IMPLEMENTING AND EVALUATING AN EVIDENCE-BASED APPROACH FOR EARLY CHILDHOOD MENTAL HEALTH INTERVENTIONS IN SCHOOLS

November 6, 2015
20th Annual Conference on Advancing School Mental Health

Presenters: Barbara Parks, MSSA, LICSW, Shana Bellow, Ph.D., Sherryl Scott Heller, Ph.D., Allison Booth, Ph.D., Jwan Griffin, MSW, LICSW
Inequality of Opportunity
Six million young children living in poverty
Without high-quality learning experiences and healthy relationships, at-risk children are less likely to grow into accomplished students, successful workers and engaged citizens.
Millions of children failing to unlock their true potential affects all of us.
Change the First Five Years

- https://www.youtube.com/watch?v=GbSp88PBe9E
The Achievement Gap

• 3 million words - # of words a three year old with parents living on welfare has heard.
• 11 million words - # of words a three year old parents of higher socio-economic status has heard
• Achievement gap is significant and can be seen as early as nine months
• Starting early can prevent the achievement gap from ever taking root

http://www.theounce.org/the-problem
The Cost of Inaction

- At-risk children who don’t receive a high-quality early childhood education are:
  - 25% more likely to drop out of school
  - 40% more likely to become a teen parent
  - 50% more likely to be placed in special education
  - 60% more likely to never attend college
  - 70% more likely to be arrested for a violent crime

http://www.theounce.org/the-problem
Heckman Equation

Presenting The Heckman Equation

Invest in early education for disadvantaged children

Develop cognitive skills, social abilities and healthy behaviors early

Sustain early development with effective education through to adulthood

Gain a more capable and productive workforce

Learn more about the benefits of quality early childhood education at HeckmanEquation.org
EARLY CHILDHOOD DEVELOPMENT IS A SMART INVESTMENT

The earlier the investment, the greater the return

Source: James Heckman, Nobel Laureate in Economics
Heckman Equation Video
• 85% of brain development occurs during the first 3 years of life
• Experiences prepare children’s brains for learning (plasticity)
Did you know? Infant & toddler Teachers help nurture and stimulate my brain as it triples in weight and establishes 1,000 trillion nerve connections during my first 3 years.

That is one crazy big colossal job and Early Childhood Educators totally ROCK!
Brain & Toxic Stress

Stressors

• Extreme poverty
• Exposure to severe maternal depression
• Parental substance abuse
• Chronic child abuse and neglect
• Repeated exposure to violence in the community or within the family.
“What, how, and how much a child learns in school will depend in large part on the social emotional competence they have developed as preschoolers... Children who do not begin kindergarten socially and emotionally competent are often not successful in the early years of school and can be plagued by behavioral, emotional, academic and social development problems that follow them into adulthood” (Peth-Pierce, 2000).
Pre-School Expulsion Research

• Of 4,000 classrooms studied nationally, 10.4% had expulsions within the last year. (Gilliam, 2008)
• Boys were more than 4.5x more likely to be expelled than girls. Rates were highest for older preschoolers and African-Americans.
• 6.7 per 1,000 preschoolers were expelled.
• Overall rate of Pre-K expulsions was more than three times greater than the national rate of expulsion in grades K-12.
• 50% reduction in expulsion rates in classrooms that have access to an early childhood mental health consultant (Gilliam, 2008)
It all started in my childhood.
NEW ORLEANS

First sighted as Indian portage to Lake Pontchartrain and Gulf in 1699 by Bienville and Iberville. Founded by Bienville in 1718; named by him in honor of the Duke of Orleans, Regent of France. Called the Crescent City because of location in bend of the Mississippi.
Tulane University’s Early Childhood Mental Health Consultation to Child Care Centers

Allison Boothe, Ph.D.
Sherryl Scott Heller, Ph.D.
Tulane University
Acknowledgements

• Geoffrey Nagle, PhD, MPH, LCSW
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• Margo Sidell, PhD
• Louisiana Mental Health Consultant team
Combination Model of IEMHC

• 3 types of MHC:
  – **Program Centered**: designed to improve experience of all individuals involved with center
  – **Child Centered**: designed to assess and make recommendations about particular children
  – **Classroom Centered**: designed to improve experience of all individuals in one classroom
Tulane University’s Model of IEMHC

