

PROJECT BRIEF

Exploring the Relationship Between Positive Behavior Support and Language Learning Opportunities in Preschool Classrooms

Project Team:

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Project Description.

The study explores the relationship between positive behavior support and teacher language support strategies in two ways: an initial correlational design study and an experimental research design study in which a subset of teachers who have been randomized to receive Pyramid Model training (a classroom-wide positive behavior support intervention) or business as usual (BAU) will be assessed pre- and post-training. Results from these studies will provide a foundation for understanding the relationship between overall positive interactions in the classroom designed to promote positive behavior and teacher use of language development support strategies.

Potentially, these findings will suggest ways in which the benefits of training in positive behavior support can be leveraged to also improve teacher-child language related interactions. Because both positive behavior and language outcomes are of concern in children at-risk, increasing the effectiveness and efficiency of professional development in targeting both developmental areas is important to the field.

Research Questions.

1. To what extent do Head Start teachers and childcare providers exhibit or model the following features of language in their interactions with children: (1) language supportive strategies (2) responsiveness (3) complex syntax (4) shared involvement in activities and play?
2. Are lead teachers' scores on assessments of classroom management and positive behavior

support significantly correlated to the quantity and quality of language interactions with children?

3. Does training in the Pyramid Model positively impact the quality of language interactions between teachers and children?

Sample.

51 Head Start teachers and childcare providers were included across the three studies that compose this project.

Methods.

This project was comprised of three studies that built upon each other to address the proposed research aims presented above:

Study 1: First, a generalizability study (G-study, Cronbach, et al., 1972; Shavelson et al., 1989), conducted on previously collected teacher language samples, was completed to determine the minimum number observations required to obtain a stable estimate of teacher language in preschool classrooms.

Study 2: An observational study, utilizing a correlational design was conducted to explore the relationship between positive behavior support (PBS) and features of teacher-child language interactions in preschool classrooms.

Study 3: A second observational study (embedded within an ongoing randomized control trial at Vanderbilt University) was conducted to experimentally examine the impacts of a positive

behavior support classroom intervention on features of teacher-child language interactions in childcare and preschool classrooms.

Progress Update.

Data collection for all three studies is complete. Analysis for study 1 is complete, and results suggest that two 20-minute samples of teacher-child language interactions during centers are sufficient for obtaining a stable estimate of the quantity and quality of teacher language input.

Coding and analysis of data for studies 2 and 3 are ongoing. Transcription of all samples of teacher language in the classroom is complete, as well as coding for frequency of child-directed talk and quality of language support. Coding of complex syntax and shared involvement in activities an play is in progress, and will be completed by Summer 2019.

Results from the correlational analysis (study 2) indicate that teachers with higher scores on an observational measure of PBS/classroom management were significantly more likely to: (a) talk to children more frequently; (b) use language support strategies more frequently; (c) score higher on a global measure of language support (Classroom Assessment Scoring System Language Modeling Subscale [CLASS; Pianta et al., 2007]).

Results of the experimental analysis (study 3) indicate that teachers in the Pyramid Model coaching group, on average, demonstrated a higher quality of language support (as measured by the CLASS) at post-test, compared to teachers in the control group. However, this difference was not statistically significant. A pre-post analysis of a small subgroup of teachers in the intervention group (N=7) indicated that on average, teachers' frequency of child directed utterances and use of language supportive strategies increased after intervention.

Implications for policy/practice.

This project examined a potential mechanism through which cross-domain effects occur between positive behavior support and child language outcomes in both teacher and child behavior. The findings from this project support the hypothesis

that a positive relationship exists between classroom management/PBS, and the language-learning environment of preschool classrooms.

We argue that these findings can support policy makers and practitioners in (1) understanding why teachers struggle to implement language focused interventions and strategies in their classrooms with a high enough fidelity and dosage to effect change in child outcomes and (2) developing professional development models that consider the influence that these variables have on the learning context within a classroom, and provide foundational support when needed to teachers both within and across domains in a way that maximizes effects for teachers, and subsequently children.

It is possible that the co-variation observed in child language and behavior in preschool classrooms is, in part, the result of teacher behavioral co-variation in their support for language learning and positive behavior support. Addressing such factors could ultimately lead to cross-domain PD approaches that improve positive behavior support and simultaneously enhance the fidelity to which teachers are able to implement language and literacy based interventions.

Implications for research.

Findings from this project will help to inform researchers' decisions regarding methods for measuring teacher-child language interactions in classroom contexts. Additionally, findings from this study help to identify features of the classroom environment and teacher behaviors that are important to measure in intervention research examining the effectiveness of language interventions in early childhood classrooms. There is also potential for contributions to a transactional or behavioral ecological theory of classroom interactions across domains.

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