

# Emotion Regulation Development: The Role of Positive and Negative Engagement in the Preschool Classroom

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## INTRODUCTION

- Emotion regulation abilities differ between children, are critical for school readiness, and develop substantially in preschool (Blair, 2002; Denham, 2006).
- Psychological processes, such as emotion regulation, develop in socially embedded interactions with adults, peers, and the learning context (Stetsenko & Vianna, 2009; Vygotsky, 1977).
- Children's positive interactions with teachers and peers in preschool are positively associated with emotion regulation. Children's negative interactions are related to difficulties in emotion regulation (Cohen & Mendez, 2009; Denham, et al., 2003).
- Little research has investigated the interplay between positive and negative engagement in the classroom the development of emotion regulation.

## RESEARCH QUESTION

Do children's positive interactions with teachers, peers, and tasks moderate the influence of their negative interactions on the development of their emotion regulation skills across one year of preschool?

## METHODS

### Participants:

- 381 children in 100 preschool classrooms in a large urban area
- 50% female, average age of 47 months
- 67.5% Hispanic, 14.5% Caucasian, 6.2% Asian, 3% African American, 8.8% other
- Average income to needs ratio of 1.69

**Procedures:** Preschool classrooms were observed once in the fall and once in the spring for approximately 4 hours during the preschool day. At both observations teachers were given a packet of questionnaires including teacher demographics and child ratings.

## MEASURES

### Observed Preschool Classroom Behavior:

- **Individualized Classroom Assessment Scoring System (inCLASS, Downer, et al, 2010):** An observational assessment of preschool children's classroom interactions.

Teacher Interactions	Peer Interactions	Task Interactions	Negative Interactions
Positive Engagement with Teacher	Peer Sociability	Engagement	Teacher Conflict
Teacher Communication	Peer Communication	Self-Reliance	Peer Conflict
	Peer Assertiveness		Behavior Control

### Teacher-Reported Emotion Regulation:

- **Emotion Regulation Checklist (ERC; Shields & Cicchetti, 1997):** 24-item report of young children's affective lability, intensity, valence, flexibility, and situational appropriateness. Lability/Negativity and Emotion Regulation scales were ( $\alpha = .96$  and  $.83$ , respectively).
- **Teacher-Child Rating Scale (TCRS; Hightower et al., 1986):** 38-item measure of children's social/relational and self-regulatory behavior. Frustration Tolerance scale was used.

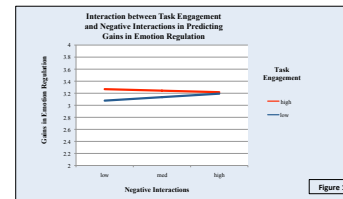
### Observed Behavior Problems:

- Nine assessor-rated items about children's cooperation, activity level, and displays of negative emotions composited ( $\alpha = .84$ ).

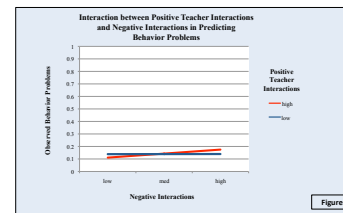
## RESULTS

- Multiple linear regressions were used to determine whether children's positive teacher, peer, and task interactions, and negative classroom interactions, predicted growth in emotion regulation skills over one year of preschool. Outcomes were examined within independent models.
- Race, gender, socioeconomic status, home language, and fall emotion regulation were controlled in predicting spring emotion regulation.

	Emotion Regulation		Lability		Frustration Tolerance		Observed Behavior Problems	
	$\beta$	SE	$\beta$	SE	$\beta$	SE	$\beta$	SE
Fall Regulation	11.355**	.052	10.318**	.060	8.510**	.064	-2.633**	.044
English Home Language	2.622**	.057	-1.537	.039	-.121	.112	-2.311**	.016
Gender	-2.998**	.048	1.652^	.034	-1.266	.088	-1.438	.015
Income to Needs	.906	.023	-.535	.017	-.326	.047	-1.109	.007
Ethnicity - White	-1.227	.116	1.706^	.070	-.895	.175	.689	.026
Ethnicity - Other	-1.201	.066	1.041	.047	.001	.127	1.370	.023
Teacher Interactions	-.755	.066	-.919	.038	-1.489	.087	.203	.019
Peer Interactions	.437	.069	.037	.041	.389	.090	.306	.015
Task Interactions	1.855^	.053	-.592	.037	1.261	.111	1.577	.015
Negative Interactions	.750	.094	1.291	.066	-1.061	.189	.033	.029
Teacher*Negative			3.094*	.138			1.980*	.071
Peer*Negative								
Task*Negative	-1.994*	.164						

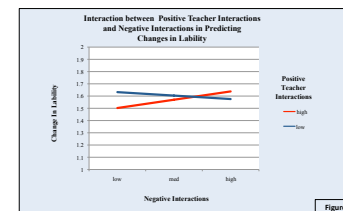


• Children with low negative interactions and high in task engagement had more gains in emotion regulation than those children with low task engagement. However, for children with high negative engagement their level of task engagement did not effect change in emotion regulation (See Figure 1).



• Children with low negative interactions and high in positive teacher interactions had less of an increase in observed behavior problems across the pre-kindergarten year compared to those children with more limited positive teacher interactions. However, children with more negative interactions had increased observed behavior problems despite positive teacher support (See Figure 2).

• Children with limited negative interactions and frequent positive interactions with the teacher had decreased lability compared to those with more limited positive teacher interactions. However, children with high levels of negative had the same amount of change in lability, regardless of positive teacher interactions (See Figure 3).



• Our findings suggest that children who are low in negative classroom interactions benefit from high positive engagement with the teacher and tasks and have fewer emotion regulation problems.

• However, the opposite was true for children who were engaged in negative classroom interactions. While counter to expectations, these results may be indicative of the fact that, for emotionally dysregulated children teachers spend more time engaged with them positively to help them negotiate the demands of the classroom.

• Positive peer interactions did not significantly influence emotion regulation development.