

Using Data from the EHSRE for Research on Young Children's Development

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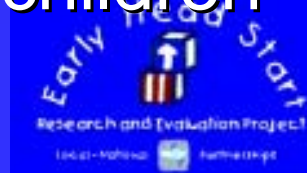
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Pre-conference Event at the 2005 Biennial Meeting of The Society for Research in Child Development, Atlanta

The Early Head Start Program

- ◆ Early Head Start Programs carry out the mandate to provide Head Start services to pregnant women and families with infants and toddlers
- ◆ Two-generation program
- ◆ Child development with parenting education and self-sufficiency
- ◆ Follows the Head Start Program Performance Standards
- ◆ Over 700 programs serving about 62,000 children



Early Head Start Is an Intensive, Two-Generation Program

**Self-Sufficiency
and Healthy
Families**



**Child
Development**



Parenting



The Early Head Start Program: Program Approaches

Programs design their program options based on family and community needs.

Programs may offer one or more options to families, including:

- a home-based option
- a center-based option
- a combination option in which families receive a prescribed number of home visits and center-based experiences
- locally designed options

The Early Head Start Research and Evaluation Project

- ◆ Began in 1995; reports to Congress in 2001 and 2002
- ◆ Led by Mathematica Policy Research and National Center for Children and Families (at Columbia University)
- ◆ Local researchers in 15 universities involved
- ◆ In 17 Early Head Start programs—about 1/3 center-based, 1/3 home-based, and 1/3 mixed-approach
- ◆ Followed 3,001 children and families from enrollment in program until child age 3
- ◆ Used random assignment—program and control group



Study Design: Site Selection

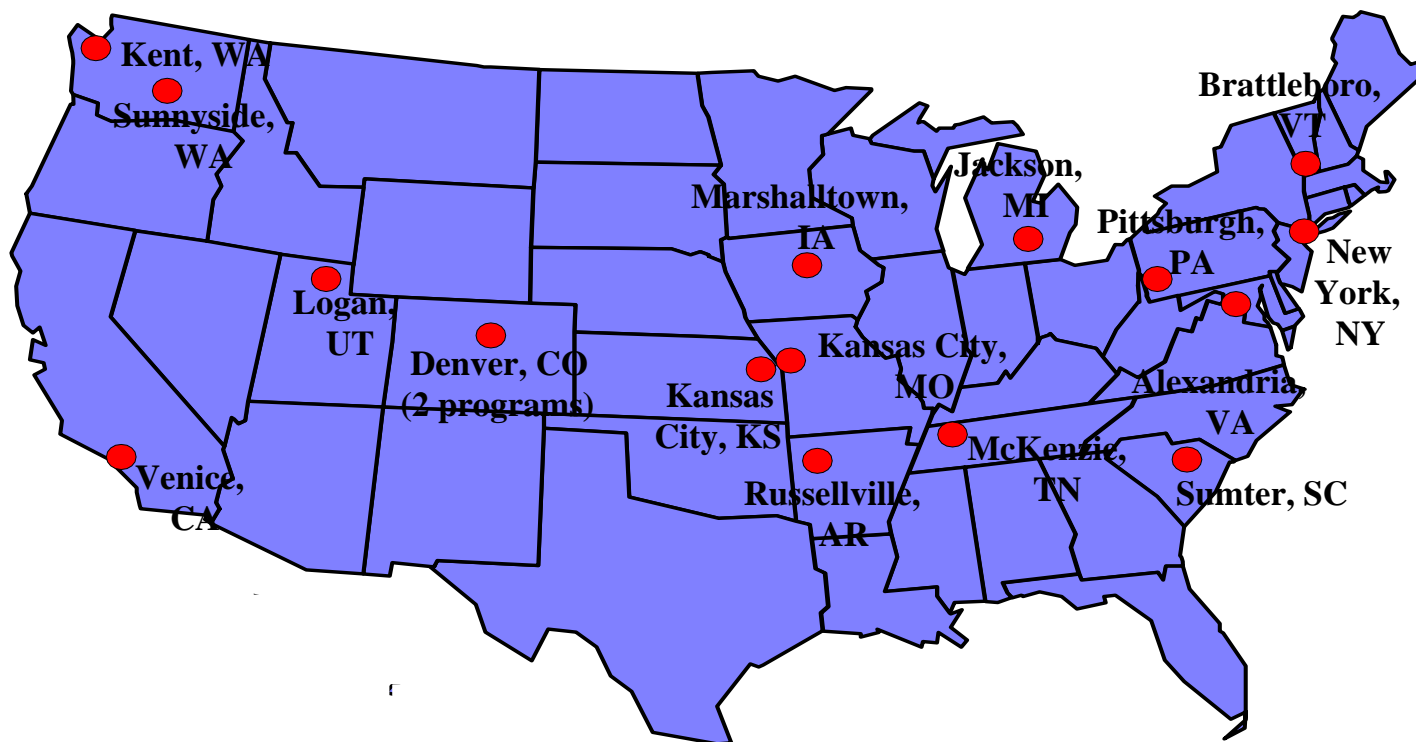
ACYF selected sites based on criteria:

(1) programs had to be able to recruit twice as many families as they could serve

(2) programs had to have a viable research partner

(3) in aggregate, programs had to provide a national geographic distribution that represented diverse programmatic approaches and settings and family characteristics

Early Head Start Research Sites



Research Conducted by Early Head Start Research Consortium

The Consortium consists of representatives from 17 programs participating in the evaluation, 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, and Alison Sidle Fuligni); 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, 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, and Rachel Schiffman); New York University (Mark Spellmann and Catherine Tamis-LeMonda); University of Arkansas (Robert Bradley, Mark Swanson, and Leanne Whiteside-Mansell); 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); 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).

Study Design: Sample Enrollment

Low-income families with children up to 12 months old at the time of enrollment were eligible for the evaluation.

