

Head Start University Partnerships for Measurement Development, Research Partners

Erikson Institute

Project Title:

Ounce Scale Validation Project

Principal Investigator:

Samuel J. Meisels

Project Director:

Kristy Beachy-Quick

Project Funding Years:

2004-2007

Contact Information:

Erikson Institute

420 N. Wabash, 6th Floor

Chicago, IL 60611-5627

Phone: (312) 893-7228, Fax: (312) 755-0133

Email: smeisels@erikson.edu; kbeachy-quick@erikson.edu

Project Abstract:

The Erikson Institute, working with the Ounce of Prevention Fund, the Childcare Network of Evanston and Infant Welfare Society of Evanston, the National Teachers Academy of the Chicago Public Schools, the Carole Robertson Center for Learning, and Erie Neighborhood House investigated the reliability and validity of the Ounce Scale – a functional assessment of young children's development from birth through 42 months of age. The Ounce Scale is a performance assessment used in Early Head Start programs to monitor infant, toddler, and young preschoolers' development and to guide individualized instruction. It is comprised of three elements: Observational Records, Family Albums, and Developmental Profiles and Standards. The Observational Records provide a structured format for organizing direct observations of children's performance by teachers and caregivers. The Family Albums engage parents in documenting observations of their children's development and provide parents with a range of activities to promote their children's development. The Developmental Profiles and Standards allow staff to evaluate their observations of the children and determine whether the child is "Developing as Expected" or "Needs Development" in six areas of development, based on explicit performance standards.

The project utilized extensive multi-method strategies that combined both quantitative and qualitative techniques. The overall design of the project was that of a cross-sectional, concurrent validation. Ratings on the Developmental Profiles were compared to scores on the Bayley Scales of Infant Development-II, the Preschool Language Scale-4, and the Ages and Stages Social-Emotional Questionnaire for 30 children at each of eight age levels (N=240). The sensitivity and specificity of the scale were assessed. Internal reliability and external validity of the scale was determined using Rasch analyses and other Item Response Theory models. The utility of the scale for planning, instruction and facilitating understanding of individual children were evaluated by means of interviews with teachers and parents and through examination of comments in the Family Albums and Observational Records.

Sample:

N=240 children and families

Measures:

Child

Ounce Scale

Bayley Scales of Infant Development, Second Edition

Preschool Language Scale, Fourth Edition

Ages and Stages Social-Emotional Questionnaire (ASQ: SE)

Parent

Parent Interviews

Teacher/Caregiver Interviews

Harvard University

Project Title:

Developing Methods for Tracking Bilingual Children's Early Language Development

Principal Investigator:

Barbara Alexander Pan

Project Funding Years:

2004-2007

Contact Information:

Harvard University

Harvard Graduate School of Education

320 Larsen Hall

Cambridge, MA 02138

Phone: (617) 496-0313, Fax: (617) 495-5771

Email: lesauxno@gse.harvard.edu

Project Abstract:

Harvard University partnered with several Early Head Start (EHS)/Head Start programs in Boston and Lawrence, MA, to achieve two primary goals. First, project staff investigated the feasibility of combining parent and teacher reports of toddlers' vocabulary over time, with the ultimate goal of developing accurate, efficient means for EHS/Head Start staff to assess and monitor the vocabulary development of toddlers, particularly those from Spanish-speaking homes. Second, researchers focused analysis on developing a deeper understanding of language development and attrition in toddlers and preschoolers who are acquiring more than one language. Participants included a sample of approximately 75 toddlers from Spanish-speaking homes and a peer sample of approximately 45 toddlers from English-speaking homes. Children and families entered the study at child age 2, 2½, or 3 years. Children were followed through their pre-kindergarten year of Head Start. Results informed development of an integrated system to identify appropriate reporter(s) and languages to be assessed, integrate reports from multiple reporters, and to display results over time.

Sample:

Core Sample: N=75 toddlers from Spanish-speaking homes

Peer Sample: N=45 toddlers from English-speaking homes

Measures:

Parent

Parent Interview

The MacArthur Communicative Development Inventory: Words and Phrases
Inventario del Desarrollo de Habilidades Comunicativas-Palabras y
Enunciados

Child

Woodcock Language Proficiency Battery-Revised (WLPB-R) - Picture
Vocabulary and Memory for Sentences Subtests
Peabody Picture Vocabulary Test-III (PPVT-III)
Test de Vocabulario en Imagenes Peabody (TVIP)

Parent-Child Interactions

Spontaneous Speech Samples

Michigan State University

Project Title:

Culturally Sensitive Measurement of Toddler-Parent Mealtime Behaviors

Principal Investigator:

Mildred A. Horodynski

Project Funding Years:

2004-2007

Contact Information:

Michigan State University

College of Nursing

416 West Fee Hall

East Lansing, MI 48824

Phone: (517) 335-6744, Fax: (517) 355-8536

Email: millie.horodynski@ht.msu.edu

Project Abstract:

