



WAISMAN
CENTER

The Moderating Effect of Parenting Behaviors on the Relationship Between Callous-Unemotional Traits and Children's Social Skills



Bailey Immel and James J. Li, Ph.D.
Waisman Center, University of Wisconsin-Madison

Background

- High callous-unemotional (CU) traits are associated with problems with social skills, including difficulty making and maintaining friendships (Graziano, Ros, Haas, Hart, Slavec, Waschbusch, & Garcia, 2015).
- Uninhibited children with low guilt and empathy experience more negative parenting than their peers (Cornell, & Frick, 2007) as well.
- No research has explored whether parenting quality may moderate the effects of CU traits in children and their social skills.

Aims and Hypotheses

- Question 1: Are children who score higher on CU traits rated lower on social skill measures?
 - Hypothesis: Level of CU traits will be negatively associated with both parent and teacher rated social skills.
- Question 2: Is the association between CU traits and social skills moderated by parent behavior?
 - Hypothesis: Children's social skills will be moderated by the level of positive and negative parenting behavior they experience such that experiencing positive parenting behavior will increase social skill levels and experiencing negative parenting behavior will decrease social skill levels.

Methods

Participants

- 210 kindergarten children from the community (Madison, WI), with and without ADHD and behavior problems.
- Child mean age = 6.02 (S.D. = .43), 57.1% male and 85.2% Caucasian.
- 21.7% met clinical criteria for ADHD according to fully structured clinical interview (CDISC-IV)
 - 20.5% ADHD
 - 17.2% ODD
- 91% of parents who participated were mothers
- 82.8% parents had at least bachelor's degree
- Median household income = \$92,000

Measures

- CU traits: *Inventory for callous-unemotional traits – Parent Version* (ICU: Frick, 2002) as rated by the parent
- Global parenting behavior: *Alabama Parenting Questionnaire* (APQ; Frick, 1991) as rated by the parent
- Social Skills: *Social Skills Intervention System-Rating System* (SSIS-RS; Gresham & Elliot, 2008) as rated by parent and teacher

Data Analysis

- Hierarchical Poisson regression* used to predict Social skills from scores of parenting, child CU traits, and their interactions.
Covariates: child sex, ADHD Diagnosis, ODD Diagnosis

Results

Table 1. Bivariate correlations between positive and negative parenting behavior, CU traits, and parent and teacher rated social skills

Variable	1	2	3	4	5
1 Positive Parenting	1				
2 Negative Parenting	-.163*	1			
3 CU Traits	-.271**	.316**	1		
4 Teacher Rated Social Skills	-.144	.030	-.187*	1	
5 Parent Rated Social Skills	..164*	-.004	-.420**	.300	1

**p < .01, *p < .05

Table 2. Hierarchical Poisson regressions predicting teacher reported social skills from negative and positive parenting and child CU traits

Variable	b	s.e.	p	95% Lower	95% Upper
Step 1					
Child sex	-.981	.595	.102	-2.160	.199
Child ADHD Diagnosis	1.180	.763	.125	-.334	2.695
Child ODD Diagnosis	.841	.814	.304	-2.456	.773
Step 2					
CU Traits	-.322	.148	.032	-.615	-.029
Negative Parenting	-.023	.457	.960	-.930	.884
Positive Parenting	-.694	.353	.052	-1.394	.006
Step 3					
CU X Negative Parenting	-.183	.258	.481	-.695	.330
CU X Positive Parenting	.214	.161	.186	-.105	.533

Figure 1. Relationship between teacher reported social skills and children's CU traits

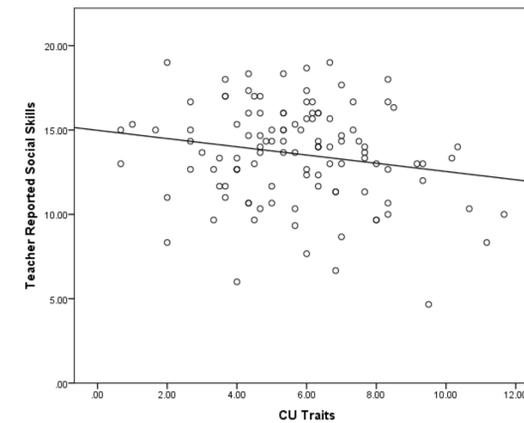
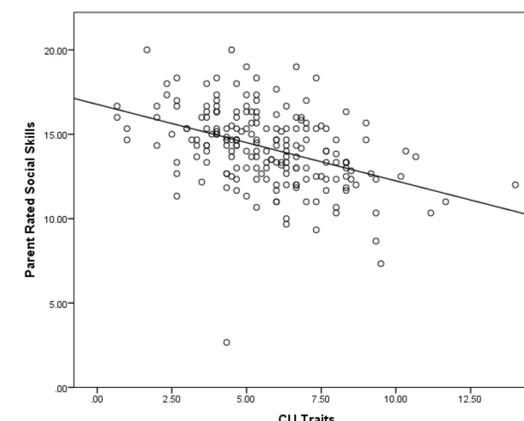


Table 3. Hierarchical Poisson regressions predicting parent reported social skills from negative and positive parenting and child CU traits

Variable	b	s.e.	p	95% Lower	95% Upper
Step 1					
Child sex	-.043	.348	.902	-.730	.644
Child ADHD Diagnosis	.159	.447	.722	-.724	1.042
Child ODD Diagnosis	-1.062	.455	.021	-1.960	-.164
Step 2					
CU Traits	-0.430	.084	0.000	-0.596	-0.264
Negative Parenting	0.458	.251	0.069	-0.037	0.954
Positive Parenting	0.188	.193	0.333	-0.194	0.570
Step 3					
CU X Negative Parenting	-0.076	.097	0.432	-0.267	0.115
CU X Positive Parenting	0.033	.092	0.720	-0.149	0.215

Figure 2. Relationship between parent reported social skills and children's CU traits



Conclusions

- Question 1: Are children who score higher on CU traits rated lower on social skills?
 - Yes, even after controlling for demographic variables and psychopathology, children's CU traits were negatively associated with both parent and teacher reported social skills.
- Question 2: Is the association between CU traits and social skills moderated by parent behavior?
 - No, parenting behaviors assessed using the APQ did not statistically moderate the association of children's CU and their social skills, whether assessed by their parent or by their teacher.
- Parenting-based interventions may not be as effective in improving childhood social skills for the subset of children who also exhibit high levels of CU (e.g., callousness, unemotionality, etc.)
- Limitations:
 - Limitation 1: Children were recruited from schools and were therefore randomly sampled (rather than a clinical sample) limiting the number children exhibiting high CU traits.
 - Limitation 2: Average income and education attainment was higher than the national average limiting generalizability.
 - Limitation 3: Parenting behavior was assessed using questionnaires and relied on parent's self-report. Parent's may not reliably report their own behavior.

- Future directions: Future studies should investigate the relationship between genetic markers for CU traits and children's social skills. Studies may also explore other potential parenting behaviors or environmental factors that may moderate this relationship.