A Preliminary Examination of the Efficacy of INSIGHTS in Enhancing the Academic Learning Context

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Today’s Presentation:

- What is INSIGHTS?
- Show efficacy results from previous studies.
- Provide a status report on our current group randomized trial.
- Present some preliminary results.
INSIGHTS
into Children’s Temperament
INSIGHTS

- Tier 1 manualized socio-emotional intervention
- Temperament-based
- Comprehensive
  - Teachers
  - Parents
  - Children/Classroom
Temperament

- A consistent reaction style
- A lens through which to view the world
Parent and Teacher Programs

- Facilitated sessions
- 2 hours for 10 weeks
- Videotaped vignettes
- Role-playing
- Homework
Parent and Teacher Programs

• Recognize child temperament
• Reframe your perceptions
• Respond
• Scaffold and stretch
• Strategies for gaining compliance
Children’s Programs

• Temperament-based
  ➢ Same temperament profiles (puppets)
  ➢ Empathy skills
  ➢ Dealing with daily dilemmas

A 45 minute classroom session once a week
Funded by the National Institutes of Health/National Institute of Nursing Research

Sandee McClowry, Catherine Tamis-LeMonda, & David Snow

- 1R01NR04781 6/98-5/04 Behavior problems
- 2R01NR04781 6/03-6/08 Social competence
A few results from first prevention trial
Participants and Setting

• 148 African American and Hispanic primary grade children and their parents and 42 teachers in 6 schools.
• Low performing urban school district.
• 86% of children eligible for free lunch.
Measurement Tools

- Diagnostic Interview Schedule for Children
  - Baseline
  - Disruptive Disorders
- Parent Daily Report
  - Negative and aggressive behavior
  - Baseline then every two weeks
- Sutter-Eyberg Student Behavior Inventory
  - Pre and Post Intervention
Child Behavior Problems by Diagnostic and Treatment Groups
Classroom Effects Regarding Boys

- Decreases: ~
  - attentional problems
  - aggressive behavior
- Increases in teacher: ~
  - efficacy in handling disruptive behavior
  - perceptions of boys’ competencies
A Quasi-Experimental Design
Two Models

- **Parallel**
  - Teachers and parents meet in separate groups

- **Collaborative**
  - Half of the sessions are together
  - Social competency content added—
    - Listening, assertiveness, collaboration, conflict resolution
Participants and Setting

- 202 African American and Hispanic primary grade children and their parents and 82 teachers
- 86% of children eligible for free lunch
- 11 low performing urban schools
### Model Summary for Growth Models for Disruptive Behavior

<table>
<thead>
<tr>
<th>Model Parameters</th>
<th>Final Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>$\gamma_{00}$</td>
</tr>
<tr>
<td>Time</td>
<td>$\gamma_{10}$</td>
</tr>
<tr>
<td>Maternal depression</td>
<td>$\gamma_{01}$</td>
</tr>
<tr>
<td>Child = male</td>
<td>$\gamma_{02}$</td>
</tr>
<tr>
<td>Temperament = High maintenance</td>
<td>$\gamma_{03}$</td>
</tr>
<tr>
<td>Temperament = Intermediate</td>
<td>$\gamma_{04}$</td>
</tr>
<tr>
<td>Program model = Collaborative</td>
<td>$\gamma_{05}$</td>
</tr>
<tr>
<td>Maternal depression × Time</td>
<td>$\gamma_{11}$</td>
</tr>
<tr>
<td>Child male × Time</td>
<td>$\gamma_{12}$</td>
</tr>
<tr>
<td>High maintenance × Time</td>
<td>$\gamma_{13}$</td>
</tr>
<tr>
<td>Intermediate × Time</td>
<td>$\gamma_{14}$</td>
</tr>
<tr>
<td>Collaborative × Time</td>
<td>$\gamma_{15}$</td>
</tr>
<tr>
<td>Residual</td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td></td>
</tr>
<tr>
<td>Slope</td>
<td></td>
</tr>
<tr>
<td>Covariance</td>
<td></td>
</tr>
<tr>
<td>Deviance statistic</td>
<td></td>
</tr>
<tr>
<td>Number of estimated parameters</td>
<td></td>
</tr>
</tbody>
</table>
What Worked?

