

Blunted Emotional Reactivity in Young Children of Alcohol-Dependent Mothers: The Mediating Role of Maternal Insensitivity to Children's Emotional Distress

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Background and Aims

- □ Children of substance-abusing parents are at risk for psychopathology and emotional maladjustment (Velleman & Templeton, 2007). Although we know maternal substance dependence is particularly detrimental to children's socioemotional health, we continue to question why and how these effects occur.
- ☐ Insensitive caregiving responses to young children's emotional distress (i.e. expressions of sadness or fearfulness) is a strong and salient predictor of children's emotional maladjustment (i.e. Leerkes et al., 2011).
- ☐ Child distress is a vital component of children's socioemotional development since preverbal children use these cues to elicit comfort and support from caregivers. Thus, insensitive maternal responses may damage mother-child emotional intimacy and relationship bonds, and help create maladaptive emotion regulation processes.
- □ Recent studies have featured parent self-reports or responses to hypothetical vignettes of general caregiver responses to different child emotions. Thus, no study has observed how these mothers respond to their own child's emotional distress, or assessed how these responses may affect children's emotional maladjustment across early childhood.

Study Aims:

- A. Examine whether and how maternal alcohol dependence affects mothers' insensitivity to children's emotional distress over time
- B. Assess whether and how mothers' insensitivity to children's distress influences children's emotional reactivity over time.

Method

Participants:

201 mothers and their 2-year-old child (M child age = 2.14 years; 44% female)

- 67% African American and Latino
- 95% of sample receiving Public Assistance; 99.5% living below US Poverty Line

Procedures & Measures:

Mother-child dyads visited a University laboratory 3 times starting when the child was 2-years-old (Wave 1) as part of a 3-Wave longitudinal study with each wave spaced 1 year apart. Sociodemographic risk factors were measured via mother self-report.

Construct	Method	Measure
Maternal Alcohol Dependence	Maternal self-report (Wave 1)	Diagnostic Interview Schedule-IV (DIS-IV; Robins et al., 1995)
Maternal Insensitivity to Child Distress	Behavioral Observation (Obs. at Waves 1 and 2)	Strange Situation (Ainsworth & Wittig, 1969); Iowa Family Interaction Rating Scale (IFIRS; Melby & Conger, 2001)
Child Emotional Reactivity (ER)	Experimenter Report (Waves 2 and 3)	Caregiver-Teacher Report Form (C-TRF; Achenbach & Rescorla, 2000).

Primary Results

- □ To capture change in maternal insensitivity and children's ER over time while controlling for baseline levels, data were entered into a latent difference score (LDS) structural equation model (SEM). Fit statistics indicated that the model fit the data well (X² = 18.260, df = 18, p = .439; CFI = .999; RMSEA = .006).
- ☐Scales capturing mothers' depression, PTSD, and anxiety symptoms were standardized and aggregated into a composite of maternal psychopathology which was later entered into the main SEM model.
- ☐ Sociodemographic risk factors (maternal age and family income), children's baseline distress, and mothers' other psychopathology symptoms were not associated with change in maternal sensitivity or children's emotional reactivity. Maternal alcohol dependence did not have a direct effect on children's emotional reactivity.
- Results indicated that greater psychosocial impairment from alcohol dependence predicted increased insensitivity to children's emotional distress from W1-W2 (β = .188; SE = .065, p < .001; see *Figure 1*).
- □ Additionally, increased maternal insensitivity to child distress from W1-W2 predicted decreased (or blunted) emotional reactivity in children from W2-W3 (β = -.278, SE = .123, p < .05; see *Figure 1*).

