Head Start Graduate Student Research Program: 2015 Research Scholars

Emily Clarkson Bostwick
Project Title: Bilingual Language Diversity of Latino Preschoolers: Profiles, Communicative Competence, and Relations with School Readiness Skills
Mentor: Dr. Gigliana Melzi
Project Funding Years: 2015-2017
University Affiliation: New York University
Project Abstract:
The overarching purpose of the proposed project is to understand Latino Dual Language Learner (DLL) preschoolers’ language diversity in both Spanish and English in a holistic, nuanced, and strengths-based way, by integrating perspectives and methodologies, and to examine the relationships between language skills, home and classroom factors, and school readiness outcomes. This project will explore Latino DLL children’s distributed knowledge across languages and language domains on a standardized assessment, as well as their communicative competence skills on a more naturalistic assessment, thereby providing a comprehensive account of their total language abilities. The project will be guided by the following objectives: (1) To explore the different language profiles of Latino DLL children and to model different home factors and classroom factors associated with these profiles; (2) To examine whether different language profiles lead to differences in children’s communicative competence and school readiness skills; (3) To develop professional development sessions and parent workshops based on the results of the study to inform teacher and caregiver practices about supporting the language acquisition and development of both Spanish and English. This project is built on existing partnerships with two local Head Start centers, and has the potential to inform practice and policy at those centers, on the national level, and ensure that the best educational environment is provided to support Latino children’s development.
Sample:
Approximately 200 3- and 4-year old Latino children from Spanish-speaking homes, along with their primary caregivers and teachers from 2 Head Start centers.
Measures:
- Demographic Questionnaire
- Bilingual English Spanish Assessment
- Communicative Competence Story Stem
- School Readiness Skills

Patricia Biancone
Project Title: Efficacy of the Reading and Motor Program for Preschoolers (RaMPP): An integrated early literacy & motor skill intervention to improve letter knowledge, phonological awareness & fundamental motor skills
Mentor: Dr. Jacqueline Goodway
Project Funding Years: 2015-2016
University Affiliation: The Ohio State University
Project Abstract:
This project will specifically address delays in early literacy and fundamental motor skill development as two important factors that impact school readiness (Engle & Black, 2008). It will examine the effectiveness of the Reading and Motor Program for Preschoolers (RaMPP), an integrated curricula
model designed to improve child outcomes in early literacy and fundamental motor skill development. Two primary research questions will be addressed: (1) To what extent does the RaMPP intervention impact letter knowledge, phonological awareness, and fundamental motor skill development of Head Start preschool children relative to Head Start business-as-usual instruction? and (2) To what extent are the intervention effects on children’s literacy and motor outcomes impacted by child-level characteristics (age, race, gender, attendance, and minority language status)? The data analysis using Hierarchical Linear Modeling (HLM) will account for nesting of the data in center and classroom to examine intervention effects on child literacy and motor outcomes. Additionally HLM will enable estimation of the separate effects of child age, gender, race, minority language status, classroom, and the treatment condition on outcomes at posttest. Descriptive and correlational statistics will also be included.

Sample:
Two Head Start preschool centers will be randomly assigned to the RaMPP intervention condition (6 classrooms) and three centers will be randomly assigned to participating as the control site (6 classrooms). A total of 180 students will be participate in the intervention (n = 90) or business-as-usual control condition (n = 90) based on the center they attended.

Measures:
- Child Early Literacy and Fundamental Motor Outcomes
  - Letter knowledge and phonological awareness outcomes
    - Phonological Awareness Literacy Screening (PALS)
    - Alphabet Knowledge Task
    - Beginning Sound Awareness Task
  - Fundamental motor skill competence outcomes
    - Test of Gross Motor Development-2
- Child- and Teacher/Classroom-Level Factors
  - Child-level
    - School and Classroom Profile Survey
    - Daily Attendance Log
    - Body Mass Index (BMI)
    - Caregiver Questionnaire
  - Teacher/classroom-level
    - Teacher Background & Beliefs Survey
    - School & Classroom Profile Survey
- Implementation Fidelity and Program Evaluation
  - Implementation Fidelity
    - RaMPP intervention condition
    - Intervention Logs
    - RaMPP Fidelity of Implementation Tool (FIT)
    - Exposure & procedural adherence
    - Quality and responsiveness
    - Differentiation from business-as-usual control condition
  - Program Evaluation
    - Intervention Evaluation Survey
    - Teacher Exit Meeting
**Zoelene Hill**