➢ Disruptive behavior went down among all children over the course of the intervention.
  ❖ The effects were greater for children with high maintenance temperaments.
  ❖ The effects were greater for the children whose parents were in the collaborative program.
    ➢ The effects were greater still for children with high maintenance temperaments whose parents were in the collaborative program.
Mediation Effects

- Collaborative program
- Parenting efficacy
- Child disruptive behavior

$z = 1.42, p = .05$
Status of Our Group Randomized Prevention Trial
Testing the Efficacy of INSIGHTS In Enhancing the Academic Context

Funded by the Institute of Education Sciences
R305A080512 7/08-6/12

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New York University
What we promised!!!
And where we are....

<table>
<thead>
<tr>
<th></th>
<th>PROMISED</th>
<th>CURRENT STATUS</th>
</tr>
</thead>
<tbody>
<tr>
<td># of schools</td>
<td>22</td>
<td>22</td>
</tr>
<tr>
<td>Parent/child dyads</td>
<td>500</td>
<td>440</td>
</tr>
<tr>
<td>Classrooms</td>
<td>150</td>
<td>192</td>
</tr>
<tr>
<td>Teacher yield</td>
<td>93%</td>
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Protocol

- Partner with underperforming urban schools
- Schools randomized into INSIGHTS or a reading program
- Recruitment and intervention: Kindergarten and 1st grade
- Five data collection times
- Hierarchical linear modeling
Theory of Change

Moderators
- School readiness
- Student gender
- Student temperament
- Maternal education

Intervention
- Teachers
- Parents
- Children

Mediators
- Teacher/Classroom Environment
  - Classroom climate
  - Teacher efficacy
- Parent Involvement
  - Parent efficacy
  - Parent participation

Student Classroom Behavior
- Aggression
- Engagement
- Attentiveness
- Relationship with teacher

Proximal Outcomes:
Academic Learning Context

Distal Outcomes
- Academic Achievement
Preliminary Results
Some of the Classroom Related Measurement Tools

- Behavioral Observation of Students in School
- Leiter – Attention Sustained
- Woodcock-Johnson
- Academic Competence Evaluation Skills
- Sutter-Eyberg Student Behavior Inventory
- Student/Teacher Relationship Scale
- Classroom Assessment Scoring System
- Teacher Efficacy
- Teacher School Age Temperament Inventory
At Baseline

✓ No significant differences in sociodemographic variables.
✓ No significant differences on any measure.
Summary for HLM for Off-Task Verbal Behavior Across 5 Time Periods

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</tr>
<tr>
<td>Time</td>
<td>$\gamma_{01}$</td>
</tr>
<tr>
<td>INSIGHTS</td>
<td>$\gamma_{10}$</td>
</tr>
<tr>
<td>INSIGHTS X Time</td>
<td>$\gamma_{11}$</td>
</tr>
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</table>

Mean at the end of 1\textsuperscript{st} grade

<table>
<thead>
<tr>
<th>INSIGHTS</th>
<th>Reading Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>.10</td>
<td>.19</td>
</tr>
</tbody>
</table>
Children in INSIGHTS, compared to those in the Reading Program, show less off-task verbal behavior at the end of the intervention.

Children in INSIGHTS, compared to those in the Reading Program, evidence a more rapid decrease in off-task verbal behavior.
### Summary for HLM for Academic Engagement Across 5 Time Periods

#### Model Parameters

<table>
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<th>Final Model</th>
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</thead>
<tbody>
<tr>
<td><strong>INSIGHTS</strong></td>
<td>$\gamma_{10}$</td>
</tr>
</tbody>
</table>

#### Mean at the end of 1st grade

<table>
<thead>
<tr>
<th>INSIGHTS</th>
<th>Reading Program</th>
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<tbody>
<tr>
<td>35</td>
<td>31</td>
</tr>
</tbody>
</table>
Children in *INSIGHTS*, compared to those in the Reading Program, are more engaged at the end of intervention.
Summary for HLM for Attentiveness Across 5 Time Periods

<table>
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<tr>
<th>Model Parameters</th>
<th>Final Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time</td>
<td>$\gamma_{01}$</td>
</tr>
<tr>
<td>INSIGHTS * time</td>
<td>$\gamma_{11}$</td>
</tr>
</tbody>
</table>
All children show increases in attentiveness over time. Children in *INSIGHTS*, compared to those in the Reading Program, show a more rapid increase.

What this means is that....
A Sneak Peak into Our Future

- Complete this group randomized trial in June, 2012.
- Conduct a longitudinal follow-up.
- Adapt *INSIGHTS* for monolingual Spanish-speaking Latino parents.
- Develop a school wide model.
- More dissemination activities.
More Information

steinhardt.nyu.edu/insights/

www.insightsintervention.com

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Gracias!

WE GOTTA GO!
SEE YA LATER!