



UNIVERSITY of ROCHESTER

Temperamental Antecedents of Callous-Unemotional Traits and Externalizing Problems

Vanessa T. Cao, Patrick T. Davies, & Melissa L. Sturge-Apple
 Dept. of Clinical & Social Sciences in Psychology, University of Rochester



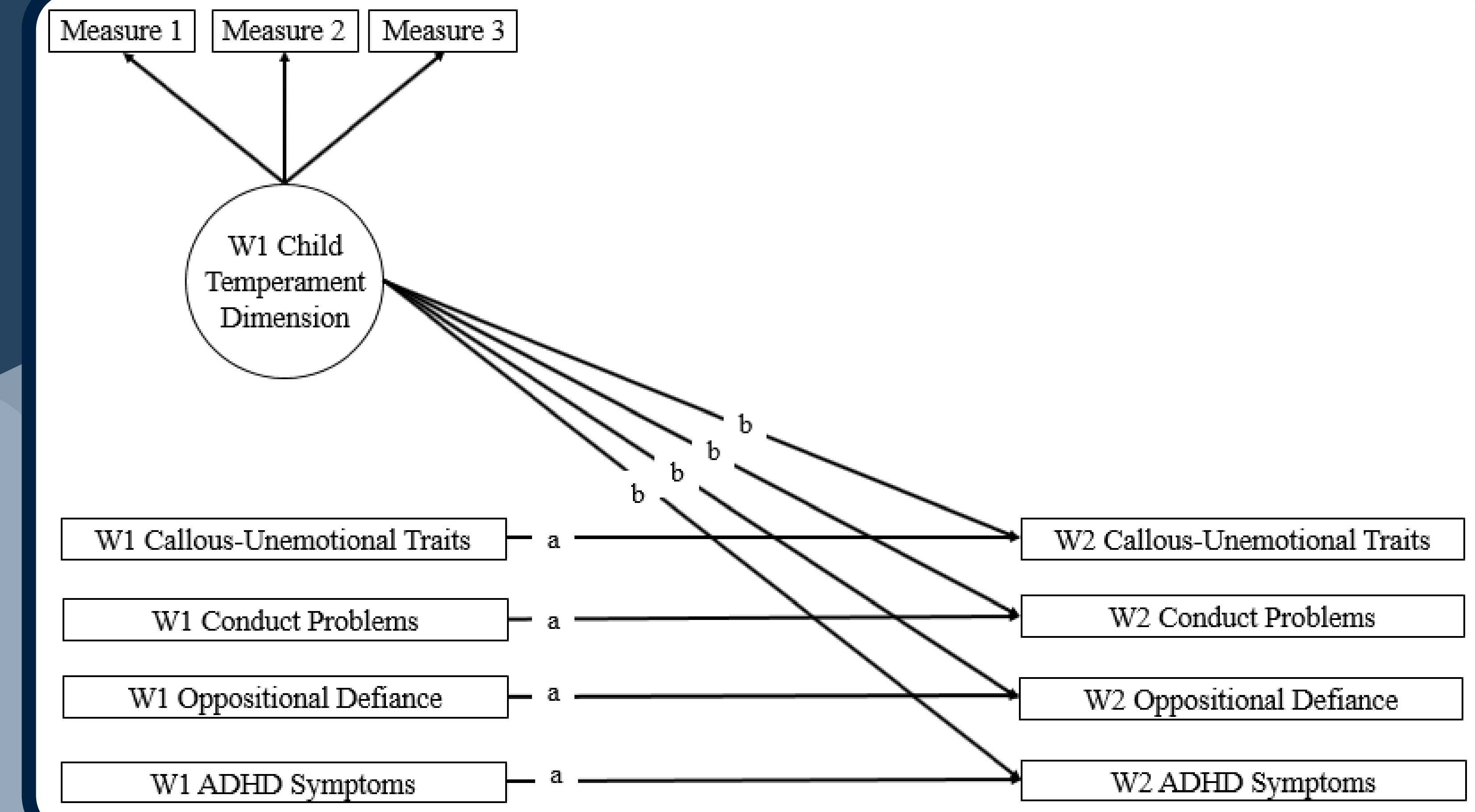
Rochester Center for Research on Children & Families