• Combination model of MHC
  – Focus is on entire program
  – Available for child-centered consults as needed

• MHC works with center for 10-12 visits over 6 months
  – On-site 5-6 hours for each visit
  – Complete 5 staff trainings
  – Most time spent in rooms with teachers
Components of Statewide IEMCH Program

- All centers participating in Quality Start QRIS or Community Networks are eligible
- Focus on CCAP children (child care assistance program)
- Consultants meet consistently with director and do their best to be flexible to meet the needs of the center.
- All consultants are licensed mental health professionals or are working towards licensure under clinical supervision.
Program Centered Components of our Model

– Relationships between individuals are a focus
  • Relationships are seen as the major catalyst of change
– Interactive trainings are consistently conducted
  • Staff members are eligible to receive clock hours of continuing education credits
  • Staff are encouraged to discuss typical difficulties they encounter in their work
– MHC consistently observes in classrooms
– Consultants are onsite & available to meet individually with staff members
– Parent meetings/workshops are available to support family engagement
Child Centered Components of our Model

• MHC available to complete a child-centered consultation when requested
  – Parent permission necessary & beneficial
  – MHC can:
    • Observe child in classroom
    • Interview parents/teachers/director
    • Parents & teachers complete screening measures
    • Make referrals when needed
    • Assist in designing behavior management program for class and assist teacher in implementing
Benefits of Combined Model

• Centers often request consultation for child-centered reasons.
  – e.g., Challenging behaviors; developmental concerns

• With combined model, they can receive immediate assistance for challenging behavior but are also able to have assistance provided across the center.

• IECMHC is both prevention and intervention.
Consultant Training

• Pre-service:
  – Trained in Tulane Model of IECMHC
  – Shadow current consultants in field
  – Required readings and web-based IECMHC trainings from nationally recognized sources
  – Participate in Tulane Infant Mental Health Training during first year (depending upon hire date).
In-Service Training

• Two times per year consultants participate in a two day training.
• Topics vary and are related to current need in the field and have included:
  – Pervasive developmental disorders, speech and language; goal setting theory; motivational interviewing; designing behavior management plans; cultural considerations; and many more.
Consultant Supervision & Adherence to Model

• Consultants participate in:
  – Individual reflective supervision two times per month (by phone)
  – Group reflective supervision one time per month (by phone)

• A continued & primary focus of supervision and training is the importance of forming relationships and partnering with center staff and using the “consultative stance” within a center.
Reflective Supervision

• An integral component of the program; senior consultants lead supervision and participate monthly in group RS with outside consultant.

• Goal of reflective supervision is to help MHCs focus on their relationships with staff and families & how those relationships support positive change.

• Consultative work is the focus. Administrative concerns are kept to a minimum.

• MHCs are encouraged to discuss challenges; to view challenges from a variety of perspectives; and to “wonder” about methods of supporting change within a center.
Adherence to model

- Supervisors also meet regularly to discuss how consultants are adhering to the model and to determine if extra support is needed.
Adherence to Model

• Feedback from center staff

• Yearly shadow visits
  – Each consultant is shadowed at a center by a senior consultant.
  – Consultants complete a shadow visit preparation form to have them determine their goals for growth & a post shadow reflection form.
  – Consultant, shadow, and supervisor meet for feedback session.
New Directions

• Working with charter schools PK-2\textsuperscript{nd} grade.
• Providing support on social emotional curricula
• Providing social skills groups for children needing extra support
• Support to RTI, IEP, and onsite social worker and/or counselor
Prior Research

Teacher Beliefs and Attitudes

Teacher Behavior

Child Outcome
What we assessed

- MHC-teacher relationship teacher report; post (ECMHC survey)
- Perceived change in teacher competence; teacher and director report; post (GAS)
- Changes in level of teacher self-efficacy and competence; teacher report; pre, post, retrospective (TOS)
- Change in teacher-child interactions in the classroom; observation; pre, post (CLASS)
Teacher Demographic Data

- **Ethnicity**
  - African American – 58%
  - Caucasian – 37%
  - Other/not answer – 5%

- **Age**
  - Mean = 40
  - Median = 38

- **Length at center** - 5 yrs.

