UW Waisman Center
Parent and Child Emotion Study (PACES)

Emotion Regulation and Co-Regulation in Families of Children with Fetal Alcohol Spectrum Disorders (FASD).

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FASD

Growth Deficiency  Facial Features  Brain Dysfunction  Gestational Alcohol

Includes: FAS, FAE, ARND, ARBD, etc.
FASD-Related Difficulties

• Social, behavioral, and emotional problems (Carmichael-Olsen et al. 1998; O’Connor, Shah, & Whaley, 2002; Streissguth, 2007).

• Executive functioning difficulties (impulsivity, inattention, processing problems; Schonfeld, Paley, Frankel, & O’Connor, 2006; Streissguth, 2007).

• Children’s emotion regulation as a mechanism for risk-outcome associations.
Emotion Regulation

• “The extrinsic and intrinsic processes responsible for monitoring, evaluating, and modifying emotional reactions, especially their intensive and temporal features, to accomplish one’s goals” (Thompson, 1994).
Emotion Regulation

• In otherwise **typically-developing** populations, dysregulation implicated in the development of:
  – Depression/anxiety, aggression, social skills, empathy, conduct disorder (Cole, Michel, & Teti, 1994; Rubin, Coplan, Fox, & Calkins, 1995).

• In children with early **developmental delays** (J. Baker, Fenning, Crnic, Baker, & Blacher, 2007) **dysregulation at age 4:**
  – **predicted** social skills at age 6.
  – was a stronger predictor than for TD children.
Contributors to Regulation

• Child Characteristics
  – Temperament
  – Psychopathology
  – Developmental background

• Parent/Family Characteristics
  – Family Climate
  – Emotion Socialization
  – Emotion Co-regulation
Parenting and Regulation

• Mother’s ability to co-regulate their typically-developing children tied to a host of child outcomes (Baker, Fenning, & Crnic, in press; Eisenberg, Cumberland, & Spinrad, 1998; NICHD ECCRN, 1999).

• Mother co-regulation abilities in children with developmental delays (Baker et al., 2007):
  – Strongest predictor of later social skills.
  – Stronger relations than found in the TD group.
1. To characterize the specific emotion regulation difficulties experienced by children with FASD.

2. To understand potential contributors (e.g., child executive functioning, family environment, parent co-regulation) and outcomes of regulation in this population.

3. To examine whether parent and/or family factors can promote resilience in children with FASD through their regulation abilities.

4. To understand the effect of FASD on families and to identify resilience factors for families.
Proposed Model

- **Family Context**
  - Marital Adjustment
  - Family Cohesion
  - Expressed Emotion

- **Parent Well-Being**
  - Daily Stress
  - Mental Health

- **Fetal Alcohol Spectrum Disorder (FASD) Status**

- **Co-regulation**
  - Child regulation with mother
  - Maternal Scaffolding

- **Self-regulation**
  - Child regulation without mother

- **Social-Emotional Functioning**
  - Behavior Problems
  - Social Skills
  - Adaptive Functioning

- **Executive Functioning**
  - Attention
  - Inhibitory Control
  - Processing Ability
Procedures

• Initial screening (10 min)
  – Risk / Previous FASD diagnosis

• Home/Lab Visit (1-2 hours)
  – FASD evaluation / confirmation
  – Child cognitive/EF assessment
  – Child regulation and parent-child co-regulation

• Completion of Questionnaires (30 min)
  – Child overall functioning
  – Family environment / parent functioning

• Follow-up (if desired)
Visit: Observation Tasks

• Child Regulation
  – Delay of Gratification
  – Locked Box

• Parent-Child Co-regulation
  – Free Play
  – Clean-up
  – Problem Solving Tasks

• *Coded with global and time-based ratings*
Time-Based Analysis

- **Child Frustration Tasks**
  - Affect/Regulation
    - Soothability, lability, intensity
  - Association with Behavior
    - ER strategies

- **Parent-Child Interaction**
  - Affect/Regulation
  - Parent-Child Synchrony
  - Parent-Child Causal Effects
    - Parent led vs. child led
Child Regulation: Frustration task

Control

Target
Parent-Child Free Play

Control

Target

Cross Correlation = .29***

Cross Correlation = .00ns
Long-Term Goals of the Study

• Pilot data for larger grant
  – Physiological measures
  – Emotion socialization
  – Longitudinal follow-up

• Intervention
  – Emotion management
  – Co-regulation / Emotion socialization
FASD Recruitment

- 45 Children between 4:6 (3:6) and 8:11
- Diagnosis or suspicion of FASD
  - Exposure and/or associated symptoms
- Within a 6 hours drive from Madison, WI
FASD Recruitment: WI

• National: FASD = 1:100 (Sampson, Streissguth, Bookstein, et al., 1997).
• WI: 72,000 births/yr = 3,960 potential (5.5yrs)
• WI may be highest risk state in the nation:
Undiagnosed FASD

- **Alcohol exposure** noted, and symptoms similar to:
  - ADHD, especially:
    - Primarily inattentive type (O’Malley et al., 2002).
    - Atypical response to traditional medication (Doig et al., 2008; Osterheld et al., 1998; Snyder et al., 1997).
    - High sensitivity to side effects (Coe et al., 2001).
  - ASD
  - Borderline to mild intellectual disability
  - Reactive attachment disorder*
Thank you