

# A CLASSROOM-WIDE MODEL FOR PROMOTING Social Emotional Development & Addressing Challenging Behavior In Preschool Children

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## TEACHING PYRAMID RESEARCH PROJECT



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## Background

Research in early education indicates that social-emotional competence is critical for children's readiness for school and early school adjustment. Early childhood educators encounter young children who demonstrate a range of social-emotional skills and varying needs for social and behavioral support. Early educators are challenged by how to support children with significant social emotional and behavioral needs while also providing a developmentally appropriate and supportive learning context for all children.

The *Pyramid Model* (Fox, Dunlap, Hemmeter, Joseph, & Strain, 2003; Hemmeter, Ostrosky, & Fox, 2006) is a promotion, prevention, and intervention framework early educators can use to promote young children's social and emotional development and prevent and address challenging behavior. The *Pyramid Model* organizes evidence-based practices that include universal promotion practices for all children, practices for children who need targeted social-emotional supports, and individualized behavior support practices for children with significant social skill deficits or persistent challenging behavior.

## The Study

Researchers from the University of South Florida and Vanderbilt University conducted a randomized study examining the implementation of the *Pyramid Model*. Teachers were recruited from public preschool classrooms in Florida and Tennessee that served children with, at risk for, and without disabilities. A total of 40 teachers (20 intervention; 20 control) participated and were randomly assigned to condition. Data were collected on a total of 484 children in these classrooms (252 intervention; 232 control), including two to three target children per classroom who were identified as having behavioral challenges (54 intervention; 43 control).

Teachers in the intervention condition received training workshops, individualized coaching, and materials (i.e., implementation guides and classroom materials) related to the implementation of the *Pyramid Model*. Weekly coaching sessions took place for 16 weeks, consisting of in-class observation of teacher practices, debrief meetings, and email follow-up. Teachers in the control condition received the training workshops at the end of the school year.

Data were collected on four occasions in all classrooms during the school year. Teachers reported on children's social skills and problem behavior by completing the Social Skills Improvement System (citation). Trained observers rated teacher implementation of the *Pyramid Model* implementation and conducted a direct observation of target children's social skills and problem behavior. Data were analyzed to examine whether (a) the intervention resulted in differences of teachers' implementation of *Pyramid Model* practices and (b) teacher implementation of *Pyramid Model* practices resulted in differences in social and behavioral outcomes for children, including target children.

## Results

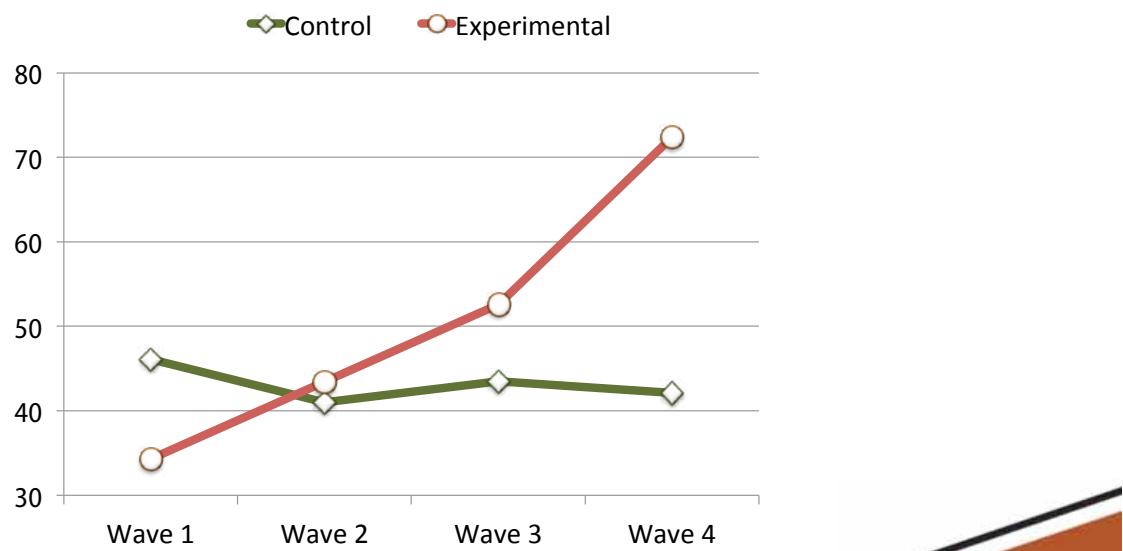
**Teacher outcomes.** Figure 1 shows data on teachers' implementation of *Pyramid Model* practices across waves for intervention and control groups. Results show that teachers in the intervention group progressed steadily toward higher levels of *Pyramid Model* implementation when compared with teachers in the control group. At the end of the school year, there were statistically significant and noteworthy differences in practice implementation between intervention and control teachers.

**Child outcomes.** Following intervention, non-target children whose teachers were in the intervention group were rated significantly higher on social skills than non-target children whose teachers were in the control group. Target children within classrooms in the experimental condition had statistically significant and noteworthy reductions in problem behavior as rated by teachers in comparison to target children whose teachers were in the control group.

## Conclusion

This study provides evidence that training and coaching resulted in increases in teacher practices for promoting social emotional development and addressing challenging behavior, as well as increasing positive social skills and decreasing challenging behavior in preschool children. This study represents one of the first experimental evaluations of the effects of a comprehensive model such as the Teaching Pyramid on children with varying levels of need around social skills and challenging behavior. The findings provide evidence for the effectiveness of a systematic professional development intervention on teachers' implementation of practices and that practices associated with the *Pyramid Model* can be effective for promoting social skills reducing problem behavior of children in a preschool classroom.

**Figure 1.**  
**Average Percent of Practices Implemented  
by Teachers Across Waves by Experimental Condition**



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