- **Education**
  - Elementary 5%
  - High School/GED 38%
  - Some college – 28%
  - Assoc or CDA – 14%
  - Bachelors – 10%
  - Graduate – 2%
  - Other – 3%

- **Length in childcare** – 10 yrs.
GAS - Teacher Findings

• 401 teachers responded
• Mean score = 1.77 (agree)
• Median score range 1 to 2
• Conclusion: Staff reported positive changes in their own and the center’s ability to support children’s social and emotional development
GAS-Director Findings

- 28 directors responded
- Mean score = 1.71 (agree)
- Median range 1 to 2 (6 items less than 2)
- Conclusion: **Directors reported positive changes in the center’s ability to support children’s social and emotional development.**
What does this mean for the MHC program?

• The behaviors that teachers and directors reported as occurring more often are behaviors that have been associated with increases in children’s cognitive, social and emotional development and school readiness.
TOS Data

- 360 teachers returned pre data
- 321 teachers returned post
  - 5 had missing data prevent inclusion
- 168 teachers returned pre AND post surveys
  - 63 cases of missing data (pre to post).
  - Due to:
    - teacher turnover (49)
    - declined (2)
    - Not at work (3)
    - not return forms (2)
    - data error (5)
    - not work with MHC (2)
Teacher Opinion Survey

- 12 items
- 2 forms
  - Infant (6 weeks to 30 months)
  - Preschool (30 months to 60 months)
- 5 point Likert Scale
  - 1 strongly disagree to 5 strongly agree
- Two factors:
  - Teacher self-efficacy
  - Teacher Influence
### What Does the CLASS Measure?

<table>
<thead>
<tr>
<th>Emotional Support</th>
<th>Classroom Organization</th>
<th>Instructional Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive Climate</td>
<td>Behavior Management</td>
<td>Concept Development</td>
</tr>
<tr>
<td>Negative Climate</td>
<td>Productivity</td>
<td>Quality of Feedback</td>
</tr>
<tr>
<td>Teacher Sensitivity</td>
<td>Instructional Learning</td>
<td>Language Modeling</td>
</tr>
<tr>
<td>Regard for Student Perspectives</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Formats</td>
<td></td>
</tr>
</tbody>
</table>
After 6 months
Significant improvement in all 7 areas

Emotional Support
- Positive Climate
- Negative Climate
- Teacher Sensitivity
- Regard for Student Perspective

Classroom Organization
- Behavior Management
- Productivity
- Instructional Learning

Heller et al. (2012)
<table>
<thead>
<tr>
<th></th>
<th>Pre</th>
<th>Post</th>
<th>F(p)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mean Scores</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive Climate</td>
<td>4.98</td>
<td>5.39</td>
<td>21.13 (.0001)</td>
</tr>
<tr>
<td>Negative Climate</td>
<td>1.37</td>
<td>1.24</td>
<td>3.44 (.065)</td>
</tr>
<tr>
<td>Teacher Sensitivity</td>
<td>4.59</td>
<td>5.20</td>
<td>21.13 (.0001)</td>
</tr>
<tr>
<td>Regard for Student</td>
<td>4.57</td>
<td>5.18</td>
<td>24.58 (.0001)</td>
</tr>
<tr>
<td>Perspective</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Behavior Management</td>
<td>4.57</td>
<td>5.30</td>
<td>29.62 (.0001)</td>
</tr>
<tr>
<td>Productivity</td>
<td>4.53</td>
<td>5.14</td>
<td>16.31 (.0001)</td>
</tr>
<tr>
<td>Instructional Learning</td>
<td>4.28</td>
<td>4.82</td>
<td>11.02 (.001)</td>
</tr>
</tbody>
</table>
• Whereas an increase of one point may not seem considerable, research on the CLASS indicates the existence of a quality threshold.

• Research findings from a national sample of preschool classrooms indicate that some child outcome variables did not improve when quality, as assessed by the CLASS, fell below a 4 (Burchinal, Vandergrist, Pianta, and Mashburn, 2010).
• When the quality of the environment reached above a 5, changes in child social behaviors were detected.

• Once the 5 point threshold was reached, improvements in child outcomes did not level off but rather continued to increase as classroom quality increased.
• Teachers with more experience and more than a high school degree tended to score higher.

• Centers that were larger or from less dense areas (i.e. non-urban) also tended to score higher.