Some programs also enrolled pregnant women. Overall, one-fourth of the families enrolled while pregnant with the focus child.

Programs recruited about twice as many families as they could serve

Programs were expected to recruit as they would in the absence of the research

Study Design: Random Assignment

MPR staff randomly assigned the families either to the program or to the control group (with equal probabilities)

- **Program staff then contacted the program group families**
- **Representatives of the local research partners notified the control group families of their status**

Control group families could receive any other services available in their community, but were not able to receive EHS services

Many Data Sources

- ◆ Baseline Demographic Data
- ◆ Child and family data collected when children were 14, 24, and 36 months old
 - ◆ Parent interview
 - ◆ Videotaped observations of parent-child interaction
 - ◆ Child assessments
 - ◆ Interviewer observations
- ◆ Family service use data 6, 15, and 26 months after enrollment (both program and control)

Additional Data Sources (Most Available Later)

- ◆ Father Data at 24 and 36 Months (n = approx. 650)
 - ◆ Father Interview
 - ◆ Videotaped Observations of Father-Child Interactions
 - ◆ Qualitative Interviews
- ◆ Child Care Observations at 14, 24, and 36 Months
- ◆ Pre-Kindergarten Follow-up Assessments
- ◆ Measures collected as part of local research

Key Questions Guided the Study

1. Did Early Head Start have a positive impact on children and families?
2. With which types of families was Early Head Start most successful?
3. Which types of programs were most successful?
4. What can we learn from the research for program improvement?

Key Findings

- ◆ Early Head Start was broadly effective with modest impacts across a wide array of child and parent outcomes.
- ◆ Effects were found in 27 program and family subgroups.
- ◆ In several subgroups, impacts were larger, demonstrating potential of the program for the future.
- ◆ Child Care is Relevant: Early Head Start increased the probability of children receiving child care and increased the probability of children receiving good quality center-based care.

Reports Written

Interim Impacts

Final Impacts; chapter for *Beacon of Hope*

Child Care Policy Report (in clearance); FAP for *Child Development*;
Child Care 4 Page Summary Report

Health Policy

Implementation (including descriptions of child care use)

Working Groups-Scholarly Papers: Fathers; Disabilities; Parenting Processes; Child Care; Program Process; Measurement; Risk and Protective Factors; School Readiness

Special Issues: *Infant Mental Health Journal*; fathers journals



The Possibilities

Topics for 2005 Biennial meeting of SRCD; presentations by EHS Consortium Members include:

- ◆ **Parenting and other contextual factors as related to child developmental outcomes**
- ◆ **Family risk as a moderator for parent engagement in EHS programs and parenting behaviors**
- ◆ **Child cognitive development and literacy/school readiness**
- ◆ **Development of children's emotional and behavioral regulation**
- ◆ **Child care settings for children eligible for EHS**
- ◆ **Services for children with disabilities**

EHS Presentations

Presentations Related to Child Outcomes:

Poster: Stability and Change of Self Regulation in Early Childhood: Relationship to Risk and the Impact of Early Head Start; *Gabrielle Rappolt-Schlichtmann, Catherine C. Ayoub*

Symposium: Early Head Start for Infants and Toddlers: What Value Is Added to Developmental Outcomes by the Time Children Reach School Age? Chairs: Helen H. Raikes and Rachel Chazan Cohen

Poster: Mother-Child Relationships, Language Practices, and Language Development in Latino Families in Early Head Start; *Alison Wishard*



Research Connections Public Use File

Constructed variables used in Interim and Final Reports (source data available later)

- ◆ Baseline Data: Health; Family Composition; Demographics; Employment; Dunst Family Resource Scale; Depression (in 8 sites).
- ◆ “Birthday Related” Data: Interviews and Observations at 14, 24, 36 months of child age: Child and Parent Outcomes, Scales and Factors.
- ◆ Service Use Data: Parent Services Interview (PSI) at 6, 15, 26 months after random assignment: Health; Child Care; Self-Sufficiency; Dunst Scales.

Baseline Variables in Public Use File

Demographic data for primary caregiver, focus child, other household members

Receipt of welfare and other assistance, income level

Maternal risk index (teen parent, single parent, limited education, welfare receipt, unemployed at enrollment)

Dunst Family Resource Scale

Child health & child birth status

Case information: program group status, random assignment date

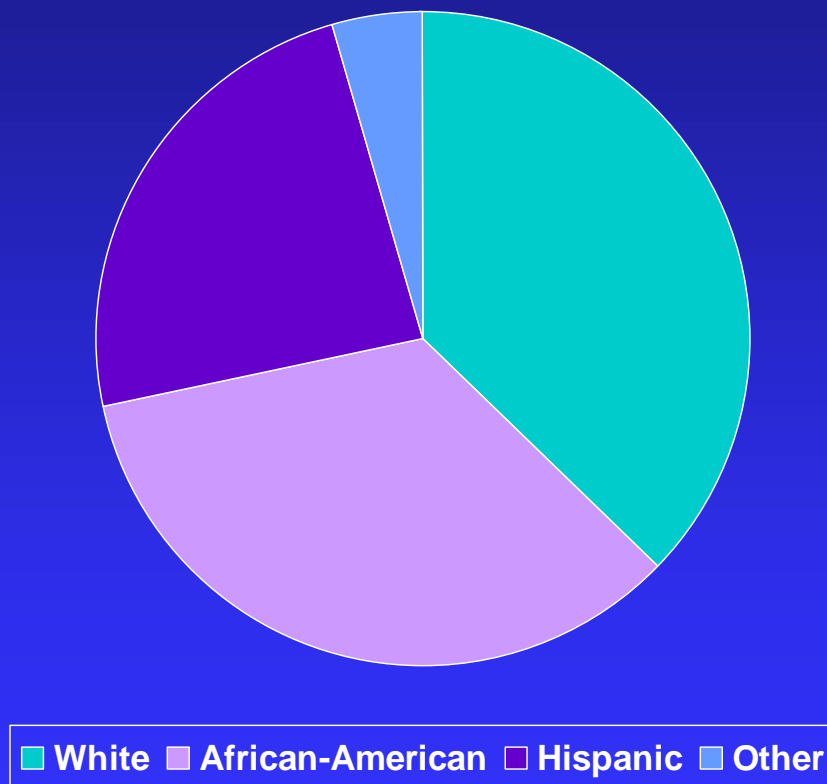
8 sites: maternal depression

Baseline Demographics

Thirty-nine percent of applicants were teenaged at enrollment

Forty-eight percent of applicants had not completed high school (nor earned a GED) at enrollment

