The Roots of School Readiness in Infant-Toddler Programs:


Pre-Design Conference: Improving Low-Income Children’s School Readiness: New Perspectives on an Enduring Challenge

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Presentation outline

- Design and theoretical rationale for the Early Head Start intervention
- Capacities necessary to deliver the intervention
- Evidence of the program’s efficacy, effectiveness, and cost effectiveness
- Potential evidence-based improvements in the Early Head Start program
- Potential for scaling to serve all eligible families
- Main messages from the evaluation through the prekindergarten year
- Questions for interpreting the evaluation findings
Design and theoretical rationale for the Early Head Start intervention

- 1994 Head Start reauthorization
- Advisory Committee on Services for Families with Infants and Toddlers: four program domains:
  - Child development
  - Family development
  - Staff development
  - Community development
- Wide range of services with multiple strategies
  - Center based
  - Home based
  - “Mixed” approach
Capacities necessary to deliver the intervention

- EHS National Resource Center at ZERO TO THREE

- Services included:
  - Week-long infant care “intensives”
  - Expert cadre provided one-on-one consultation
  - Coordinated through the Administration on Children, Youth and Families (Now the Administration for Children and Families, ACF)
Evidence of the program’s efficacy, effectiveness, and cost effectiveness

- Impacts at ages 2 and 3, families still enrolled
- What children experienced at ages 3-5, after EHS
- Impacts 2 years later, children approaching kindergarten, average age 63 months
- Early impacts mediating later ones
- Relative “contributions” of EHS (0-3) and pre-k program experiences (3-5)
- Cost effectiveness?
Impacts at ages 2 and 3, while families still enrolled

- Overall impacts on children across the domains of development important for school readiness: cognition, language, social-emotional behavior, and approaches to learning

- Overall impacts on parenting practices and home environment that support child development, and some parental self-sufficiency impacts

- EHS had its greatest success with 3 subgroups of families:
  - Families enrolled before child was born
  - African Americans
  - Children with “moderate” number of risk factors

- Largest impacts for subgroups of programs: those that delivered high quality services and offered mixed-approach style of program services
What children experienced at ages 3-5, after EHS

- 90% of total sample entered formal pre-k program sometime 3-5.
- Average enrollment 13.5 months.
- But only 49% of EHS children were in formal pre-k programs before age 4. And 82% between 4 and 5.
- African American children had highest enrollment rates.
- Being in EHS increased chances children would enroll in a pre-k program.
- Average quality = 5.3 on ECERS-R.
- EHS did not impact quality of pre-k programs children attended.
- Quality of Head Start and other pre-k programs differed (5.6 vs. 5.0).
Impacts 2 years later, children approaching kindergarten, average age 63 months

- Former EHS Children had reduced behavior problems but no benefits in school-achievement-related outcomes.

- Spanish-speaking former EHS children had larger vocabularies.

- Parents of former EHS children were more likely to read daily, provide home teaching activities, attend program open houses.

- EHS reduced number of parents’ depressive symptoms.
Summary of impacts found across the developmental period of the study: for children...

- Enhanced social-emotional development
  - Reduced aggression at 2, 3, and 5

- Increased positive approaches to learning
  - Enhanced at ages 3 and 5

- Improved cognitive and “academic” skills
  - Positive at ages 2 and 3
  - No impacts at age 5 (but measures changed)

- Enhanced language development
  - Vocabulary, English speakers at 2 and 3, not 5
  - Vocabulary, Spanish speakers at 5, not earlier

- Created some positive health effects at each age
Summary of impacts found across the developmental period of the study: for parents.

- Improved positive parenting, stimulation of learning and language, positive home environment
  - Enhanced at all 3 ages

- Reduced negative parenting
  - Reduced spanking of 2- and 3-year-olds
  - Moms less detached when children were 2 and 3

- Improved parent mental health
  - Less parenting distress, conflict at age 2
  - Reduced maternal depression, age 5

- Enhanced parental self-sufficiency
  - Increased school and training attendance at 2 and 3
Impacts 2 years later, children approaching kindergarten, average age 63 months: Subgroup findings

- Strong benefits for African American children and parents continued (vocabulary, emotion regulation, behavior problems, supportive home environments).

- Some benefits for high-risk group (approaches to learning, speech problems) but negative impact on letter-word identification. (Moderate-risk group continued to benefit.)

- Program approach was important, but with home-based programs having stronger effects for both children and parents (not mixed-approach as found at age 3).

- Implementation of performance standards (quality) had little bearing on child and family impacts, except for the home-based programs.
Some early impacts mediated later ones

- Early impacts on vocabulary, cognition, and aggressive behavior at ages 2 and 3 mediated age 5 impact on sustained attention.

- Reductions in aggression at ages 2 and 3 mediated age 5 impacts on social behavior problems.

- Home language and literacy supports mediated age 5 positive approaches to learning.

- Within home-based programs, age 2 impacts on parental support for language and literacy mediated age 5 social-emotional outcomes.
Main messages when taking both 0-3 and 3-5 experiences into account

- EHS participation, prenatally to age 3, was most strongly associated with age 5 impacts related to social-emotional development and parenting.

- Participation in formal pre-k programs between ages 3 and 5 is most strongly associated with age 5 school-achievement-related outcomes.

- Children who participated in both EHS (0-3) and formal programs (3-5) fared the best across the domains of school readiness at age 5.
Cost effectiveness?

- This should be a very large question mark at this stage.

- Very little basis for judging cost effectiveness now.
Questions for discussion of potential evidence-based improvements in the Early Head Start program

- How can the program’s successes serving African American families be replicated with white and Latino children?

- If program performance standards were important for impacts at age 3, why not at age 5? (At 5, standards were significant only for the home-based programs.)

- Are programmatic enhancements possible that would increase EHS’s impacts two years after it stops serving families?

- What is it about the mixed-approach programs that yield the strongest impacts at age 3? Why not at age 5?

- How can center-based services be strengthened to achieve greater impacts for those programs?
Potential for scaling to serve all eligible families

- EHS now serves no more than about 4 percent of all eligible low-income families.
- This is after the administration added $1.1 billion to the program budget.
- What will it take to serve all eligible families?
Why the EHS evaluation is relevant to today’s agenda

- Intervention is long standing, since 1995.
- Large sample, nationally diverse, rigorous randomized trial evaluation
- Measured outcomes in most domains considered important for children’s school readiness
- Has short-term longitudinal follow-up findings
- Both experimental and nonexperimental analyses to explore what works for whom under varying conditions
- Yet...
Questions related to interpreting the evaluation findings

- Are findings based on a program as it operated in the late 1990s applicable to programs operating in the 2010s?
- Are the needs of pregnant women and families with infant and toddlers different in the 2010s than they were in the 1990s?
- Are impacts with effect sizes in the range of .10 to .25 strong enough to substantially alter the lives of low-income families and change children’s growth trajectories?
  - What about the substantially larger effect sizes for some subgroups, such as African Americans?
- How should we interpret different impacts at different points in program participants’ lives?