Michigan State University, working with eight Early Head Start (EHS) programs, developed a measure for assessing toddler-parent mealtime feeding behaviors. This measure can be used to (1) identify key issues in mealtime feeding behaviors that may inform appropriate intervention strategies and (2) evaluate family and EHS program progress in the area of toddler-parent mealtime feeding behaviors and toddler nutrition. Participants included African American mother-toddler dyads (N = 200) and Caucasian mother-toddler dyads (N = 200) enrolled in EHS. The study was conducted in three phases. Phase one consisted of focus group sessions with low-income, African American families with toddlers, with the goal of tailoring existing instruments developed for Caucasian EHS families with toddlers. Phase two employed survey methods to collect responses to survey items generated in the focus group sessions, with the goal of testing the psychometric properties of the measure within the two target populations and testing the validity of the self report measure. In Phase three, EHS staff were trained to use the measurement instruments. The expected outcome of this study was an observational measure that directly assesses parent-toddler mealtime feeding behavior as well as a companion self-report mealtime behavior measure that is culturally appropriate for use with both African American and Caucasian EHS families with toddlers.

Sample:

N=200 African American mother-toddler dyads

N=200 Caucasian mother-toddler dyads

Measures:

Parent

Toddler and Parent Mealtime Behavior Questionnaire (TPMBQ)

Toddler-Parent Mealtime Observation
Feeding Self-Efficacy Questionnaire
Social Support Instrument

The Pennsylvania State University

Project Title:

Development of Early Arithmetic, Reading, and Learning Indicators for Head Start Populations

Principal Investigator:

James C. DiPerna

Project Funding Years:

2004-2007

Contact Information:

The Pennsylvania State University
105 Cedar Building
University Park, PA 16802
Phone: (814) 863-2405, Fax: (814) 865-7066
Email: jdiperna@psu.edu

Project Abstract:

The Pennsylvania State University partnered with the Lebanon County Head Start Program to develop a set of progress-monitoring measures to assess key early literacy and mathematics skills for 3-and-4-year old children enrolled in Head Start. The project carefully developed skill probes in the early literacy domain (including alphabet recitation, letter identification, letter-sound correspondence, and phonemic awareness) and in the early mathematics domain (including number recitation, number identification, counting, and subitizing). Participants included approximately 200 Head Start children per year. The measures developed for this study can help ensure that children are developing key literacy and mathematics skills and can provide data regarding when a child is at risk of later academic difficulty and would benefit from change in instruction.

Sample:

N=200 Head Start children per year

Measures:

Child

Early Literacy Probes

Early Mathematics Probes

Woodcock-Johnson III Tests of Cognitive Abilities and Achievement

Woodcock Reading Mastery Test-Revised
Dynamic Indicators of Basic Early Literacy Skills (DIBELS)
Test of Early Mathematics Ability, Third Edition (TEMA-3)

Teacher

Teacher Ratings of Early Academic Skills and Behavior

University of Arkansas for Medical Sciences

Project Title:

The Family Map: An Integrated Assessment of the Parenting Environment in Early Childhood

Principal Investigator:

Leanne Whiteside-Mansell

Project Funding Years:

2004-2007

Contact Information:

Arkansas University Center on Developmental Disabilities
Partners for Inclusive Communities
2001 Pershing Circle, Suite 300
North Little Rock, AR 72114
Phone: (501) 682-9933, Fax: (501) 682-9901
Email: WhitesideMansellLeanne@uams.edu

Project Abstract:

The University of Arkansas partnered with two area Head Start centers to create a comprehensive, user-friendly measure to assess various aspects of the family and home environment. The new measure, The Family Map, provides comprehensive information on parenting practices, household conditions, and parental characteristics that are associated with child well being. The Family Map was developed and validated on European American, African American, and Latino families. The scoring system provides a map to the areas of concern and strength for each family. Data from this project examines key issues regarding relations between the family environment and children's well being, with emphasis on examining cultural differences.

Measures:

Preliminary Version of the Family Map

University of Kansas

Project Title:

Partnership to Develop Meaningful Outcome Measures for Early Head Start Children and Families

Principal Investigator:

Judith J. Carta

Dale Walker

Kathleen Baggett

Project Funding Years:

2004-2007

Contact Information:

Judith J. Carta

University of Kansas

Juniper Gardens Children's Project

650 Minnesota Ave. 2nd Floor

Kansas City, KS 66101

Phone: (913) 321-3143, Fax: (913) 371-8522

Email: Carta@ku.edu

Dale Walker

University of Kansas

Juniper Gardens Children's Project

650 Minnesota Ave. 2nd Floor

Kansas City, KS 66101

Phone: (913) 321-3143, Fax: (913) 371-8522

Email: Walkerd@ku.edu

Kathleen Baggett

University of Kansas

Juniper Gardens Children's Project

650 Minnesota Ave. 2nd Floor

Kansas City, KS 66101

Phone: (913) 321-3143, Fax: (913) 371-8522

Email: kbaggett@ku.edu

Project Abstract:

The Juniper Gardens Children's Project at the University of Kansas partnered with two Early Head Start (EHS) programs to develop and validate two measures: one for monitoring children's growth in communication and one for monitoring change in parent's responsiveness toward children.

