Lessons From the Early Head Start Research and Evaluation Project

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The Early Head Start Program

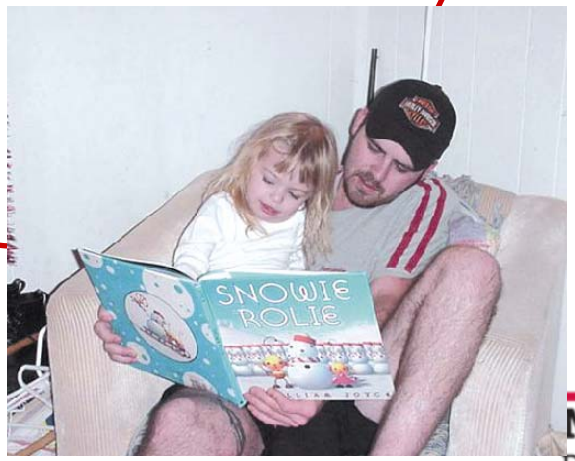
- More than 700 programs serving more than 70,000 children
- Various originating agencies, but all become Head Start
- Follows the Head Start Program Performance Standards
- About 10% of the Head Start budget

Early Head Start Is an Intensive, Two-Generation Program

Child Development

Self-Sufficiency and Healthy Families

Parenting



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Program Approaches

- Center-Based- center-based care and at least 2 home visits a year
- Home-Based- weekly home visits and monthly socializations
- Mixed- combination of center-based and home-based

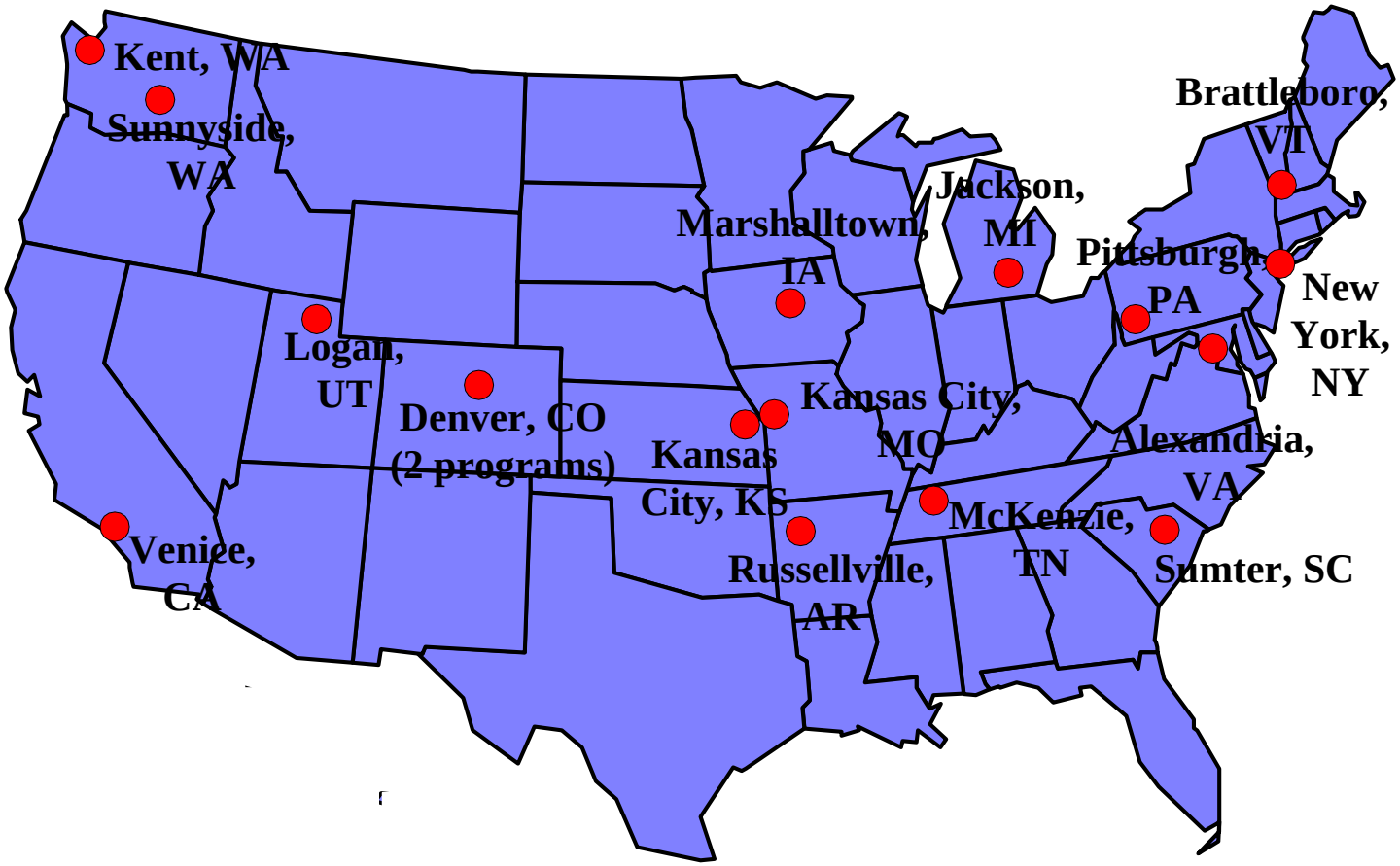
The Early Head Start Research and Evaluation Study

