Protective Experiences and Socioemotional Development in the Context of Childhood Adversity: Foundations of Resilience

PACEs Lab
Protective and Compensatory Experiences

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Background

- Negative effects of Adverse Childhood Experiences (ACEs) on mental and physical health have been well documented[1]
- Effects of childhood protective factors on healthy development are less understood
- Supportive relationships and enriching resources of Protective and Compensatory Experiences (PACEs) may promote healthy developmental trajectories[2]

Study Aim

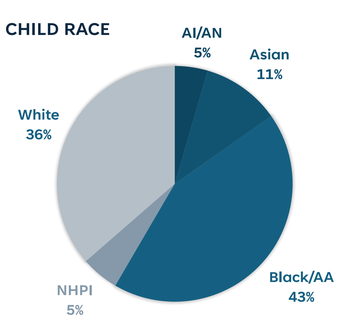
- This study aims to examine the complex relationship between childhood adversity and protective factors across three developmental stages of childhood and clarify patterns of effects in developing children

Method

- Participants (*N*= 438) completed online surveys on their own experiences and their child's experiences
- Parents self-reported on their childhood adversity and current protective experiences, and their child's protective factors
- Participants were recruited via ResearchMatch, offering a geographically diverse sample across the United States

Participant Characteristics

- Most parents were married (79.5%) and held a bachelor's degree (53.4%).



Child	
Sex	
Female	42.2%
Male	57.8%
Age	
2-18	*M*= 9.05

Parent	
Sex	
Female	53.4%
Male	46.6%
Age	
20-71	*M*= 35.95

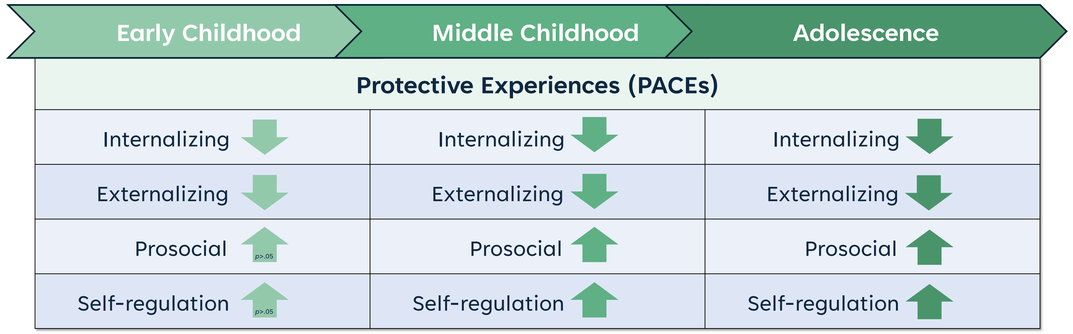
Outcomes Across Developmental Stages

Standardized Coefficients of Parent and Child ACEs and PACEs on Outcomes

	Early Childhood Ages 2-4 *n*= 71				Middle Childhood Ages 5-11 *n*= 243				Adolescence Ages 12-18 *n*= 124			
	Int	**Ext**	**Pro**	**Self-R**	**Int**	**Ext**	**Pro**	**Self-R**	**Int**	**Ext**	**Pro**	**Self-R**
Parent ACEs	-.09	.12	-.09	**-.36***	-.12	-.06	**.21***	.21	.16	.02	.08	.08
Parent PACEs	-.06	-.07	.17	**.29***	-.09	**-.11***	**.18****	**.36*****	.11	**-.17***	.07	.13
Child ACEs	**.46****	.16	.04	**.51****	**.67*****	**.55*****	**-.38*****	-.15	.15	**.26***	.01	-.22
Child PACEs	**-.31***	**-.44****	.30	.26	**-.22*****	**-.21****	**.30*****	**.25****	**-.47*****	**-.31***	**.53*****	**.45*****

*p <.05. **p <.01. ***p <.001
Controlled for child sex, child age, and parent education
Int= Internalizing symptoms; **Ext**= Externalizing symptoms; **Pro**= Prosocial behavior; **Self-R**= Self-regulation

Observed Patterns



Measures

	Parent	Child
	All measures reported by biological parent	
Adverse Childhood Experiences[1] **ACEs**	Retrospective report of childhood adversity 10 items; dichotomous	Current report of childhood adversity 10 items; dichotomous
Protective and Compensatory Experiences[2,3] **PACEs**	Retrospective report of childhood protective experiences (R-PACEs) 30 items; 5-point Likert	Current report of protective experiences (Ch-PACEs) 10 items; 5-point Likert
Strengths and Difficulties Questionnaire[4] **SDQ**		Internalizing behaviors 10 items; 3-point Likert Externalizing behaviors 10 items; 3-point Likert Prosocial Behavior 5 items; 3-point Likert
Patient-Reported Outcomes Measurement System[5] **PROMIS**		Self-Regulation Frustration Tolerance subscale 6 items; 5-point Likert

PACEs

Protective and Compensatory Experiences

Supportive Relationships	Enriching Environment
Unconditional love	Regular routines
Trusted mentor	Safe living space
Best friend	Growth opportunities
Social group	Physical activity
Community involvement	Hobby

Selected References

1. Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., Koss, M. P., & Marks, J. S. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults. *American Journal of Preventive Medicine, 14*(4), 245–258.
2. Hays-Grudo, J., & Morris, A. S. (2020). *Adverse and protective childhood experiences: A developmental perspective.* American Psychological Association.
3. Morris, A. S., Jesperson, J. E., Baarlan, D., Watrous J. N. H., & Hays-Grudo, J. (2024). Infant mental health and the assessment of adverse and protective childhood experiences. In J.D. Osofsky, H.E. Fitzgerald, M. Keren, & K. Puura (Eds.), *WAIMH Handbook of Infant and Early Childhood Mental Health: Vol. 2, Cultural Context, Prevention, Intervention, and Treatment* (pp. 305–322). Springer, Cham.
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5. Blackwell, C. K., Kallen, M. A., Lai, J. S., Bevans, K. B., Wakschlag, L. S., & Cella, D. (2022). Measuring PROMIS® well-being in early childhood. *Journal of Pediatric Psychology*, 47(5), 559–572.

Results

- When including parent and child ACEs in the regression model, child PACEs were significantly associated with:
  - Significantly lower levels of internalizing and externalizing behaviors across all age groups
  - Significantly higher levels of self-regulation and prosocial behaviors in middle childhood and adolescence

Discussion

- Child PACEs were linked with positive outcomes across developmental periods, despite both child and parent ACEs
- Current child PACEs were more consistently linked to outcomes across developmental stages than parent's retrospective PACEs
  - This highlights the importance of modifiable, present-day experiences
- Likert-scale PACEs measures capture variation across developmental stages, offering a more nuanced approach
- Findings reinforce a shift to strengths-based research actively building protective environments and potentially disrupting the intergenerational transmission of trauma
- Results support early screening, prevention, and intervention efforts
- Findings emphasize the importance of various supports for parents who have faced adversity

Limitations

- Cross-sectional design
- Self-report surveys

Future Directions

- Longitudinal research
- Examination of daily PACEs and cumulative effects
- Evaluation of PACEs workshops in a variety of settings