

Promoting Resilience: A Preschool Intervention Enhances the Adolescent Adjustment of Children Exposed to Early Adversity

Michael Sanders, Janet Welsh, Karen Bierman, and Brenda Heinrichs

The Pennsylvania State University

Contact: Michael Sanders, mts34@psu.edu

Background

- Adverse childhood experiences (ACEs), including exposure to abuse and various forms of parental dysfunction, have been linked to poor social functioning, increased emotional distress, and school adjustment difficulties in children.^{1,2,3}
- Exposure to ACEs in early childhood may lead to such vulnerabilities in adolescence by disrupting the development of the physiological systems that regulate adaptive stress responding or by disrupting parent-child relationships.^{4,5}
- Intervening during early childhood to address the effects of ACEs may be particularly important, given evidence of their negative impact on the neurodevelopment of self-regulatory processes during the preschool years.^{4,6}

The **current study** examined: 1) the association between childhood ACEs and emotional distress and school bonding in early adolescence, and 2) whether the Head Start REDI intervention would buffer children against the negative effects of early ACEs, ameliorating negative effects on early adolescent emotional distress and school bonding.

Method

Participants: 356 children (17% Hispanic, 25% African American; 54% girls) recruited from 44 Head Start classrooms in 3 Pennsylvania counties enrolled in the Head Start REDI Program.

Measures:

Childhood ACEs: nine ACEs: 1) child abuse, 2) living apart from the parent; 3) witnessing violence; 4) parent arrest; 5) parent special education; 6) parent grade retention; 7) 3 or more family moves; 8) frequent corporal punishment; and 9) parent depression (CES-D Questionnaire)

Social-emotional distress: various questionnaires including the Strengths and Difficulties Questionnaire and Positive and Negative Affect Schedule to assess subjective distress

School bonding: People in My Life Questionnaire and School Adjustment Questionnaire to assess subjective school bonding experiences

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Intervention

- The Head Start REDI classroom program targeted social-emotional learning and language/emergent literacy skills.
- Teachers taught the Preschool PATHS curriculum covering the topics of prosocial skills, emotional understanding, self-control, and social problem-solving.
- Teachers also led daily interactive reading lessons to strengthen language skills and discussed support social-emotional themes. Sound games and print centers supported emergent literacy skills.
- Teachers received detailed manuals, four days of workshop training, and weekly coaching with a trained REDI Consultant.

Analyses

Multilevel latent profile analysis was used to characterize adolescent adjustment.

Three distinct profiles of adolescent emotional distress and three distinct profiles of school bonding emerged. For emotional distress, **low**, **medium**, and **high** distress profiles emerged, and for school bonding, **strong**, **average**, and **weak** bond profiles emerged; in both cases, the “medium” and “average” profiles characterized the average level of adjustment in our sample.

Results

Table 1. Relative Risk of Social-Emotional Distress and School Bonding Latent Profile Membership

Sample	Comparison	Relative Risk	Lower Bound	Upper Bound
Social-Emotional Distress				
High ACEs (No Intervention)	Medium vs. High Distress	.63	.31	1.29
	Low vs. High Distress	.26*	0.13	.51
High ACEs (Intervention)	Low vs. Medium Distress	.40*	0.25	.64
	Medium vs. High Distress	2.65	.96	7.34
High ACEs (Intervention)	Low vs. High Distress	8.10*	3.16	20.80
	Low vs. Medium Distress	3.06 ⁺	1.62	5.78
School Bonding				
High ACEs (No Intervention)	Average vs Weak Bond	.13*	.06	.30
	Strong vs Weak Bond	.08*	.03	.18
High ACEs (Intervention)	Strong vs Average Bond	.58	.35	.97
	Average vs Weak Bond	11.62*	3.79	35.66
High ACEs (Intervention)	Strong vs Weak Bond	17.81*	5.62	56.49
	Strong vs Average Bond	1.53	.79	2.97

Results, continued

Figure 3. School Bonding Latent Profile Distribution by Risk Status and Treatment Condition

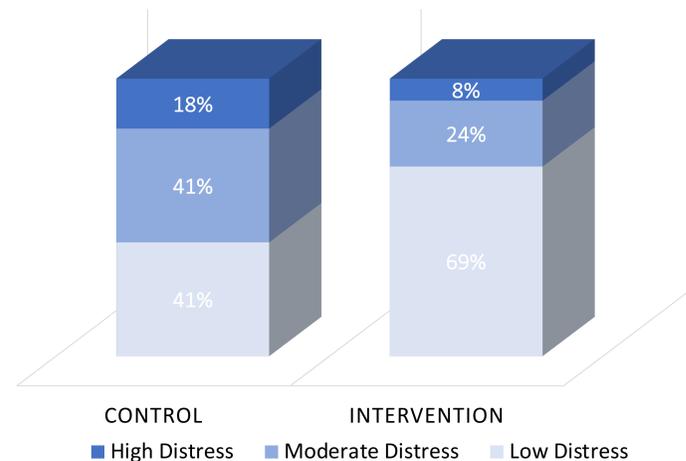
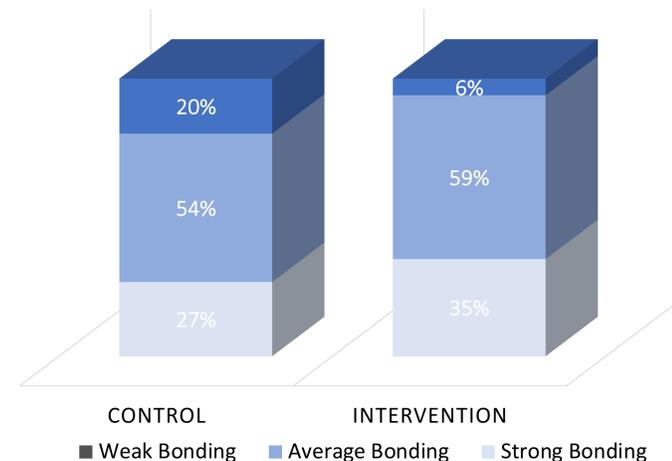


Figure 4. School Bonding Latent Profile Distribution by Risk Status and Treatment Condition



Note: Relative risk indicates how high ACEs were associated with adolescent distress profiles within the control and intervention groups. Analyses control for child sex, age, race, and family income-to-needs ratio. ⁺ $p < .10$, * $p < .05$

Discussion

- High ACEs exposure in early childhood was associated with increased risk of experiencing social-emotional distress and weak school bonding in early adolescence.
- Receiving the REDI intervention in preschool conveyed some protection for children with high levels of early childhood ACEs exposure, reducing the prevalence of high social-emotional distress (3-8x as likely to be in better profile) and weak school bonding (11-17x as likely to be in better profile).

Conclusions and Implications

- Classroom-based interventions that target social-emotional skills may be particularly helpful for many children experiencing high levels of early adversity.
- Social-emotional competencies bolstered by REDI may have helped youth to effectively manage the normative social-emotional stressors of early adolescence and remain bonded to school.
- Expanded ACEs scales that incorporate indices of early adversities often experienced by children in low-income families may assist in accurate assessment and prediction.^{7,8}
- Classroom teachers can effectively promote the resilience when they are provided with an evidence-based SEL program and coached in teaching strategies that enhance child social-emotional skills. Future studies are needed to replicate and expand these findings and to explore the scalability and sustainability of preschool-based interventions like REDI.