Applicant Ethnicity



Child Cognitive and Language Development Variables

Measure

Data Source

Bayley Mental Development Index (MDI), factor scores

Direct Child Assessment (14, 24 and 36 months)

Early gestures, vocabulary comprehension and production (MacArthur CDI)

Parent Interview (14 Months)

Vocabulary production, combining words, and sentence complexity (MacArthur CDI)

Parent Interview (24 Months)

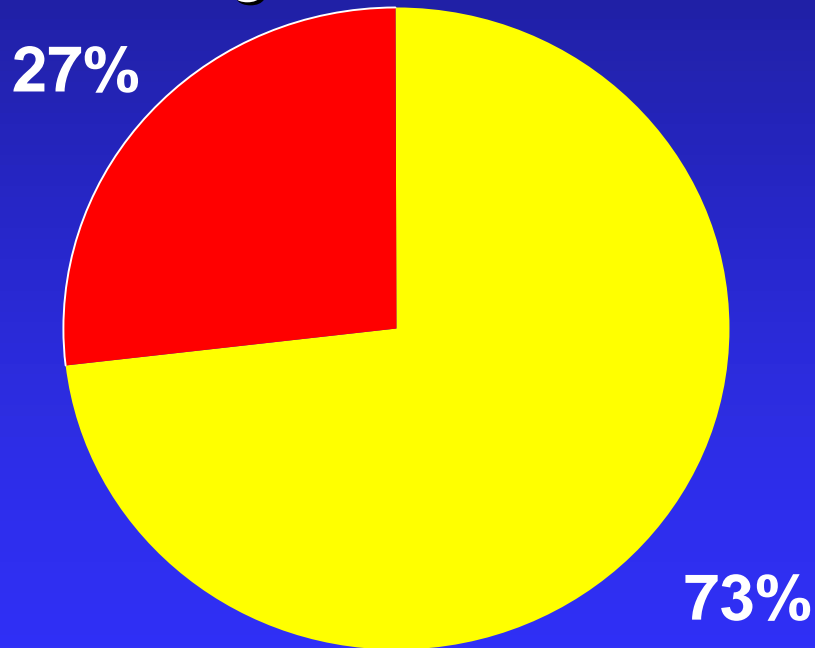
Receptive vocabulary (PPVT / TVIP)

Direct Child Assessment (36 Months)

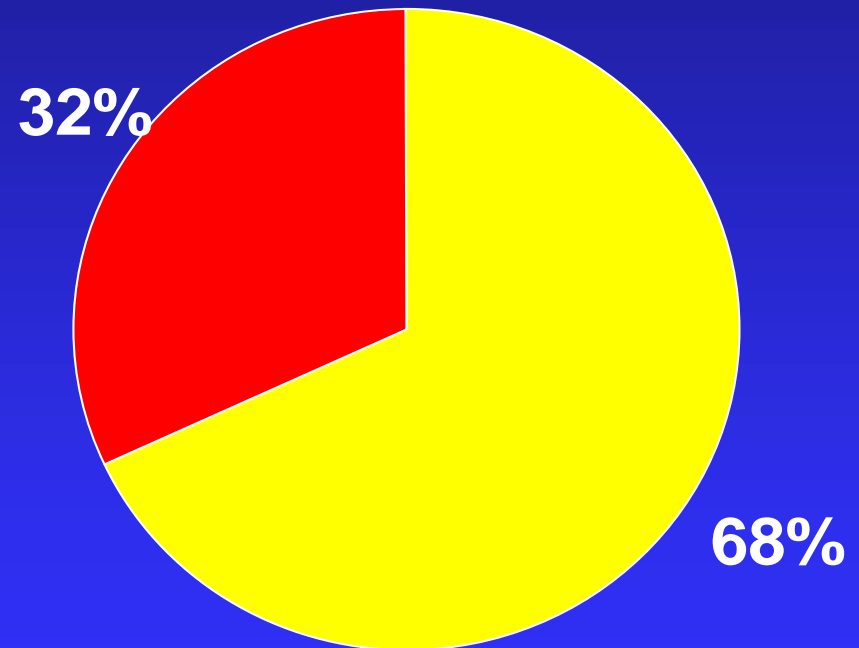
Fewer EHS Children Were in the Low-Functioning Group

Bayley MDI

Program Children



Control Children



■ At or Above 85 ■ 85 or Below

Child Social and Emotional Well-being Variables

Measure

Data Source

Child engagement, negativity toward parent, and sustained attention with objects

Coding from Videotaped Parent-Child Semistructured Play Task (14, 24 and 36 months)

Child engagement, persistence, and frustration

Coding from Videotaped Puzzle Challenge Task (36 Months)

Emotional regulation, orientation /engagement (Bayley BRS)

Interviewer Observations (14, 24 and 36 months)

Emotionality, Sociability (EASI)

Parent Interview (14 Months)

Aggressive behavior, ADHD, ODD (ASEBA CBC)

Parent Interview (24 and 36 Months)

Child Health Variables

Measure

Data Source

Child Health Status

Parent Interviews (14, 24 and 36 Months)

Child medical visits (check-ups, acute care, emergency room, dentist, etc.)

