 2003; Karoly, et al, 1998). In recent years, policymakers and researchers in the United States have reexamined the role that quality early education can play in the lives of young children growing up in poverty (Rouse, Brooks-Gunn, & McLanahan, 2005). Specifically, some have argued that high quality education and care programs that begin early in life have the potential to close gaps in school achievement that often exist between poor and minority children and their middle-class, mostly White, counterparts (Magnuson & Waldfogel, 2005). Based on these conclusions, U.S. policymakers and practitioners interested in improving the lives of poor children have considered the possibility that early education programs may contribute to solving the myriad of problems that growing up in poverty poses. This paper will examine the most recent American research on socioeconomic and racial gaps in school readiness. Additionally, early childhood intervention programs in the form of quality early education and care will be discussed, and the effects of successful early educational intervention programs for children in poverty will be reviewed.

For the purpose of this paper, the terms intervention programs, early childhood education programming and early care refer to programs offered to young children prior to the start of formal schooling. These programs share the goal of enhancing early learning and development through cognitively stimulating activities. An intervention is a program that is targeted towards children who experience environmental risk, namely poverty, which likely interferes with normative, healthy development in a number of developmental domains. They are offered with the expectation that such programs can buffer the negative effects of poverty on the development of a child. The term intervention is used to distinguish early education programs offered to poor children from those that families with greater financial resources can afford.

School Readiness

The extensive body of developmental research suggests that school readiness is a key foundational element and indicator of later life success. This information has led to a number of US-based studies examining the early educational experiences of poor children. The concept of school readiness recognizes that children enter school with varying degrees of preparedness for learning. Because these differences can persist throughout schooling, concerns have arisen regarding how ready children are to learn when they arrive at school. Findings from studies examining the link between socioeconomics and school readiness have largely concluded that poor children are less likely than their more privileged peers to arrive
at school ready to learn, and that children who start school with a disadvantage are unlikely to catch up to their classmates unless educational intervention programs are made available (e.g., Duncan & Magnuson, 2005; Magnuson & Waldfogel, 2005).

Researchers have posited that the proportion of kindergarteners who enter school without basic literacy and numeracy skills could be substantially higher in poor and minority communities than that of children from middle-class backgrounds (Brooks-Gunn, 2003). Given the historical racial and ethnic inequalities in the United States, the socioeconomic circumstances of Black and Hispanic families tend to be strongly associated with gaps in their children’s test scores and achievement. Moreover, because of unequal educational opportunities, failing public schools and the inability of many poor families to pay for a higher quality private education, children of poor and minority parents are more likely to struggle in school than are their wealthier White peers (Wells & Crain, 1997). For instance, findings from the US-based Early Childhood Longitudinal Study (ECLS-K) reveal that the mean socioeconomic level of Black children in kindergarten was significantly lower than that of White kindergarteners, and that the average socioeconomic level of Hispanic children was lower than both Black and White children (Duncan & Magnuson, 2005). As such, increased attention has been paid in recent years to closing the gaps in school readiness, with the greater goal of reducing disparities in achievement and life success.

**Early Education**

While many researchers have turned their attention to reducing the achievement differences between students by making early intervention programs available, interest in the effects of early care and education on young children from poor families has also been heightened. Increases in the use of early care and education for the nation’s youngest children are due in part to the marked swell in female labor force participation. Specifically, this relatively recent surge, which is as a result of changing family structure and welfare reform legislation, has led to a dramatic rise in the number of young children who are left in the care of someone other than their parents (Phillips & Adams, 2001). This may come in the form of day care, child care, or early education arrangements. Although research suggests that income is clearly associated with the cognitive development and achievement of children during their preschool years, studies have likewise found that the poorest children benefit the most from a high quality early education program (Brooks-Gunn, 2003; Yoshikawa, 1995). Thus, for the large numbers of young children from poor backgrounds who are enrolled in early education, such education has the power to truly impact their developmental trajectories. For youngsters growing up in poverty, which in the United States means that the family’s income is below the federal poverty level, quality early education programming can improve school readiness and subsequent chances for school success, financial independence, and social stability.