• Even with a high rate of teacher turnover (35%), significant differences were found.

www.qrslouisiana.org

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Insert DC Healthy Futures Slides

- 6 Minute Healthy Futures Video
- Demographics of DC Children and Risks
- 4-5 slides on Healthy Futures – results, highlight any differences from Tulane model
- powerful impact on reducing teacher burden and enhanced by natural control group in year 5
Play is often talked about as if it were a relief from serious learning. But for children play is serious learning. Play is really the work of childhood.

Fred Rogers
DC PRIMARY PROJECT - Promoting Healthy Social-Emotional Adjustment

Annual Conference on Advancing School Mental Health, New Orleans, Louisiana – 11/6/15
J’Wan Griffin, LICSW, School Primary Project Program Manager
Department of Behavioral Health, School Mental Health Program, Washington, DC
What is “Primary Project”?

- an evidence-based, early intervention/prevention program for children pre-Kindergarten-4 through 3rd grade

- developed over 50 years ago by the Children’s Institute, Rochester, New York

- adopted by Department of Behavioral Health in 2008 as part of the “continuum” of school-based mental health services for young children

- For children identified as having “mild” problems with social-emotional adjustment in the classroom, i.e., shy and withdrawn, slightly overactive or distractible, etc.
Six (6) Components of “Primary Project”

1) **screening** for early identification and intervention
2) **intervention** - one-to-one, non-directive (child-led) play sessions with a trained paraprofessional
3) **collaboration with a mental health professional** to implement the “continuum” of mental health service provision, i.e., mental health referral process
4) **ongoing supervision and training**
5) **program evaluation**; and
6) **integration** into the school community –in-school service
Determining **Eligibility** –
The Teacher-Child Rating Scale (T-CRS)

- the T-CRS is a valid measure
- consists of 32 questions completed by the teacher

- reflects the ‘teacher’s perception’ of child’s classroom performance in the following domains:
  - task orientation
  - behavior control
  - assertiveness
  - peer social skills

- not ‘time-consuming’ – takes less than 5 minutes
- Assessment Report generates immediately
Primary Project Screening

Teacher-Child Rating Scale results

- (score of 31-100) NORMATIVE Range
  - No intervention needed
- (score of 15-30) PRIMARY PROJECT Range
  - Parent/guardian Permission Letter sent home
- (score of 0-14) MENTAL HEALTH Range
  - Mental Health Referral to DBH Clinician generated

No intervention needed
The “Intervention”

- a play room or area consisting of a special arrangement of expressive toys, i.e., playdoh, dolls, cars, trucks, crayons, markers, puppets, etc.
- the play session is one-to-one, and, non-directive (“child-led”)

- conducted by a “Child Associate”, trained paraprofessional who uses specific communication techniques during the play session in interaction with the child
- 15 or 20-minute play sessions are conducted weekly for 8 to 15 weeks

- The child controls the play session and can play with whatever they want, in almost any way they want
- 3 rules apply during the play session (the Child Associate explains the rules to each student before play sessions begin):
  - 1) you cannot harm yourself
  - 2) you cannot harm the Child Associate; and
  - 3) you cannot destroy the toys
The Child: Child Associate Interaction

• Total ‘interaction time’ is ONLY 4-8 hours during the SY

• Yet, the relationship has a powerful IMPACT on the child’s social-emotional development, i.e., decrease in shy/withdrawn behaviors, increase in verbal responses, improved problem-solving and decision-making, heightened self-confidence, etc.

• Enhances school-related competencies in four (4) domains, i.e., task orientation, behavior control, assertiveness, and, peer social skills
“I’ve learned that people will forget what you said, people will forget what you did, but people will never forget how you made them feel.”

Maya Angelou (1928-2014)

Quoted in the local Express newspaper on May 29, 2014
Children’s Institute (program developer) reports:

- 20% of all children suffer some difficulty with emotional and behavioral challenges in the classroom which impact their learning

- Over 5,500 children receive Primary Project services each year

- More info: contact childrensinstitute.net
In the District of Columbia:

- Screening results (SY2008-2014) indicated that more than 20% of children are experiencing “mild” difficulties with social-emotional adjustment in the classroom (19%-39%)

- Positive screening results for mental health services has exceeded 20% since SY2011-12
**Group**
Primary Project Participants 2014-15