**Project Title:** Choosing to Not Enroll? Understanding Parents’ Decision Making in Enrolling and Not Enrolling in Head Start  
**Mentor:** Dr. Anna Gassman-Pines  
**Project Funding Years:** 2015-2016  
**University Affiliation:** Duke University  

**Project Abstract:** 
This mixed-methods study is grounded in Bronfenbrenner’s ecological systems theory and adapts five sociological frameworks for determining institutional participation to the Head Start context. Through surveys of Head Start enrollee parents and eligible non-enrollee parents (n= 340), this study will measure the extent to which (1) psychological resources; (2) socioeconomic status; (3) social connectedness; (4) group consciousness; and (5) group conflict predict Head Start enrollment. In addition, the survey will measure parents’ priorities when selecting early child care. First, this study will measure the predictive value of the various constructs and the extent to which these factors vary across racial and ethnic groups. Then, cluster analysis of the survey responses will be used to identify typologies of Head Start enrollee parents and non-enrollee parents. Finally, in-depth interviews of parents, representative of the various Head Start enrollee and non-enrollee typologies, will be conducted and analyzed to provide comparisons of the groups using rich and detailed information not available through survey-based data. This study provides critical information about facilitators and barriers to enrollment that will allow Head Start providers to strategically improve programming and recruitment to promote enrollment amongst their increasingly diverse target population.  

**Sample:** 
This study will survey parents whose children are currently enrolled in Head Start (170) and Head Start eligible parents whose children are not enrolled in any center-based preschool program (170). In-depth interviews will be conducted with 30 of the 340 parents and 10 Head Start staff members will be surveyed.  

**Measures:**  
- Psychological Resources  
- Socioeconomic Status  
- Social Connectedness  
- Group Consciousness  
- Group Conflict  
- Priorities and Preferences

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**Francesca Longo**

**Project Title:** Two-Generation Approach to Improving Emotional and Behavioral Regulation  
**Mentor:** Dr. Eric Dearing  
**Project Funding Years:** 2015-2017  
**University Affiliation:** Trustees of Boston College  

**Project Abstract:** 
The present study builds on theoretical and empirical prior work indicating that children’s executive function (EF) skills are important precursors to emotional and behavioral regulation and that these skills are likely best promoted when addressed across classroom and home contexts. Specifically, the proposed study will exploit a randomized experimental design to evaluate the effects of a direct child training targeting EF on children’s emotional and behavioral regulation. The direct child training will consist of weekly, 30-minute sessions comprised of games modeled after Tominey and McClelland’s (2011) circle time games, focusing on directly teaching children how to switch between two different
sets of rules (i.e., cognitive flexibility) and inhibit automatic responses (i.e., inhibitory control). In addition, the present study will examine the value added of training both children and parents in these areas. The parent-training curriculum is focused on developing strong parent-child interactions with a specific emphasis placed on teaching parents the developmental importance of EF. Each training session will teach parents a new skill and give them the tools to foster these new skills in their children. Children and parents will be evaluated pre- and post-intervention.

Sample:
A total of 21 Head Start classrooms with a range of 13 to 20 students per classroom. All parents and children from these classrooms will be approached for participation in the study, leading to a maximum sample size of 420. The sample will be comprised of about 30% African American, 25% Hispanic, and 15% Asian students and maternal education will range with about 70% with a high school diploma or less and 30% with less than a high school diploma.