6-, 15, and 26-Month Parent Services Interviews

Child had immunizations, lead and other screening tests

6-, 15, and 26-Month Parent Services Interviews

Child Medicaid, insurance coverage

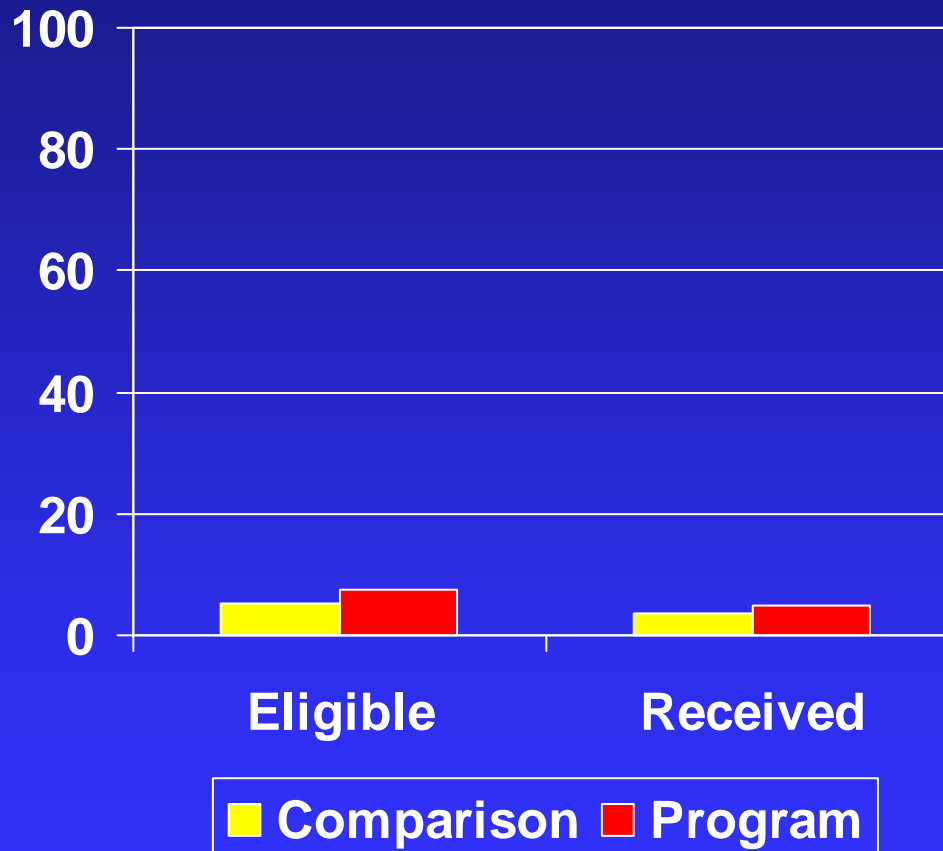
6- and 15-Month Parent Services Interviews

Disabilities: child eligible for, received Early Intervention services

6-, 15, and 26-Month Parent Services Interviews



Child Development Services



- Focus Child Eligible for Early Intervention Services by 26 month PSI
- Focus Child Received Early Intervention Services by 26 month PSI

Home Environment Variables

Measure

Infant/Toddler HOME scale (with additional NLSY items)

Early Childhood (Preschool) HOME scale and 2 subscales on physical environment

Parent warmth, harshness and stimulation of language and learning (I/T & EC HOME subscales)

Safety precautions

Data Source

Parent Interview and Interviewer Observations (14 and 24 Months)

Parent Interview and Interviewer Observations (36 Months)

Parent Interview and Interviewer Observations (14, 24 and 36 Months)

Parent Interview (14, 24 (and 36) Months)

Parent Well-being Variables

<u>Measure</u>	<u>Data Source</u>
Depression (CESD; SF at 36-m)	Parent Interview (14 and 36 Months)
Major Depression (CIDI-SF)	Parent Interview (24 Months)
Parental distress, parent-child dysfunctional interaction (PSI-SF)	Parent Interview (14, 24 and 36 Months)
Family conflict (Family Environment Scale)	Parent Interview (14, 24 and 36 Months)
Pearlin Mastery Total Score	Parent Interview (14 Months)
Academic skills (Woodcock-Johnson/Munoz picture vocab)	Parent Interview (24 Months)
Health status	Parent Interview (14, 24 and 36 Months)

Reported Parenting Variables

Measure

Data Source

Knowledge of child development
(KIDI – subset of IHDP items)

Parent Interview (14 and 24
Months)

Discipline strategies

Parent Interview (14, 24 and 36
Months)