Introduction

- Three higher-order child temperament superfactors:
 - (1) Surgency
 - (2) Negative Affectivity
 - (3) Effortful Control
 (Rothbart, 2001)
- Children who exhibit elevated levels of surgency, negative affectivity, and poor effortful control are more likely to develop externalizing behaviors (Dollar & Stifter, 2016)
- Unclear if certain temperament constructs may precede specific forms of children's externalizing problems

Methods

Construct	Method	Reporter	Wave	Measure Description
Surgency	Observation	Trained Coder	1	Black Boxes (Activity/Approach)
				Lock Box (Activity/Approach)
				Gift Delay (Activity/Approach)
Negative Affect	Observation	Trained Coder	1	Black Boxes (Negative Dominant Affect)
				Lock Box (Negative Dominant Affect)
				Gift Delay (Irritability)
Effortful Control	Observation	Trained Coder	1	Peg Tapping
				Go/No-go Errors of Omission
				Gift Delay (Latency)
Externalizing Behavior	Survey	Mother Report	1 & 2	ICU (Frick, 2004)
				1. CU Traits
				HBQ (Ablow, 1999)
				2. Oppositional defiance
				3. Conduct problems
				4. ADHD symptoms



Conceptual depiction of SEM of children's temperament dimension predicting residualized change in their later externalizing behaviors. (a) autoregressive paths and (b) structural paths

Aim

Examine three dimensions of child temperament as antecedents of distinct externalizing problem domains including callous-unemotional (CU) traits, conduct problems, oppositional defiance, and ADHD symptoms

Participants

Sample

- 243 children and their families
- 56% girls
- Mage at W1 = 4.6 years

Ethnicity/Race

- 48% Black
- 43% White
- 9% Multi-racial or Other
- 16% Latino

Socio-economic Status

- Median income: \$36,000
- 69% received public assistance

Results

(Model #)	Temperament Construct	Indicator	Standardized Loadings	Overall Model Fit Indices	Significant Structural Paths (b) (inclusion of autoregressive paths (a))
(1) Surgency		Black Boxes	.67	$\chi^2(28, N = 243) = 72.38, p < .001; \chi^2/df \text{ ratio} = 2.59$ RMSEA = .08 CFI = .96	W1 Surgency \rightarrow W2 ADHD symptoms ($\beta = 0.13, p < .05$)
		Lock Box	.79		
		Gift Delay	.60		
(2) Negative Affect		Black Boxes	.44	$\chi^2(28, N = 243) = 70.02, p < .001; \chi^2/df \text{ ratio} = 2.50$ RMSEA = .08 CFI = .96	W1 Negative Affect \rightarrow W2 CU Traits ($\beta = 0.15, p < .05$) W1 Negative Affect \rightarrow W2 CP ($\beta = 0.16, p < .05$)
		Lock Box	.62		
		Gift Delay	.74		
(3) Effortful Control		Peg Tapping	.78	$\chi^2(28, N = 243) = 71.63, p < .001; \chi^2/df \text{ ratio} = 2.56$ RMSEA = .08 CFI = .96	W1 Effortful Control \rightarrow W2 CP ($\beta = -0.24, p < .05$) W1 Effortful Control \rightarrow W2 OD ($\beta = -0.16, p < .05$)
		Go/No-go	-.47		
		Gift Delay	.40		

Conclusions

- Highlights that children with certain temperamental dispositions may be more at risk for developing certain forms of externalizing psychopathology
- Identification of specific temperamental antecedents that underpin distinct dimensions of children's externalizing behavior may provide insights for the ongoing development of targeted early childhood interventions

Acknowledgements

This research was conducted at the Mt. Hope Family Center and was supported by the Eunice Kennedy Shriver National Institute of Child Health and Human Development fellowship R01 HD065425 awarded to Patrick T. Davies and Melissa L. Sturge-Apple. We are grateful to the children, parents, and staff who participated in this project.