Measures:
- Children’s emotional and behavioral regulation
  - Challenging Situations Task (CST)
  - Behavior Problem Index (BPI)
  - Positive Behavior Scale
  - Social Competence Scale-Parent Form
- Children’s executive function
  - Head-to-Toes Task
  - Pencil Tap Task
  - Something’s The Same game
  - Behavior Rating Inventory of Executive Function-Preschool Version
- Parent’s skills
  - Behavior Rating Inventory of Executive Function
  - Conflict Tactics Scale-Parent-Child (CTS)
- Family Characteristics
  - K-6 Kessler 6-item Psychological Distress Scale
  - Parenting Stress Index (PSI)

Davis Henderson
Project Title: Dynamic Assessments of Navajo Head Start Children's Narrative Ability
Mentor: Dr. Adelaida Restrepo
Project Funding Years: 2015-2016
University Affiliation: Arizona State University
Project Abstract:
The purpose of the this study is to examine Navajo narratives and language characteristics using Dynamic assessment of narratives (DAN) to differentiate Navajo Head Start children as being "at-risk" for language impairment or typically developing. The main aim of the study is to examine whether DAN is sensitive to changes in narrative structure from pre- to post-test in Navajo children, to examine whether DAN discriminates accurately to those with language differences from language disorders, and to determine the best ability group predictors, whether it is change scores, pretest performance, posttest performance, or a combination of these. A One-Way ANOVA with repeated measures analysis will be run to determine whether there are significant changes from pre- to post-dynamic assessment in the measures of total score, story structure, use of subordinating conjunctions and emotion terms. Further, a discriminate analysis will be run using external measures to classify children to examine classification of accuracy. Also, a multiple regression analysis will be run to test whether pretest scores,
gain scores, and responsiveness scales significantly predict the difference in the ability of the groups’
performance on the task. The study will provide information about whether DAN is sensitive to narrative
changes and whether it differentiates those truly at risk from those developing typically.

**Sample:**
100 English-speaking and bilingual children ages 4;0 to 5;11 who are enrolled in the full-day class Navajo
Head Start program on the Eastern Navajo Reservation will be recruited.

**Measures:**
- Clinical Evaluation of Language Fundament- Preschool, Second Edition (CELF- P2)
- Spoken Narrative
- Narrative Assessment Protocol (NAP)
- PEARL

Lisa White

**Project Title:** Examining an Executive Functioning and Bilingual Advantage among Latino DLL Children in
Head Start Classrooms: A Strength-Based Approach

**Mentor:** Dr. Daryl Greenfield

**Project Funding Years:** 2015-2017

**University Affiliation:** University of Miami

**Project Abstract:**
In a sample of Latino preschool dual language learners (DLLs) attending Head Start, the proposed study
will examine executive functioning (EF) and bilingual development across the year as they relate to
classroom practices and science readiness. The study will be the first to examine the bidirectional
relationship between bilingualism and EF (i.e. bilingualism promoting EF development and EF promoting
bilingual development), to highlight the mechanisms behind this relationship, and to inform
opportunities for intervention for teachers. It will also determine if children’s EF and bilingual ability
across the year mutually predict science readiness. Lastly, this study will examine if level of support for
the home language in Head Start classrooms influences EF and bilingual ability across the year. Results
from this study will directly inform classroom practices that capitalize on DLL children’s strengths to
promote school readiness across domains. In the long-term, this study is a necessary step in a research
agenda addressing the Latino achievement gap. Such efforts will help educators and policymakers utilize
the unique strengths of DLL children within the American educational system, ultimately establishing a
positive trajectory of academic success in preschool and beyond for our nation’s future multilingual
leaders.

**Sample:**
The proposed study will supplement a larger partnership project, “Enfoque en Ciencia,” between the
University of Miami (UM) and Miami-Dade Head Start, which currently has 1000 Latino children enrolled
across 90 classrooms. A random sample of 35 classrooms will be chosen from the greater sample for the
proposed study resulting in approximately 350 Spanish- and English-speaking DLL children.

**Measures:**
- Language
  - Preschool Computerized Language Assessment (PCLA)
- Executive Functioning
  - Executive Functioning Early Childhood Computer Task (EFECcT)
- Science
  - Lens on Science (LENS)
  - Enfoque en Ciencia
- Classroom Support for DLLs
- The Classroom Assessment of Supports for Emergent Bilingual Acquisition (CASEBA)