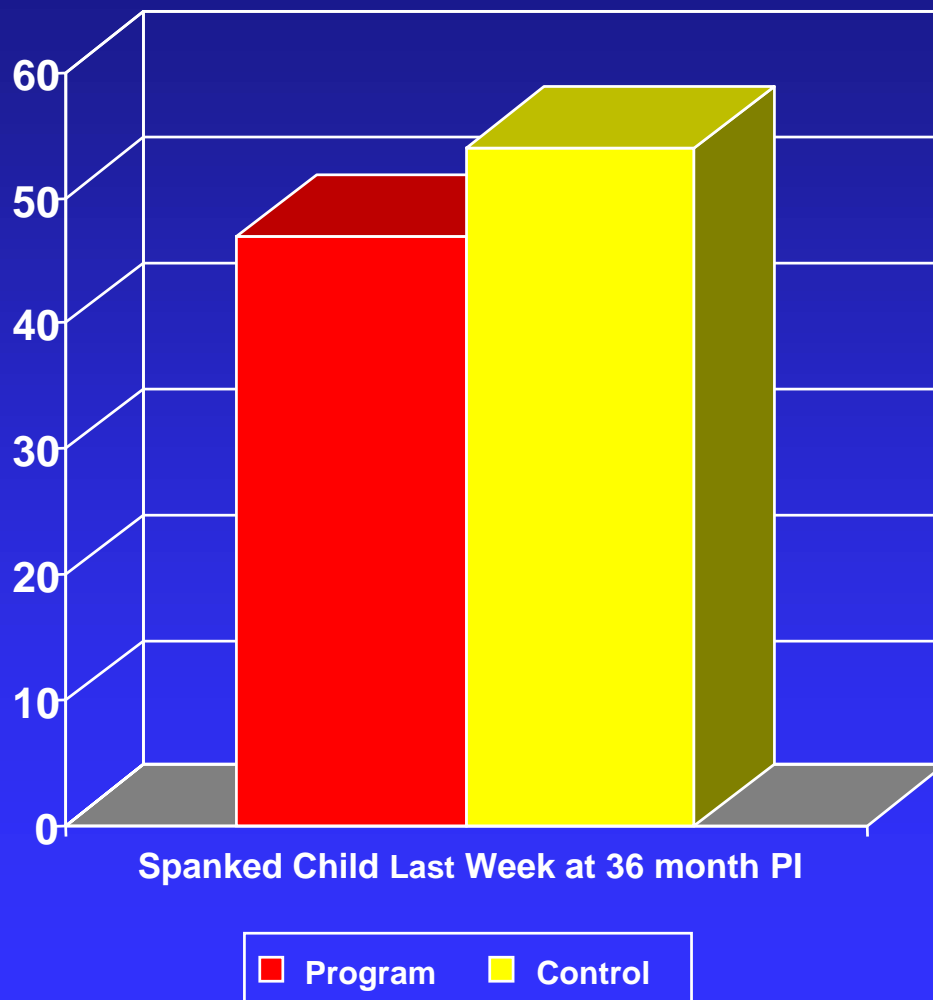
Reading, bedtime routines

Parent Interview (14, 24 and 36
Months)

Parental Modernity Scale –
traditional, progressive

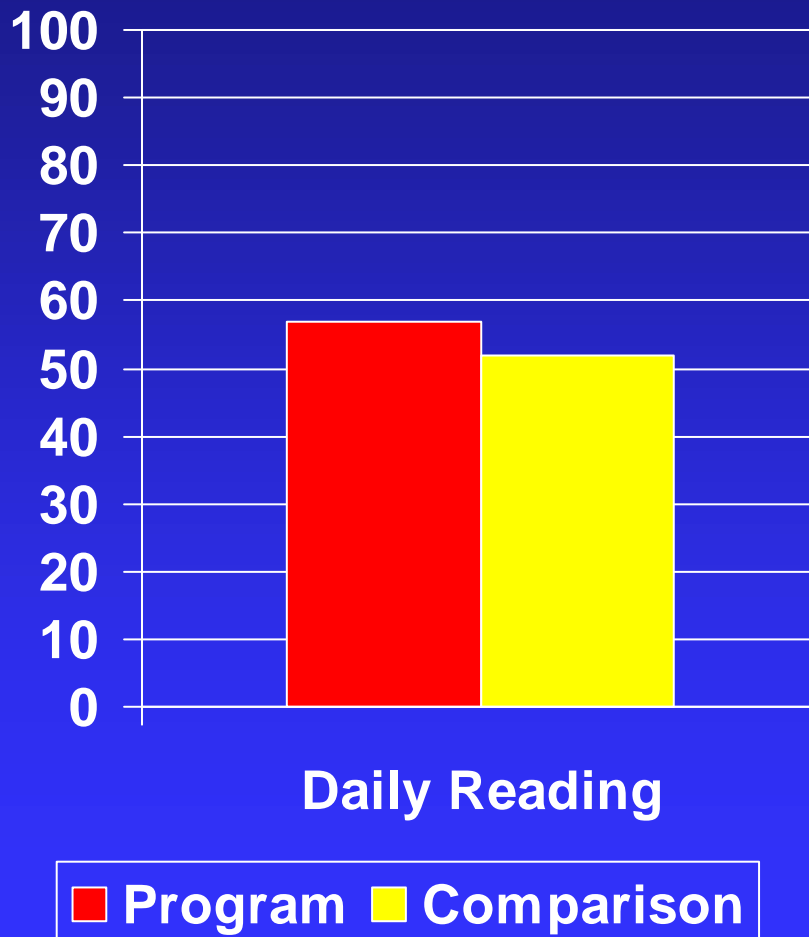
Parent Interview (24 Months)

Parent Interview: Discipline Strategies



**Parent reports
having Spanked
the Focus Child in
the week prior to
the 14-, 24-, and
36-month Parent
Interviews**

Parent Interview: Family Routines



**Parent Reads to Child
at Least Once Per Day**

**Other Variables of
Interest:**

- **Focus Child has
a Regular
Bedtime**
- **Family has a
Bedtime Reading
Routine**

Observed Parenting Behavior Variables

Measure

Data Source

Parent supportiveness
Parent detachment
Parent intrusiveness
Parent negative regard of child

Coding from Videotaped Parent-Child Semistructured Play Task (14, 24 and 36 Months)