- Began in 1995
- 3,001 children and families randomly assigned to EHS program or control group in impact study with experimental design:

Early Head Start Group **Control Group**

- Followup: (1) age 36 months; (2) when children in prekindergarten
- Fifth grade follow-up in progress

Early Head Start Research Sites



Research Conducted by Early Head Start Research Consortium

Representatives from 15 local research teams, the evaluation contractors, and ACF/ACYF

Research institutions in the Consortium (and principal researchers) include ACF (Rachel Chazan Cohen, Judith Jerald, Esther Kresh, Helen Raikes, and Louisa Tarullo); Catholic University of America (Michaela Farber, Lynn Milgram Mayer, Harriet Liebow, Christine Sabatino, Nancy Taylor, Elizabeth Timberlake, and Shavaun Wall); Columbia University (Lisa Berlin, Christy Brady-Smith, Jeanne Brooks-Gunn, Alison Sidle Fuligni and Ann Martin); Harvard University (Catherine Ayoub, Barbara Alexander Pan, and Catherine Snow); Iowa State University (Dee Draper, Gayle Luze, Susan McBride, Carla Peterson); Mathematica Policy Research (Kimberly Boller, Ellen Eliason Kisker, John M. Love, Diane Paulsell, Christine Ross, Peter Schochet, Susan Sprachman, Cheri Vogel, and Welmoet van Kammen); Medical University of South Carolina (Richard Faldowski, Gui-Young Hong, and Susan Pickrel); Michigan State University (Hiram Fitzgerald, Tom Reischl, Rachel Schiffman, and Holly Brophy-Herb); New York University (Mark Spellmann and Catherine Tamis-LeMonda); University of Arkansas (Robert Bradley, Mark Swanson, Leanne Whiteside-Mansell, Lorainne McKelvey, Andrea Hart); University of California, Los Angeles (Carollee Howes and Claire Hamilton); University of Colorado Health Sciences Center (Robert Emde, Jon Korfmacher, JoAnn Robinson, Paul Spicer, and Norman Watt, Mary Klute and Jiny Puma); University of Kansas (Jane Atwater, Judith Carta, and Jean Ann Summers); University of Missouri-Columbia (Mark Fine, Jean Ispa, and Kathy Thornburg); University of Pittsburgh (Carol McAllister, Beth Green, and Robert McCall); University of Washington School of Education (Eduardo Armijo and Joseph Stowitschek); University of Washington School of Nursing (Kathryn Barnard and Susan Spieker); and Utah State University (Lisa Boyce and Lori Roggman).

Positive Impacts for Children at Age 3

- Higher immunization rate
- Fewer emergency room visits for accidents and injuries
- *Cognitive development* (higher Bayley scores & fewer in low-functioning group)
- Larger receptive vocabularies
- Lower levels of aggressive behavior
- Greater sustained attention with objects, *engagement of parent*, and less negativity

Positive Impacts for Parents When Children Were 3

- More positive (and less negative) parenting observed in parent-child play: both mothers and fathers
- More stimulating home environments, support for learning
- More daily reading
- Less spanking: both mother and father report
- More hours in education and job training
- Probability of being employed (trend)

Subgroups: Programs

All program approaches had favorable impacts. Mixed approach had strongest.

Well-implemented programs affected more outcomes when children were 3:

- **Child outcomes**
- **Parent-child interactions**
- **Parenting**
- **Mental health**
- **Progress toward economic self-sufficiency**

Strongest impacts found in early-implemented mixed programs

Subgroups: Families

Positive Impacts in 28 of 29 subgroups

Larger impacts in 3 family subgroups:

- **African American**
- **Enrolled during pregnancy**
- **Moderate demographic risk**

No impacts: highest level of demographic risk

Examining EHS Children's Experiences After Age 3?

- 1994 Advisory Committee: continuity and smooth transitions
- While in EHS, families got help accessing quality child care.
- EHS provided transition services as children left their program.
- Control group families were on their own.

What Difference Did Being in EHS Make on Program Participation After EHS?

- EHS children more likely to be in a formal ECE program *both* 3-4 and 4-5 (47% vs. 42%)
  - **Average quality of centers observed was good: ECERS-R of 5.25 (no difference in quality of programs EHS and control children were in.)**
- More likely to be in Head Start at some time, 3-5 (55% vs. 49%)
  - **Quality of Head Start centers children attended was higher than quality of other formal programs (5.6 vs. 5.0).**

Context for Understanding Early Head Start's Prekindergarten Impacts

- Impacts assessed 2 years after children and families left the program.
- Program fell short of goal of enrolling most children in early childhood programs.
- Control group had nearly as much program experience after age 3.
- Quality of control group pre-k program experience was comparable to that of EHS and mostly "good."

