Observing Self-Regulation in Context in Head Start Classrooms and Dual Language Learners School Readiness

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Project Description.
The purpose of this study is to examine the association between the classroom context, self-regulation skills, and academic achievement in a sample of Dual Language Learning (DLL) children enrolled in Head Start. Given the increasing number of DLL children enrolled in Head Start, it is important to understand how teachers can use the contexts of the classroom to best support the development of skills, like self-regulation, that contribute to later success. The current study examines the association between a direct assessment and an observation of self-regulation skills to determine if direct assessments accurately capture a child's ability to self-regulate their behaviors in the classroom. Additionally, this study examines which contexts of the preschool classroom are associated with children's use of self-regulated behaviors. Lastly, this study investigates the relationship between self-regulation skills and academic achievement. The results of this study have the potential to inform classroom interventions aimed at increasing self-regulation and academic skills for young DLL children.

Research Questions.
1. What is the association between a direct assessment of self-regulation skills and an observational measure of self-regulation skills in the preschool classroom?
2. Which contexts of the preschool classroom best support use of self-regulation skills?
3. Do self-regulation skills, measured by two separate methods, mediate the relationship between classroom context and academic achievement?

Sample. The sample of participants included 341 Spanish-English speaking DLL children attending Head Start in a large urban area in South Florida. All children were screened for language dominance and sampled from 40 classrooms across 9 Head Start centers. Children ranged in age from 37 to 63 months old (M = 49.79, SD = 6.81), of which 48.9% were females.

Methods. A combination of a direct assessment and a classroom observation were used to examine self-regulation skills and classroom context. Direct assessments were used to assess academic achievement.

Data collection measures and procedures
- All children first were first assessed on a language screener to determine their DLL status and dominant language. Subsequent direct assessments occurred in the child's dominant language.
- Observations of DLL children's self-regulation skills in the classroom contexts were conducted via video recordings and are currently being coded.
- All outcome measures of academic achievement (i.e., science, math, literacy) were conducted last at the end of the school year.
- *preLAS2000* (Duncan & De Avila, 1998). The preLAS2000 assesses children's expressive and receptive language skills in English and Spanish. The preLAS2000 was used to determine children's dominant language.
- *Preschool Self-Regulation Assessment* (PSRA; Smith-Donald, Raver, Hayes, & Richardson, 2007). The PSRA is a direct assessment of children's self-regulation skills. The PSRA consists of a structured battery of age-appropriate tasks designed to assess self-regulation in behavior, emotion, and attention.
- *Social Development Lab-Kindergarten Coding System* (SDL-K; Rimm-Kaufman, 2005). The SDL-K is an observational coding

system that measures children's exposure to learning contexts and behaviors (e.g., self-regulated behavior) in the classroom.

- *Enfoque en Ciencia/Lens on Science* (Greenfield, 2015). Enfoque en Ciencia/Lens on Science is a direct assessment of children's science content knowledge and practice skills.
- *Research-based Early Maths Assessment: Brief Form* (*REMA-Brief*; Clements, Sarama, & Liu, 2008). The REMA-Brief is an assessment of early math skills that taps a broad range of early math skills.
- *Woodcock-Muñoz Identificación de letras y palabras* (Schrank, Wendling, & Alvarado, 2010)/*Letter-Word Identification subtest from the Woodcock–Johnson IV Tests of Achievement* (Schrank, Mather, & McGrew, 2014). This language subtest assesses children's broad reading ability.

To address Research Question 1, a series of Confirmatory Factor Analyses will be conducted to determine the best models of observed and assessed self-regulation. Research Question 2 will be addressed with a ANOVA to determine the classroom context where the most self-regulation skills occur. Research Question 3 will be analyzed by taking the best fitting models for assessed and observed self-regulation from Research Question 1 and conducting a series of Structural Equation Modeling path models.

Progress Update. Data collection has been completed. All direct assessment data has been entered, verified, cleaned and scored. Video recordings of the SDL-K observations are currently being coded for DLL children's self-regulation skills.

Preliminary analyses were conducted to address part of Research Question 1, that found that assessed self-regulation is best explained by a two-factor model.

Implications for policy/practice

The findings of this study can inform early educators and policymakers by providing support for classroom changes that can be made by teachers to support the use and development of self-regulation skills for DLLs. Further, policy makers can utilize the strengths of the preschool environment to inform interventions that increase self-regulation skills and improve the academic achievement of young DLL children.

Implications for research

Findings from this study will further our understanding of the skills that DLL children rapidly develop during preschool. By examining self-regulation skills with two different methods, findings will highlight the implications of using different methods of measuring self-regulation. Further, the use of multiple methods of assessing self-regulation will result in a better understanding of how self-regulation skills contribute to academic achievement.

For more information:

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