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

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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
  - 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)
  - 20-item self-report scale
- 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
    - 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)
  - Scale 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:
  - Initiative
  - 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
  - Caucasian/White 68% (n=170)
  - 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
  - boys 74% (n=184), girls 26% (n=66)

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 1: Risk Factors Results

Model 2: Protective Factors

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

Model 2: Protective Factors Results

- CBCL Total Problem scores decreased over time (not significant)

- 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

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