EHS Impacts on Children Two Years After Early Head Start

- Decreased behavior problems
- Higher level of positive approaches to learning
- Larger receptive vocabularies for Spanish-speaking children, but not for English speakers
- No impacts on achievement-related outcomes: letter-word identification, applied problem solving, emotion regulation variables

EHS Impacts on Parents and Home Environment 2 Years After Early Head Start

- Higher percentage read to child daily
- Higher scores on HOME total scale and warmth scale
- Higher on summary of 8 teaching activities
- Lower risk for maternal depression
- Parent more likely to attend meetings or open houses at child's program (if child was in a program)
- No impacts on spanking or variables coded in child-mother interaction videotapes

Association of Children's Participation in Formal Programs from Birth to Age 5 with Age 5 Outcomes

Formal Programs, 3-5

- Higher letter-word identification
- More parent reading to child
- More aggressive behavior (negative association)

Ever in Head Start

- Higher letter-word identification (trend)
- More IEPs
- Reduction in negative parental regard
- No association with aggressive behavior

Putting it All Together at Age 5: EHS + FP Fared Best

Social Emotional, Parent (Both>EHS only>FP>Neither)-- EHS Confers Most of the Benefit: Approaches to Learning, Receptive Language (trend), Parent Reading, Home Scores, Reduced Depressive Symptoms, Someone in HH with Drug or Alcohol Problem

School-Related Outcomes (Both>FP>EHS>Neither)--Formal Program Confers Most of the Benefit: Letter Word Identification, IEP, Applied Problems (trend)

Behavior Problems (FP> Both> Neither> EHS)--EHS Buffers Against Negative Effects: Aggressive Behavior Problems, Social Behavior Problems

Outcomes for 0-3 Home-Based Programs at Prekindergarten

Children:

- Reduced hyperactivity, behavior problems, and withdrawn behavior
- Positive social skills and approaches to learning
- Increase in applied problems score

Parents:

- Percent reading daily
- HOME total, learning environment, warmth
- Monthly income $2,408 vs. $2,106

Where the Children Go:

- Impact on ECE post-EHS: 45% v. 39%
- Marginal impact on ever in Head Start: 57% v. 51%

Outcomes for African American Children at Prekindergarten

Similar to story at 36 months, largest number of impacts for African Americans

Children:

- **Lower child aggressive behavior problems as rated by parent**
- **Higher child sociability, attention (Leiter)**
- **Higher approaches to learning**
- **Higher PPVT receptive vocabulary**
- **Fewer speech problems**

Parents and home environment:

- **EHS parents less negative regard in observed play situation**
- **More children's books in the home**
- **Child much less likely to have lived in home with alcohol/drug problem**
- **Parent less likely to have been abused in past year**
- **Lower maternal depressive symptoms**

Where the children go:

- **Children more likely to participate in FP 3-5 than other groups**

A Complex Story: Highest-Risk Families Appear to Benefit from 5 Years of Comprehensive Services

No positive impacts at 3

Some positive impacts at 5

- **Improved approaches to learning**
- **Reduced living with someone using drugs**
- **Reduced neighborhood exposure to violence**
- **Reduced parent experiencing abuse**
- **But *reduced* letter-word identification (negative impact)**

Ages 3-5: Least likely to be in formal programs

- **39% for high risk vs. 47% for low and 43% for moderate risk.**
- **EHS did not increase in enrollment in formal programs.**
- **EHS did not increase use of Head Start but 57% of highest risk were in Head Start at some time 3-5**

A Complex Story: Highest Risk Families Appear to Benefit from 5 Years of Comprehensive Services

Negative associations with formal program:

- Increased behavior problems
- Reduced vocabulary
- Reduced math
- More IEPs
- Improved parent health
- Reduced Home scores

Head Start adds:

- Increased letter-word identification
- More IEPs (trend)
- More parent daily reading
- Increased HOME scores
- Reduced depression

Summary

- EHS has impacts at age 3, some sustain to age 5.
- Many children have some FP 3-5 but fewer than half throughout period 3-5. EHS has some but small impact.
- 0-3 and 3-5 experiences contribute to age 5 outcomes in complementary ways.
  - **EHS-Social Emotional, Parenting, Receptive Language**
  - **FP-School – Related Outcomes**
  - **EHS Buffered Negative Behavior Problems Associated with FP**
- Greatest benefits when 0-3 program was followed by 3-5 formal programs (EHS + Formal Programs).
- Those programs that included focus on in-home services had greater impacts (mixed at age 3 and home-based at age 5).
- African American children sustained impacts.
- For families at highest risk, may need comprehensive services 0-5 to maximize benefits.

For More Information on All EHS Research

http://www.acf.hhs.gov/programs/opre