ENCYCLOPEDIA
on Early Childhood
Development

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Relationship Between Preschool Programs and School Completion: Commentary on Hauser-Cram, McDonald Connor and Morrison, and Ou and Reynolds

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May 2014, 2e éd.

Introduction

Without exception, scholars who have examined the evidence that early childhood programs can positively affect school completion agree that such programs do enhance the likelihood of school completion for children growing up in poverty. The papers approach the question from different perspectives. Hauser-Cram[a] discusses a number of problems that make it hard to give definitive answers to this question, then summarizes conclusions reached by others who have considered

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the matter, and finally describes three preschool programs that have demonstrated positive, long-lasting effects on educational attainment for poor children. Connor and Morrison[b] go into more detail about background factors associated with academic attainment; they discuss the evidence for and against targeting the child or the parent as the primary focus of an early childhood program, and show that the field has not always been specific about what exactly the goal of an early childhood program should be: child language, pre-literacy skills, parenting practices, or teacher behaviours. Ou and Reynolds defined precisely what they meant by "early childhood program" and summarized the evidence emerging from the eight studies that met their definition (children were in "treatment" between the ages of three and four years, and data existed to examine long-term educational achievement). These scholars included a useful summary table describing outcomes from the studies that met their criteria.[3]

Research and Conclusions

Obviously, the more carefully controlled experimental studies, such as the *Perry Preschool* and the *Abecedarian* programs, have the strongest evidence of benefit. Although both have relatively small samples, sample size is partly offset by good experimental design and low attrition. Importantly, the much larger *Chicago Child-Parent Center* study has comparable evidence of long-term benefits. For the most widely offered of all preschool programs, *Head Start*, the evidence of long-term efficacy is still mixed.

There are some differences among the authors as to the best model through which early childhood programs can influence school completion, but strong evidence of the superiority of one service delivery model over another is lacking. Connor and Morrison conclude that best practice combines some form of family treatment with direct services to children. However, if school completion is the criterion in question, long-term outcomes from the *Abecedarian* study do not support the idea that family focus is crucial. The evidence is that the child-focused preschool program had a stronger effect on young adult educational attainment than did a more family-centered program provided in the primary grades.

This is not to argue that a child-focused preschool program can nullify the effects of the early home environment. The *Abecedarian* analyses suggest that centre-based preschool educational programs operate to some extent independently of the home environment to influence children's development – both contribute, and the better the quality of the early environment, the better the child is likely to do in school. However, it has not been proven that adding a parent-focused

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component onto a child-centered preschool experience leads to cognitive/academic benefit over and above what the child-focused program alone provides.

A randomized study that addressed the importance of adding a parent component to a centre-based early childhood education experience was the *Carolina Approach to Responsive Education* (Project CARE). In this study, one group of children had centre-based treatment to which a family education component was added, while a second group of children had the family education component alone. Children treated in both ways were compared to untreated controls. Children with centre-based education plus home visits outperformed the control group during the early childhood years, but those with home visits alone did not.[1,2]

Data from the *Perry Preschool Project* were used to test whether long-term positive benefits seemed to come from enhancement of the cognitive development of study participants or from positive effects on the family. The results indicated that direct cognitive enhancement was the more likely mechanism. The *Abecedarian* study tested mediators of the effects of early childhood programs on long-term academic test scores (through age 21) and found that, for both reading and math achievement, the effects of the early childhood program were mediated through program effects on early cognitive development.[3] Similarly, the *Abecedarian* data indicate that both maternal IQ and the early home environment exert main effects on long-term educational attainment, but when the models are tested for mediation, it can be shown that maternal IQ influences educational attainment through its effect on the quality of the early childhood home environment.

Ou and Reynolds suggest three models that might account for the benefit of early childhood program on school completion: direct cognitive benefit to the individual child leading to better school progress across the years; positive changes for the family that influence the extent to which the child adapts to school; and support for schools such that children have better attendance and less mobility across schools, thus experience more continuity across the years, thereby learning more effectively.

Connor and Morrison contribute unique comments on what components of early education lead to success in learning to read. They also make an excellent point about the need to treat each young child as an individual, tailoring the early education to match his or her developmental stage and learning style.

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Implications for Development and Policy

Cost/benefit analyses indicate that early childhood programs can save society up to $7 for each dollar spent in the early years due to reductions in grade retention and use of special services, in terms of higher earning potential, and due to reductions in the societal cost of lawbreaking. Where early childhood treatment did not appear to be associated with a reduction in crime, the cost benefit was not so powerful.[4]

These papers are unanimous in their support for early childhood programs, although they differ to some extent in what they emphasize and on just how child-focused, centre-based programs, parent programs and school-based programs best combine to influence school completion. The implications are similar, however. Young children at risk, especially those growing up in poverty, can derive great benefit from high-quality early childhood programs. Conversely, poverty makes it more likely that children will have poor quality preschool programs – or none at all. High-quality early childhood programs are those that focus on the individual child and tailor his or her education to what is needed to prepare for later success. Money spent during the early years is cost-beneficial for society. Policy makers need to keep emphasizing the importance of the early years, and making resources available to ensure that poor children have access to high-quality care that also ensures they receive preschool education designed to give them the best preparation for school success and school completion.

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4. Masse L. A benefit-cost analysis of the Carolina Abecedarian Preschool program. Paper presented in: Campbell F, Chair, What's a good early childhood education worth and why? Symposium presented at: the Biennial Meeting of the Society for Research in Child Development; April 26, 2003; Tampa, Fla.

Notes:

[a] Comments on original paper published by Penny Hauser-Cram in 2004. To have access to this article, contact us at cedje-ceecd@umontreal.ca.

[b] Comments on original paper published by Carol McDonald Connor & Frederick J. Morrison in 2004. To have access to this article, contact us at cedje-ceecd@umontreal.ca.

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