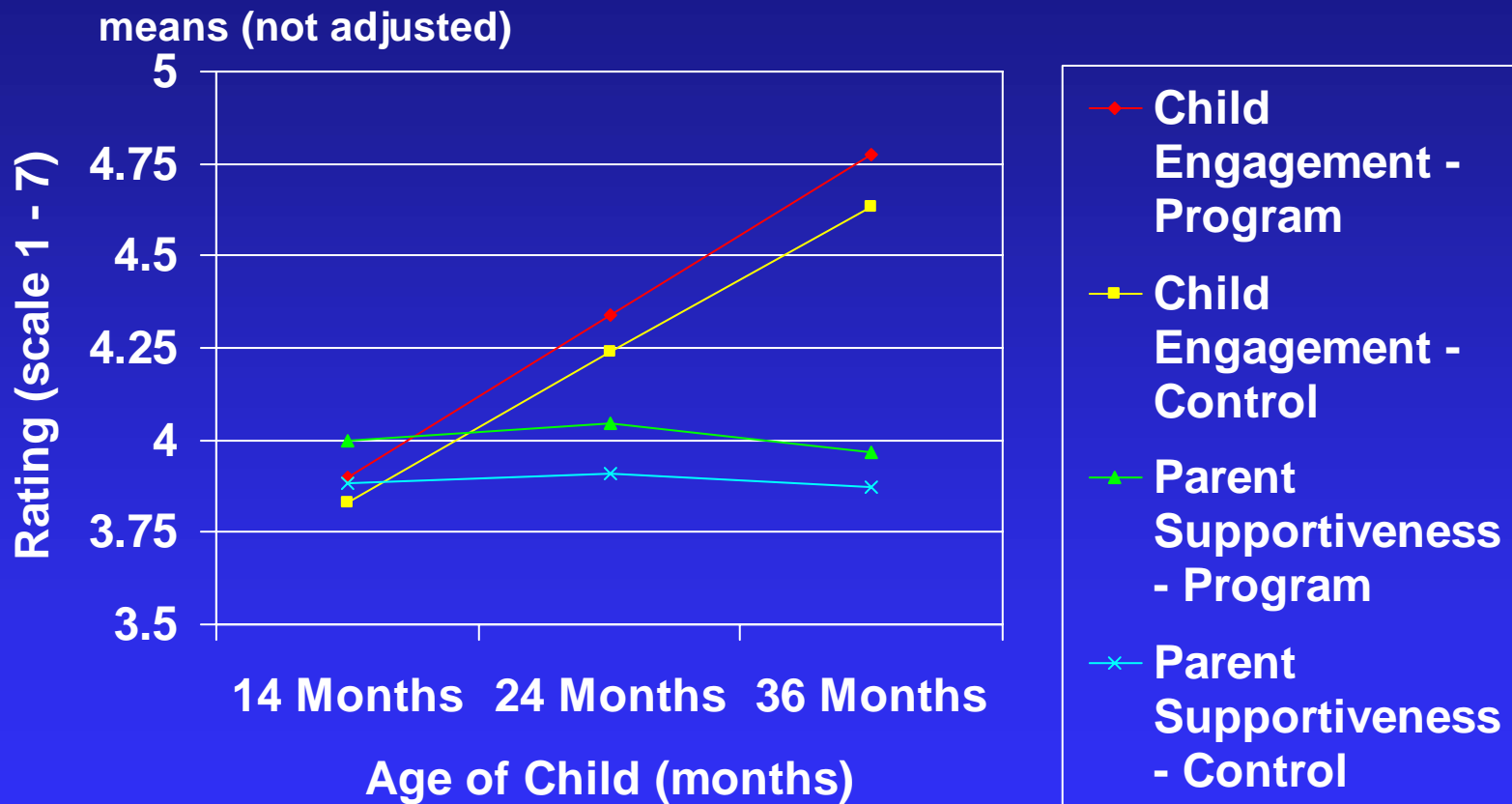
(NCAST) Parent-Child Interaction Teaching Scale

Coding from Videotaped Teaching Task (24 Months)

Parent quality of assistance
Parent detachment
Parent intrusiveness
Parent supportive presence

Coding from Videotaped Puzzle Challenge Task (36 Months)

Child Engagement, Parent Supportiveness at 14, 24, and 36 Months of Age



Family Functioning, Self-sufficiency Variables

Measure

Data Source

Relationship with child's father
over time

Parent Interview (14, 24 and 36
Months)

Married or cohabiting

6-, 15, and 26-Month Parent
Services Interviews

Self-Sufficiency (education and
training, welfare receipt,
employment and income)

6-, 15, and 26-Month Parent
Services Interviews

Dunst Family Resources Scale
(39 items)