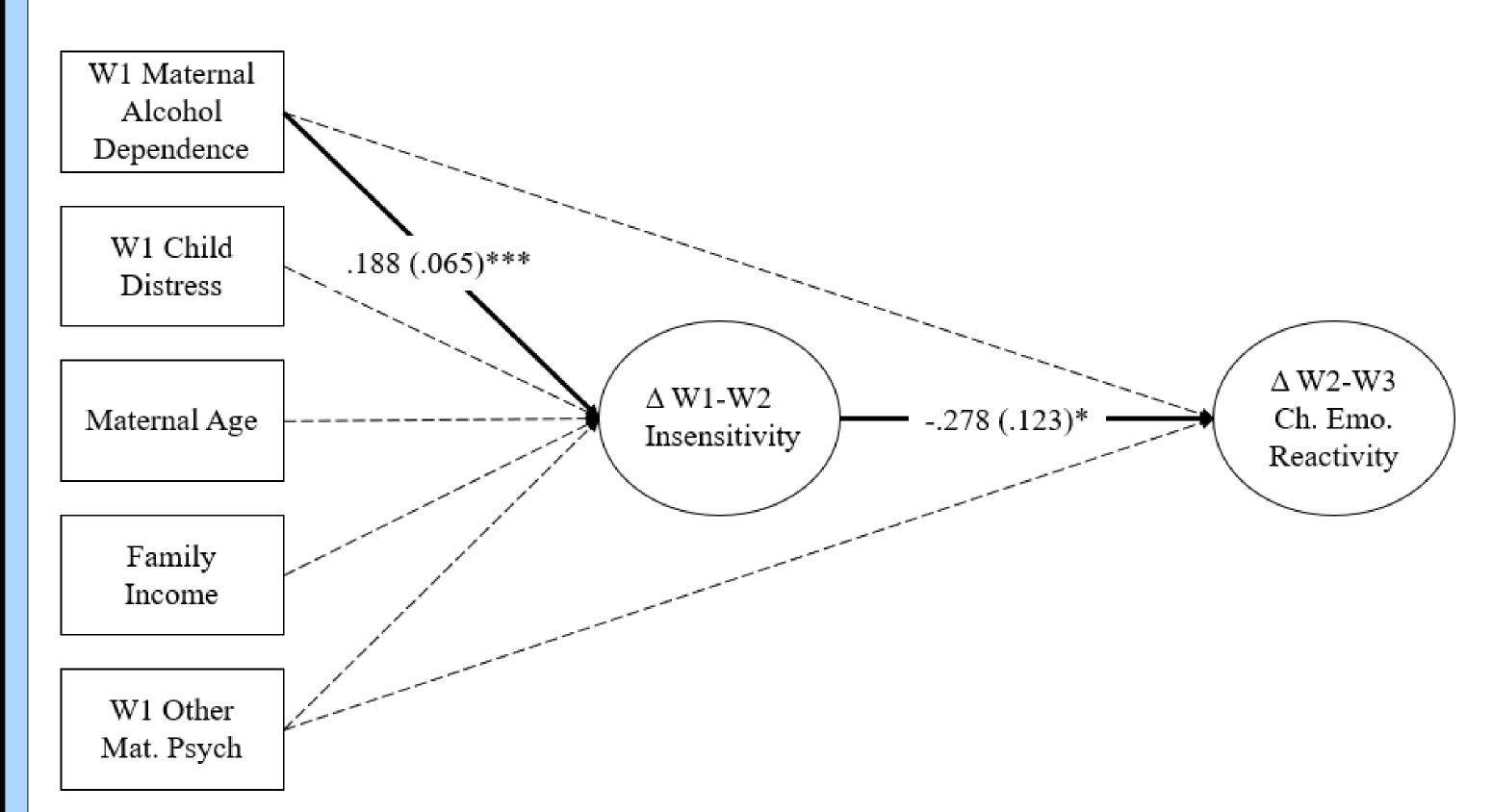


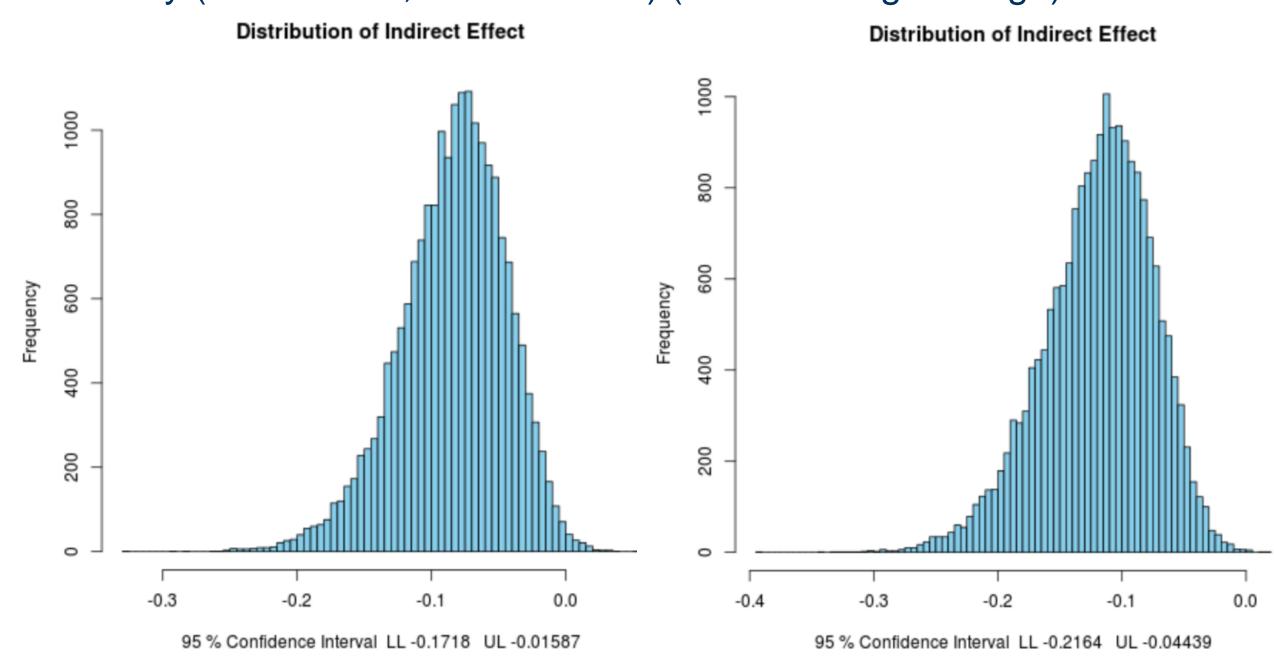
Figure 1. Main LDS SEM model examining associations between maternal alcohol dependence, baseline child distress, family sociodemographic risk factors, other maternal psychopathology, change in maternal insensitivity over time, and change in children's emotional reactivity over time. W1 = Wave 1; W2 = Wave 2. W3 = Wave 3. Mat. Psych = Maternal psychopathology. Ch. Emo. Reactivity = Child Emotional Reactivity. Although not depicted, covariances between exogenous variables were specified in all SEM models.

Multi-Group Analyses

- Multi-group analyses were conducted to examine whether alcohol-dependent mothers' responses to child distress differed based on child gender.
- □ Maternal alcohol dependence predicted increased insensitivity to both boys and girls' emotional distress (Boys: β = .177, SE = .065, p < .001; Girls: β = .212, SE = .065, p < .001).
- \Box However, this link between maternal insensitivity to children's distress and blunted emotional reactivity was specific to girls (β = -.372, SE = .175, p < .05).

Mediation Analyses

- Monte Carlo confidence intervals were obtained to test the significance of the mediating effect of maternal insensitivity to child distress on both boys' and girls' emotional reactivity (Preacher & Selig, 2012).
- □ Results indicated that maternal insensitivity to child distress significantly mediated associations between maternal alcohol dependence and children's blunted emotional reactivity (lower level: -LL: -0.1718, UL: -0.01587) (see lower left image).
- Maternal insensitivity to distress was a significant mediator of the link between maternal alcohol dependence and girls' blunted emotional reactivity (LL: -0.2164, UL: -0.04439) (see lower right image).



Discussion

- ☐ Findings are some of the first from an observational study to show that alcohol-dependent mothers struggle to sensitively respond to their child's emotional distress. When their mothers insensitively respond to their distress, children display less emotional reactivity over time.
- ☐ Children may be dampening their outward expressions of emotional distress to prevent eliciting further insensitive or maladaptive responses from their mothers. This may be occurring even when children are highly distressed. Thus, blunted ER may operate as a protective factor for children growing up in emotionally apathetic environments.
- ☐ Since girls are traditionally socialized to express vulnerable emotions and may be used to receiving sensitive responses from parents in general, this lack of sensitive parenting may be especially detrimental to their emotional functioning.
- ☐ While blunted emotional reactivity may be a useful strategy children use to navigate these environments, it may hinder their ability to obtain emotional support from others or may increase their risk for future internalizing problems, especially those involving emotion regulation.

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