Effect of Teacher-Child Interactions on Low-Income Children’s Early Self-Regulation Development

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Abstract

This study examines the self-regulation development of 295 low-income three to six-year-olds in early learning settings, some of whom were Spanish-English dual language learners. All children improved in their performance over time on three early self-regulation tasks. Spanish-English Latino dual language learners did not differ at entry into the study or in their rate of growth from their non-Latino peers on the self-regulation tasks whereas their monolingual English-speaking Latino peers performed worse on two tasks after controlling for child and family characteristics and child receptive language ability, suggesting a possible cognitive advantage of bilingual language acquisition on self-regulation skills. Quality of teacher-child interactions in diverse community early learning settings predicted differences in self-regulation performance on the pencil tap task.

STUDY AIMS: Describe changes in self-regulation skills over time for low-income children in early care and education settings, and examine the factors that may influence those changes.

Consistent with previous research, average scores on the three self-regulation tasks shown in figures 1-3 show growth in assessed self-regulation skills over time (Carlson, 2005).

Summary & Discussion

In this sample of largely low-income children, self-regulation skills grew throughout the early years.
• Growth in behavioral impulse control was most rapid before pre-kindergarten
• Child age and receptive vocabulary were predictive of performance on these tasks

Results indicate an early advantage on executive function and impulse control tasks at the beginning of preschool for Spanish speaking, Latino children.

Teacher-child interactions positively predicted executive functioning and impulse control.
• More supportive, warm, and intentional teacher-child interactions support low-income children’s self-regulation development

The LA ExCELS Study

(Los Angeles: Exploring Children’s Early Learning Settings)

A longitudinal study of low income children attending a variety of early learning programs.

Sample and Methods:
• 295 children
• 193 children attended some form of licensed child care or early education program during Preschool and Pre-Kindergarten
• Low-Income Sample (mean income-to-needs ratio: 1.17)
• Half Latino and Spanish speaking

Measures:
Self-Regulation Tasks (Smith-Donald, Raver, Hayes, & Richardson, 2007):
• Gift Wrap Task
• Pencil Tap Task
• Toy Sort Task

Classroom Measures
• Adult Involvement Scale (Ritcher, Homers, Kraft-Sayre, & Weaver, 2001)
• CLASS (LaParo, Pianta, Hamre, & Stuhlman, 2005; LaParo, Pianta, & Stuhlman, 2004)

The LA ExCELS Study

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Implications

Early dual language acquisition may play a protective role for the cognitive development of low-income bilingual children.

Specific aspects of teacher-child interactions at the child and classroom levels, and the child’s language and ethnicity and should be explored further.

Higher self-regulation skills (emotional, behavioral, and cognitive regulation) are related to better school-readiness which is especially important for this sample of at-risk children (Raver, 2002).

For more information about the study, please contact Sandra Soliday Hong (sandy.hong@unc.edu) or the study PI Allison Sidle Fulgni (afulgni@calstatela.edu) and Carollee Howes (howes@ucla.edu).

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