6-, 15, and 26-Month Parent
Services Interviews

Parent Interview: Father Presence

Biological Father Presence with Child

- CONTINUOUS Presence
- NO PRESENCE

Any Male Presence with Child

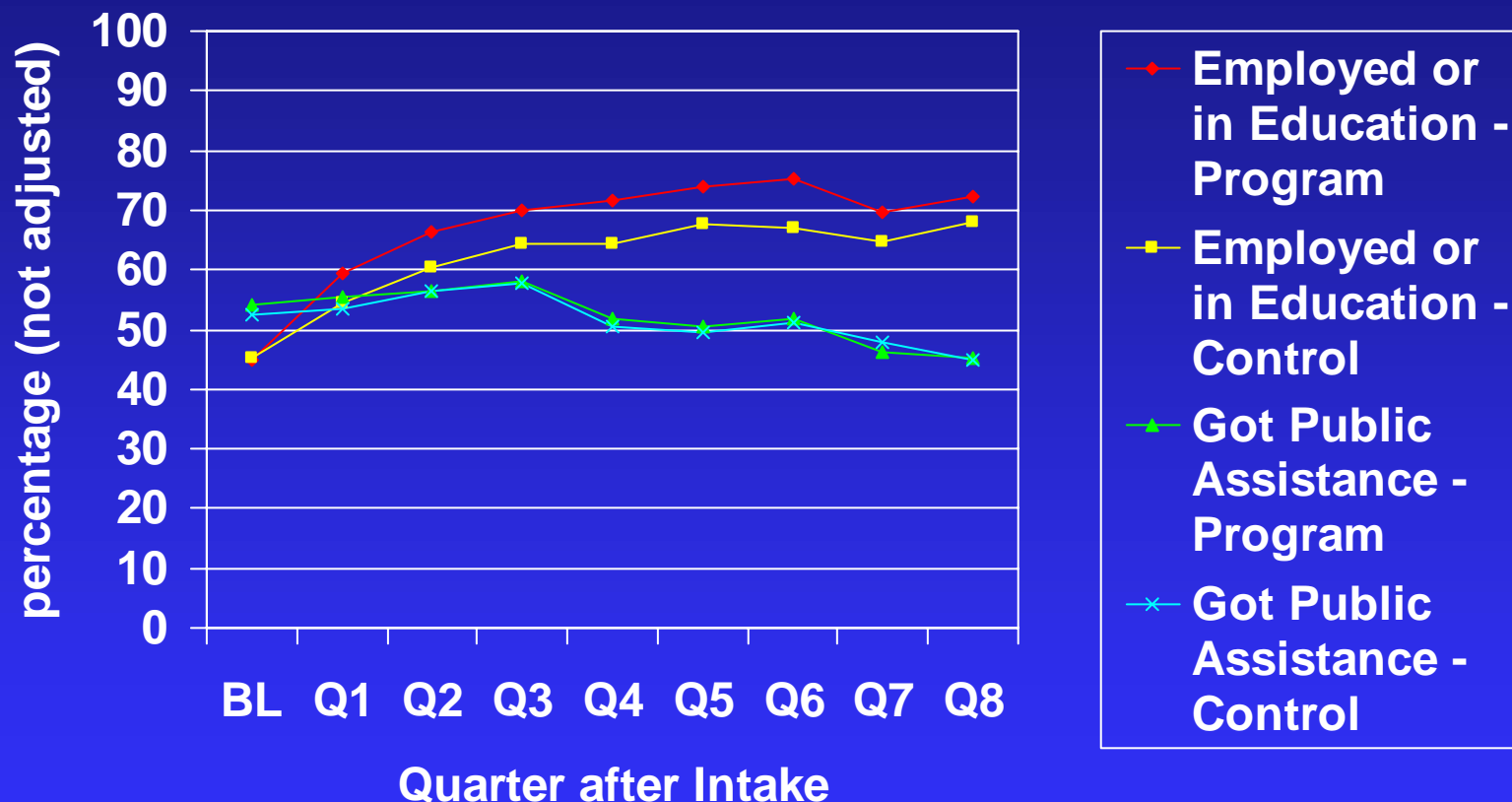
- CONTINUOUS Presence
- NO PRESENCE



Continuous Bio Father Presence

■ Comparison ■ Program

In Activity, Received Welfare, by Quarter after Intake



Service Use Variables

**Measures from 6-, 15, and 26-Month Parent Services Interviews
(Includes services received from EHS and other sources)**

Home visits, case management, group activities, parenting-related services

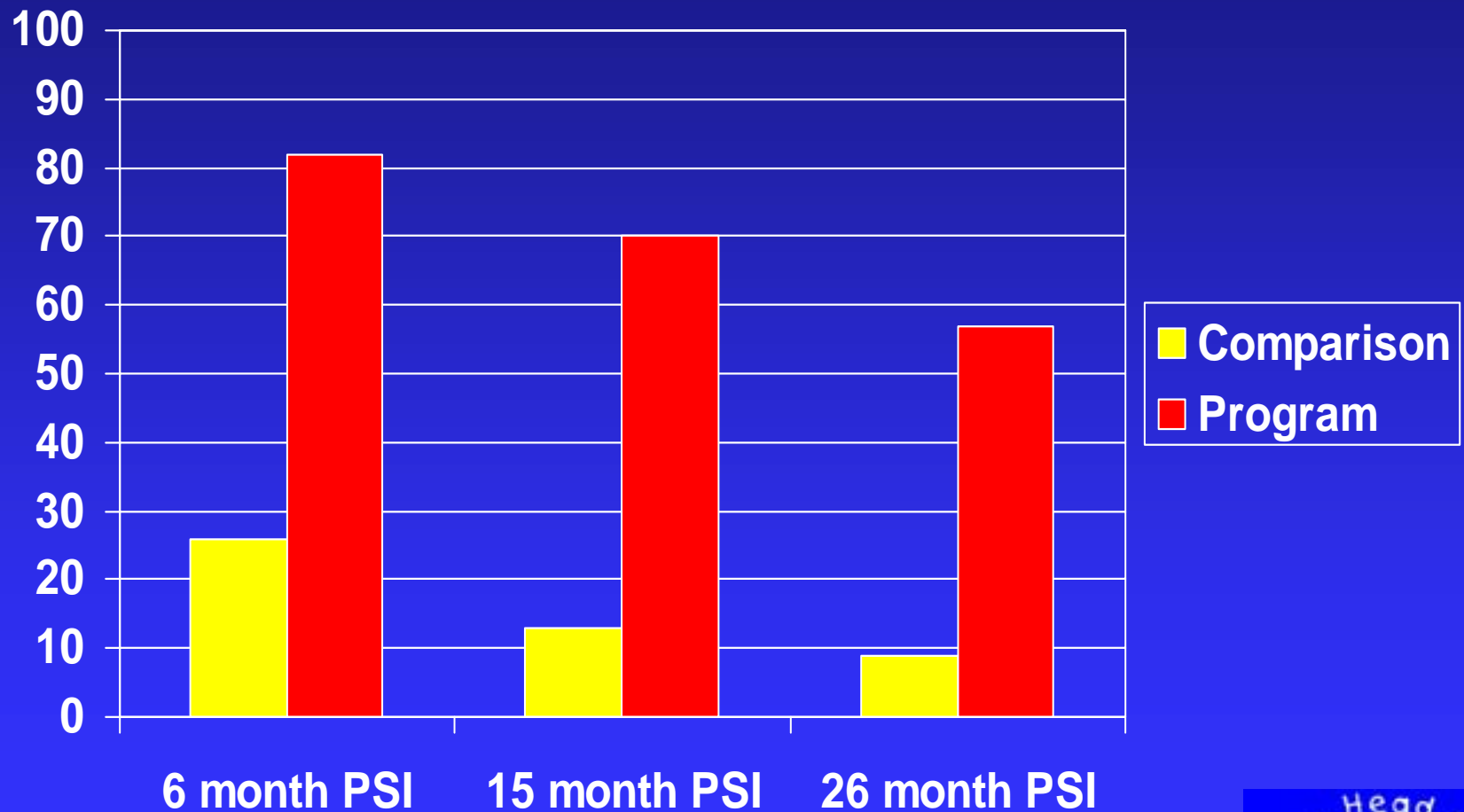
Education/training, employment, physical/mental health, housing, transportation services