Literature in the area of early childhood education suggests that high quality early education programs can exert positive effects on a child’s cognitive outcomes, as well as on skills beyond general cognitive ability and intelligence quotient (IQ) (Campbell & Ramey, 1994). Indicators of high quality early education programming are those dimensions of an early education or care program that are recognized to promote healthy learning and development. These dimensions include well-trained teaching staff, a small number of children per classroom and an enduring intervention that begins early. Reviews of effective early education strategies
conclude that programs that combine early childhood education with services to support families can produce lasting positive social benefits, and can result in decreased rates of antisocial and delinquent behavior (Yoshikawa, 1995).

**Early Education: Model Programs**

The Perry Preschool and Abecedarian projects are two early education intervention programs that have positively impacted the lives of those children who participated. Evidence from these programs supports the argument that education-centered early intervention programs can combat the negative effects that growing up in poverty can have on child development. The Perry Preschool Project placed an experimental group of preschool-aged children in an intense, high quality intervention program. A high quality intervention program is one that includes many of the theoretically recognized elements of quality education programs, such as regular academic-oriented activities for children, a rich learning environment, qualified teachers, and home visits to enhance parenting strategies for adults. The Perry Preschool program included a weekday morning preschool routine combined with weekly home visits by program staff. The teacher-child ratio in the intervention program classrooms was one adult for every five or six children, the teachers were professionally trained and qualified in early childhood education, and the program extended over two calendar years (Schweinhart, 2003). In a 15-year follow-up study, children who had participated in the intervention program demonstrated increased IQs in the years following the intervention. Children who participated in the program had, on average, higher scores on standardized school assessments, spent fewer years in special education programs, and demonstrated fewer conduct and behavior problems than demographically similar children who did not participate in the program (Consortium for Longitudinal Studies, 1983). Additionally, the positive effects of the intervention have persisted through age 40, more than 30 years after the program ended, in the form of lower rates of crimes committed and higher monthly earnings on average when compared to adults with the same background who did not participate in the program as children (Schweinhart, 2003).

The Carolina Abecedarian Project is another example of an early education intervention program administered to low-income children in America, with encouraging results. In this program, children were randomized at birth into one of four groups. Of these four groups, only participants in one group received the most intense intervention, which consisted of both preschool and school-age early education. The intense treatment group, along with the other three less intense treatment groups, also received child-care and health services at a center with enriched resources. Additionally, home visits were conducted for the school-aged groups. A follow-up study of program children more than a decade after the program had begun found positive effects for cognitive and academic achievement in children who received preschool and school-age education services (Campbell & Ramey, 1994). Children who received the intervention from infancy into elementary school demonstrated an IQ and achievement score advantage over those who did not participate in the early section of treatment. This suggests that education interventions that begin in infancy and continue into the later school years can produce positive cognitive effects that are long-lasting.

Both the Perry Preschool and Abecedarian projects began when children were very young, lasted over a substantial period of time, and were intense and comprehensive in the nature of services administered. As a result, children born into households of poverty entered school more prepared to learn and experienced
greater cognitive gains overall and later life success along a variety of indicators when compared to their peers of the same economic background who did not receive an intervention. These findings offer powerful support to the assertion that educational interventions that occur early in life can produce long-lasting positive benefits for children in poverty who may otherwise face many obstacles to school success.

**Conclusion**

This paper has presented evidence to substantiate calls for the widespread implementation and funding of quality early education-based interventions for children in low-income families. When programs are administered early and comprehensively, and meet recognized standards of quality, early education programming can produce lasting gains in a variety of developmental domains for children who otherwise may fall behind in school as a result of growing up in poverty with families who cannot provide the necessary resources and support for school success. This paper has identified the negative effects that growing up in poverty can have on young children, and has recognized that early education and specifically early education interventions, such as the model programs highlighted here, can make a lasting, positive difference for children. Now we must make such successful programs must be made available to all poor youth so that every child enters school on equal ground, ready to learn and continue on to successful, independent lives.

**Endnotes**

1. The Early Childhood Longitudinal Study is an ongoing research project with two cohorts, birth and kindergarten. The study focuses on children's early experiences and includes information on a range of individual, family, school, and community factors that influence development. For more information, see the National Center for Education Statistics website, available at http://nces.ed.gov/ecls/

**References**


account for racial and ethnic test score gaps? *Future of Children, 15*(1), 35-54.


