An Examination of Risk and Protective Factors for Children's Mental Health Outcomes

Cindy A. Crusto, Ph.D. and Melissa Whitson, Ph.D.

Department of Psychiatry Yale University School of Medicine

23rd Annual Children's Mental Health Research & Policy

Study Purpose

- To examine the mental health trajectories of young children in three SAMHSA-CMHS systems of care
 - explore important risk and protective factors related to children's mental health
 - exposure to trauma events
 - caregiver depressive symptoms
 - parenting stress
 - self-control, attachment, initiative
 - examine how differing levels of these risk and protective factors predict children's future symptoms and behavioral and emotional difficulties
 - determine moderating effects of child characteristics (i.e., age, gender)

Measures

 Required CMHS Outcome Measure Child Behavior Checklist (CBCL 1½–5, Achenbach, 2000; CBCL 6–18, 2001)

Supplemental ECE-SOC Measures

- Traumatic Events Screening Inventory-Parent Report Revised (TESI-PRR; Gosh-Ippen, 2002)
- Center for Epidemiologic Studies Depression Scale (CES-D; Locke & Putnam, 1971)
- Parenting Stress Index/Short Form (PSI/SF; Abidin, 1995)
- Devereux Early Childhood Assessment (DECA; LeBuffe & Naglieri, 1999)

Child Behavior Checklist (CBCL)

- Rated by parents concerning issues, disabilities, descriptions of child's problems and best things about the child
- Internalizing (withdrawal, somatic complaints, depression, anxiousness) and Externalizing (delinquent and aggressive behavior) scales
- Comprised of a number of statements about the child's behavior, e.g. Acts too young for his/her age $% \left({{\rm Act}} \right)$
- The preschool checklist contains 100 questions and the school-age checklist contains 120 questions
- Responses are recorded on a Likert Scale
 0 = Not True, 1 = Somewhat or Sometimes True, 2 = Very True or Often True
- The CBCL/6-18 obtains parents' reports of children's competencies and problems
- A total score from all questions also derived
- Scores fall in normal, borderline, or clinical ranges

Traumatic Events Screening **Inventory (TESI-PRR)**

- Assesses history of exposure to different types of potentially traumatic events
 - children aged birth to six years
 - 24 items
 - accidents, natural disasters, death of someone close to the child, assault, attacks by animals, domestic violence, war, community violence, and sexual abuse
 - response categories: "yes", "no", or "unsure"

Center for Epidemiologic Studies-Depression Scale (CES-D)

- Measures depressive symptoms in the general population (i.e., nonpsychiatric persons older than 18)
- Measures major components of depressive symptomatology, including depressive mood, feelings of guilt and worthlessness, psychomotor retardation, loss of appetite, and sleep disturbance
- Used as an indicator of symptoms relating to depression, not as a means to clinically diagnose depression
- 4-point Likert Scale
- MIT Likel's Code Rarely or none of the time (<1 day) Some or a little of the time (1-2 days) Occasionally or a moderate amount of the time (3-4 days) Most or all of the time (5-7 days)
- Score of 17 and above indicates symptoms relating to depression and further assessment is needed to clinically assess depression

Parenting Stress Index/Short Form (PSI/SF)

- Assesses stress in the parent-child relationship; stress in the parenting role
 - children aged birth to 10 years
 - 5-point Likert-scale: "strongly disagree" to "strongly agree'
 - 3 subscales and Total Stress scale
 - Parental Distress
 - Parent-Child Dysfunctional Interaction
 - Difficult Child

Devereux Early Childhood Assessment (DECA)

- Comprehensive, strength-based assessment of within child protective factors in preschool-age children (2-5 years)
- 37-items, Total Protective Factors Scale, which is composite of 3 protective factors subscales;

 - Self-control Attachment
- DECA meets Head Start and IDEA requirements for strength-based assessment as well as APA and NAEYC assessment guidelines
- Completed by parents/caregivers

Participants

- 250 children and their families
- Community
 - NLBB 48% (n=120)
 - RIPEP 7% (n=17) Sarasota 45% (n=113)
- Race/Ethnicity

 - Black or African American 15% (n=37) American Indian or Alaska Native .4% (n=1)

 - Other 8.8% (n=22) Missing 8.0% (n=20)
- Age=4.04 years (SD=1.14)
- Gender

Procedure

- Data pooled from across three ECE SOCs
- Supplemental measures to the CMHS required Longitudinal Outcome Child and Family Study
 - Baseline, 6months, 12 months
 - Caregiver report
 - Interviews conducted by trained interviewers • Evaluation staff, family members, community members
 - Interviews conducted in caregivers' preferred or primary language
 - Interviews conducted in family's home or another location

Model 1: Risk Factors

- Examination of risk factors on CBCL over time
- Predictors (Risk factors):
 - number of different types of trauma events
 - maternal depressive symptoms
 - parenting stress (total scale)
- Controlled for: child's age and child's gender
- Outcome: CBCL total problems score at baseline, 6, and 12 months

Model 1: Risk Factors Results

- CBCL Total Problem Scores decreased over time (not significant)
- At baseline
 - number of different types of trauma events experienced was significantly related to higher CBCL scores
 - lower levels of maternal depression were significantly related to higher CBCL scores
 - higher parenting stress was significantly related to higher CBCL scores
- **Parenting stress** was significantly related to trajectory of CBCL scores over time
 - children whose parents had higher parenting stress at baseline improved more quickly than children whose parents reported less stress at baseline



Model 2: Protective Factors

- Protective factors on CBCL over time
- <u>Predictors (Protective factors)</u>:
 DECA: Initiative, self-control, attachment
- Controlled for: child's age and child's gender
- <u>Outcome</u>: CBCL total problems score at baseline, 6, and 12 months



CBCL Total Problem scores decreased over time (not significant)



Model 2: Protective Factors Results

• At baseline

- higher self control was significantly related to lower CBCL scores
- older children were significantly more likely to have higher CBCL scores
- Only **age** was significantly related to trajectory of CBCL scores over time
 - older children started out higher at baseline but exhibited fewer problems at 6 months

Discussion

- Based on preliminary results, parenting stress was significantly related to trajectory of CBCL scores over time
 - potential benefits to early intervention
 - clinical vs. statistical significance
- In the protective factors model, only age was significantly related to trajectory of CBCL scores over time
 - older children started out higher at baseline but exhibited fewer problems at 6 months

Acknowledgements

- ECE SOCs and associated staff and children and their families
- Melissa L. Whitson, Ph.D.