Family health and other family development services

Child health and development services

Child care services (center or “any,” arrangements, hours per week, cost, subsidy)

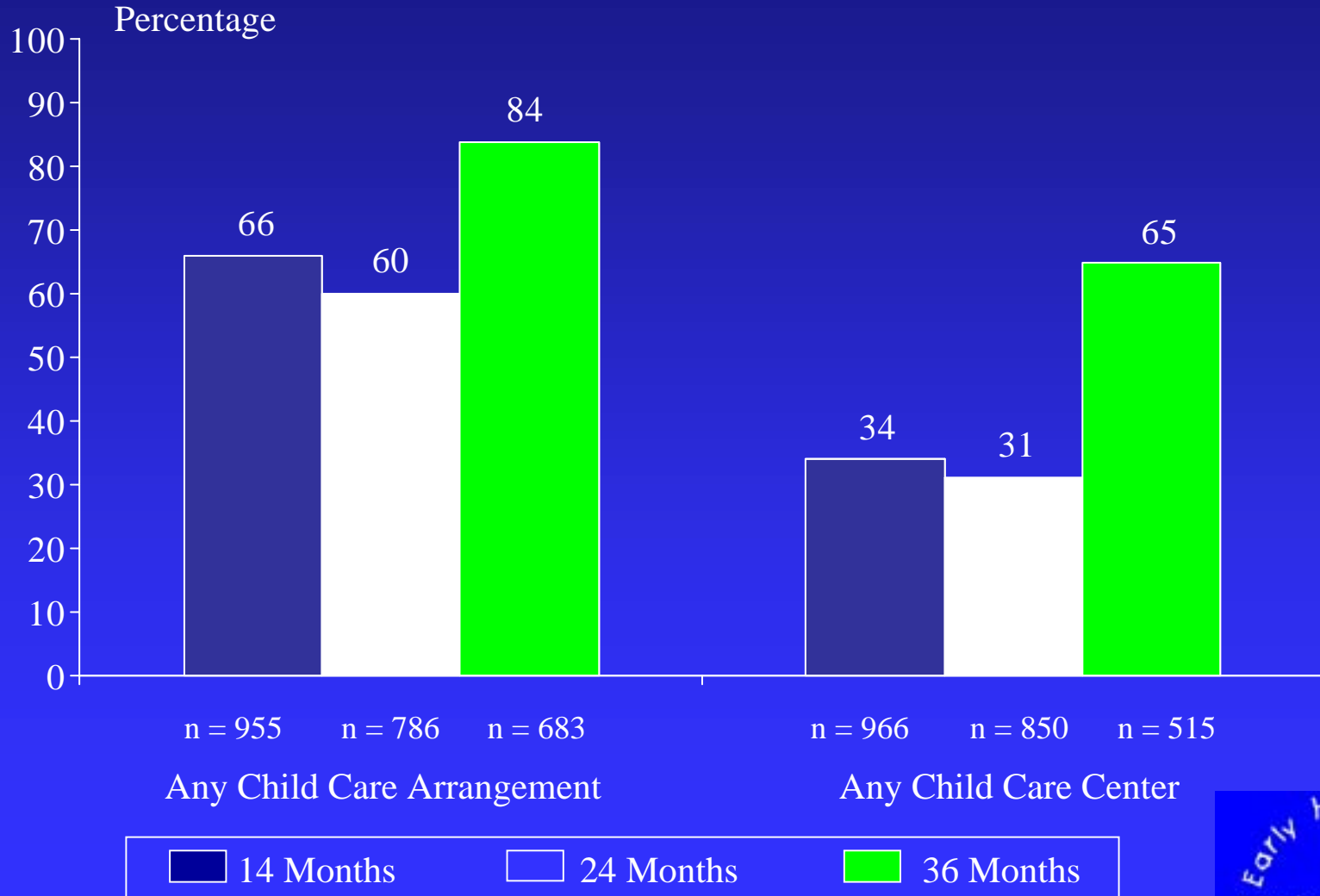
Percentage of Families Receiving Home Visitation



Child Care Used by Early Head Start Families

		Program Approach		
	Full Sample	Center-Based	Home-Based	Mixed-Approach
Percentage of Children:				
Who received any child care	86	93	80	89
Who received center-based child care	51	79	33	52
Percentage of Children Who Received Care by Number of Arrangements:				
0	14	7	20	11
1 or 2	47	40	48	49
3 or more	40	53	33	40
Average # of arrangements used	2	3	2	2

Use of Child Care by Early Head Start Children at 14, 24, and 36 Months of Age



Limitations

Data that are publicly available do not contain:

- Item-level (source) data
- Data collected directly from fathers
- Pre-Kindergarten data

These data will be available for restricted use

Locally collected data will not be available

The 17 research programs were not randomly selected, findings based on the data cannot be formally generalized to all Early Head Start programs funded during 1995 and 1996