Participants included 175 EHS children and families who were involved in longitudinal studies examining the concurrent and predictive validity of the proposed progress-monitoring measures. Following the development of these measures, project staff developed and tested an infrastructure for

helping sites become self-sufficient in using data from the new measures to make program decisions at the program and individual child and family levels. Finally, project staff developed a website that provides support for training EHS staff on the measures and for using the data to make individual and program level intervention decisions. This project resulted in were two new measures that have been carefully developed within the EHS context, and that have been examined for their validity and reliability., The assessments are related conceptually and empirically to children's readiness for preschool, and have demonstrated utility when implemented by EHS program staff.

Sample:

N=175 children and families

Measures:

Child

Early Communication Indicator (ECI)

Indicator of Parent-Child Interaction (IPCI)

Preschool Language Scale

Ages & Stages Questionnaire

Preschool Comprehensive Test of Phonological Processing

Preschool Oral Language and Early Literacy Indicators

Brief Infant-Toddler Social Emotional Assessment-Parent Version (BITSEA)

Child Behavior Checklist

Referral for Intervention Services

Parent

Adult-Adolescent Parenting Inventory 2 (AAPI-2)

Home Observation for Measurement of the Environment (HOME)

University of Washington

Project Title:

Incorporating an Attachment Q-Set into Parent-Child Relationship
Assessment and Support in Early Head Start

Principal Investigator:

Susan Spieker

Project Funding Years:

2004-2007

Contact Information:

University of Washington

Box 357920

Seattle, WA 98195-7920

Phone: (206) 543-8453, Fax: (206) 685-3349

Email: spieker@u.washington.edu

Project Abstract:

The University of Washington-Puget Sound Educational Service District Early Head Start (EHS) Program Partnership assessed the reliability, validity, and utility of the Toddler Attachment Sort-45 (TAS45) for measuring parent-child attachment relationships for low-income children. Project staff trained staff and supervisors at the EHS program to use and incorporate the TAS45 into periodic assessments of child development and parent-child interactions. Further, the project planned to develop a dissemination package promoting the use of the TAS45 to assess and support parent-child attachment relationships. Participants included children in home-based and center-based EHS programs. Project results contribute to the body of knowledge about the adaptation of research-based tools into best practices of an EHS program.

Sample:

N=115 children from a home-based program

N=150 children from a center-based program

Measures:

Child

Toddler Attachment Set 45 (TAS45)

The Communication and Symbolic Behavior Scale (CSBS)

The Preschool Language Scale Fourth Edition (PLS-4) English Edition

Parent

The Brief Infant-Toddler Social & Emotional Assessment-Revised (BITSEA)

Parent-Child

Reciprocity rated from videotapes of free play.

Utah State University

Project Title:

PICCOLO: Parent Interactions with Children-Checklist of Observations Linked to Outcomes

Principal Investigator:

Lori Roggman

Project Funding Years:

2004-2007

Contact Information:

Utah State University
Department of Family Consumer & Human Development
2905 Old Main Hill
Logan, UT 84322-2905
Phone: (435) 797-1545, Fax: (435) 797-3845
Email: falori@cc.usu.edu

Project Abstract:

Utah State University partnered with area Early Head Start programs to develop a measurement tool for observing, tracking, and supporting parent-child interactions that lead to positive child outcomes from infancy to age three. The primary objectives for the study are to: (1) develop a valid, reliable measure of early parent-child interaction, (2) assess the usefulness of the measure for Early Head Start staff who will observe parenting interactions, and (3) develop supporting materials in English and Spanish. To develop the initial version of this measure, parent-child interactive behaviors were defined in easily observable terms, tested by observers viewing an archive of over 1,500 videotapes of parent-child interaction, and analyzed in relation to previously measured global dimensions of parent-child interactions, children's attachment security, and children's developmental outcomes. A revised version of the measure was tested on a new sample of 200 families, with 600 new observations. The proposed measure expands Head Start's tools for tracking program effectiveness and progress towards improving parent-child interactions.

Sample:

N=1,300 archived videotapes of parent-child interaction
N=200 new families

Archived Measures:

Child

Bayley Scales of Infant Development Mental Development Index (MDI)
Bayley Scales of Infant Development Behavior Rating Scale (BRS)
Comprehensive Test of Phonological Processing (CTOPP)
Developing Skills Checklist (DSC)
Peabody Picture Vocabulary Test-III (PPVT-III)
Story and Print Concepts
Woodcock-Johnson Tests of Achievement – Applied Problems, Letter Word, and Picture Vocabulary Subscales
Sustained Attention/Staying on Task Subscale of the Leiter-Revised
Sustained Attention Task

Mother

Attachment Q-sort

Child Behavior Checklist (CBCL)

MacArthur Communicative Developmental Inventory (CDI)

Social Skills Rating System (SSRS)