**Group Description**
381 students (pre-k thru 3rd grade)

<table>
<thead>
<tr>
<th>Series</th>
<th>From</th>
<th>To</th>
<th>Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>First</td>
<td>8/1/2014</td>
<td>7/16/2015</td>
<td>Earliest</td>
</tr>
<tr>
<td>Second</td>
<td>8/1/2014</td>
<td>7/16/2015</td>
<td>Latest</td>
</tr>
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</table>

**Dimension**

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Effect Size</th>
<th>Std Dev</th>
<th>Count 1</th>
<th>Count2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task Orientation</td>
<td>0.38</td>
<td>5.62</td>
<td>381</td>
<td>381</td>
</tr>
<tr>
<td>Behavior Control</td>
<td>0.13</td>
<td>4.58</td>
<td>381</td>
<td>381</td>
</tr>
<tr>
<td>Assertiveness</td>
<td>0.40</td>
<td>4.92</td>
<td>381</td>
<td>381</td>
</tr>
<tr>
<td>Peer Social Skill</td>
<td>0.33</td>
<td>4.63</td>
<td>381</td>
<td>381</td>
</tr>
</tbody>
</table>
Other Significant Data

• Race information for participating children: 395 were African-American (89%); 21 were White (5%); 18 were Hispanic (4%); and 7 were Asian (2%)
• 381 children completed the Project with **fidelity**
• Parent-guardian “face-to-face” contacts with the Child Associates increased:
  – 292 contacts to obtain consent for participation and conduct “End-of-year Conferences” - met Project goal
• Hundreds of outreach efforts via telephone and paper correspondence
Primary Project Screening Results *(2008-June 2015)*

<table>
<thead>
<tr>
<th>SY</th>
<th>08-09</th>
<th>09-10</th>
<th>10-11</th>
<th>11-12</th>
<th>12-13</th>
<th>13-14</th>
<th>14-15</th>
</tr>
</thead>
<tbody>
<tr>
<td># Sites (schools/CDC’s)</td>
<td>12 schools</td>
<td>16 schools</td>
<td>13 sites 8 sch/5 CDC</td>
<td>30 sites 16 sch/14 CDC</td>
<td>35 sites 17 sch/18 CDC</td>
<td>40 sites 23 sch/17 CDC</td>
<td>45 sites 28 sch/17 CDC</td>
</tr>
<tr>
<td>Number screened</td>
<td>991</td>
<td>1435</td>
<td>835</td>
<td>1445</td>
<td>2664</td>
<td>3031</td>
<td>4775</td>
</tr>
<tr>
<td>Positive-Primary Project</td>
<td>355 (36%)</td>
<td>522 (36%)</td>
<td>323 (39%)</td>
<td>497 (34%)</td>
<td>579 (22%)</td>
<td>567 (19%)</td>
<td>1067 (22%)</td>
</tr>
<tr>
<td>Number in Project</td>
<td>164</td>
<td>329</td>
<td>206</td>
<td>269</td>
<td>328</td>
<td>247</td>
<td>441</td>
</tr>
<tr>
<td>Positive for MH Services</td>
<td>65 (7%)</td>
<td>99 (7%)</td>
<td>105 (13%)</td>
<td>354 (24%)</td>
<td>785 (29%)</td>
<td>868 (28%)</td>
<td>1386 (29%)</td>
</tr>
</tbody>
</table>
The Primary Project “TEAM”

Four (4) Collaborations:

- The child receiving the intervention
- The child’s family (parent/guardian/others)
- The teacher/staff
- DBH (Child Associate/DBH Clinician/Healthy Futures Consultant)
Primary Project is **NOT** ‘just playing’
“Benefits” of Primary Project Services

- It’s an evidence-based program, so it’s ‘data-supported’
- Provides “early”:
  - 1) detection of adjustment problems in young children
  - 2) identification of need for mental health intervention
  - 3) intervention to minimize/eliminate adjustment problems
- Provides opportunity for a consistent, positive interaction with an adult
- Promotes pro-social behaviors, i.e., self-regulation, problem-solving and decision-making, positive self-esteem, improved self-confidence, etc.
- Improves school readiness and enhances school-related competencies
- Observable changes at school and home are reported by school staff, clinicians, Child Associates, and, parents/guardians
- School-based intervention – occurs during the school day
- Primary Project enhances the DBH “continuum” of school-based mental health services
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