Placing intervention in classroom contexts: Findings from CSRP
Picower Foundation/NCCP
Early Learning Strategies Dissemination Project

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Goals for today’s talk

- Theory and rationale for the Chicago School Readiness Project (CSRP)
- Model of intervention targeting professional development
- Findings from CSRP’s professional development program
- Implications for early childhood education programs and policies
Theory and rationale: Why target children’s self-regulation in classroom contexts?

- Recent research on “effective teaching” –
  - ineffective teachers appear to lose large amounts of time to out-of-control negative child behaviors (e.g. aggression, teasing) (Arnold et al., 1999; Bohn, Roehrig, & Pressley, 2004; Norris, 2003).

- Ineffective teachers may exacerbate children’s disruptive behavior
  - through reinforcement, coercive exchanges (Dishion, 1990; Lyons-Ruth & Zeanah, 1993; Patterson, 1982; 1996; Thompson, 1994).

- Rates of behavioral problems among young low-income children are high
  - (5-7% in general pop, but have been reported to be higher among children enrolled in low-income preschool settings),
  - and classrooms may represent important context for service delivery

- Disruptive behavior identified as most stressful part of teachers’ day
  - teacher burnout ~ low warmth, low sensitivity, unwillingness to try innovative teaching methods
Important that our project also had clear **policy implications**

- **Through “child care/early educational policy” lens:**
  - Allowed us to test ways to improve classroom quality in “real world” contexts where supply of teachers with B.A.s limited, where community organizations must stretch to make ends meet.

- **Through “educational policy” lens:**
  - The CSRP model aimed to provide training and consultation to teachers so that they can maintain more emotionally supportive class environments that were more rewarding to teach, less stressful to manage, and more conducive to learning
Why use randomized trials?

**Policy decisions are expensive:**

*Tough fiscal decisions* re: which programs to fund with limited tax dollars – home visiting? Nurse home visiting? IEPs in preschool?

*The “cost” in terms of harnessing/losing public will* to tackle problems involving child poverty and inequality

**Building on path-breaking “hybrid” models that combine questions of treatment efficacy with theoretically-driven developmental questions:**

clinical intervention research (e.g. work by Gorman-Smith & Tolan, 2005; Dodge, Bierman & colleagues, Jones, Brown & Aber) and

policy research (e.g. Morris, Duncan, & Clark-Kauffman, 2005; Gassman-Pines & Yoshikawa, 2006).

Integrative theoretical model of the role of children’s emotional and behavioral adjustment in predicting school readiness
Raver & Jones, 2003
### Overview of CSRP services

<table>
<thead>
<tr>
<th>Fall</th>
<th>Winter</th>
<th>Spring</th>
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<tr>
<td>Teacher training + coaching</td>
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<td>Stress reduction</td>
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Paired teacher-training with “coaching” by MHC in light of:
- a) concern for “dosage”
- b) need for stress reduction

Direct “1-on-1” services by MHC.
High prevalence of elevated behavioral problems—Beyond the scope of teachers’ responsibility.
The principal aim of CSRP is to improve low-income preschool-aged children’s school readiness.

- Intervention question I: Was the program used by teachers? Did teachers like the trainings and did they like having mental health consultants in the classroom? The intervention package must be “acceptable” and “usable” to the programs that were offered the services.

- Intervention question II: Test whether randomized status to treatment vs. control improves classroom quality on teachers’ management of classroom and emotional climate of classroom.

- Intervention question III: Test whether initial classroom-level benefits of CSRP are sustained over the course of the school year.
Selecting 18 sites (35 classrooms): Balancing generalizability with feasibility

- Chose 7 economically disadvantaged neighborhoods--balance between high proportions of African American and Hispanic residents
- 18 Sites, 90 teachers, 602 children enrolled in two cohorts
- Rates of parental consent for child participation ranged from 66.6% to 100% across all sites, Mean = 91%, SD = 6%.
Each site matched with another “sister” site on range of demographic characteristics of families, site characteristics indicating program capacity, etc. and then randomized to tx vs. control status.

<table>
<thead>
<tr>
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<th>Treatment – “Package A”</th>
<th>Control – “Package B”</th>
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<tr>
<td>Services</td>
<td>30 hours of training offered. MHCs with a MSW spent 1 day a week in classroom, from Sept to May of school year.</td>
<td>Teacher’s assistant (1 day1/wk)</td>
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<td>provided</td>
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<tr>
<td>Sites</td>
<td>9</td>
<td>9</td>
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<tr>
<td>Classroom</td>
<td>18</td>
<td>18-1</td>
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Service delivery to sites

- 30 hours of teacher training (4 Saturdays + stress management workshop on-site)

- Mental Health Consultants visited sites 1x a week
  - for classroom-focused ("coaching")
  - child-focused consultation ("1-on-1" services)
  - Manualized, with clinical supervision 1x every two weeks.

- "Coaching cycle" as part of classroom-based consultation:
  Included selection, trying, receiving feedback on new behavioral strategy.

- Guided by principles of:
  - collaboration between mental health consultant and teacher,
  - cultural competence, and
  - sustainability
Teachers’ responses to the trainings and MHCs in classrooms

- There are no guarantees that teachers will “take up” services, just because we offer them
  - 75% of teachers attended at least 1 training, and 63% attended at least 3 trainings,
  - Classrooms received 29 visits (~130 hours of services), on average, by MHCs

- Teachers rated the quality of trainings as “very helpful” and the quality of MHC visits as “somewhat” to “very helpful.”

- Anecdotal comments:
  “I honestly could not see how they could help me improve on anything” → “I modeled [the MHC’s] use of reminders to the children of what kind of behavior was expected. I watched as my repeated warning of consequences began to decrease as the disruptive behaviors began to decline.”

  “I gained so much from [the MHC] in understanding why specific children may be behaving in a particular way.”
Measuring impact: Data

- **Site level**
  - 14 characteristics (e.g. % of teachers with BA) from PIR

- **Classroom level**
  - CLASS (La Paro & Pianta, 2004) (Sept, Jan, Mar, May)
    Classroom climate, teacher sensitivity, etc.
  - Teacher psychosocial characteristics (K-6, job stressors)
  - Classroom-level Covariates
    - Classroom quality
      - Process—ECERS (Sept)
      - Structure—number of teachers, number of children (Sept, Jan, Mar, May)

- **Child level**
  - Family interview (Fall baseline, Fall 1-year-followup)
  - Teacher report of internalizing and externalizing behavior problems (Sept, Jan, March, May)
  - Direct assessment (Sept, May)
Initial impact of CSRP
(Raver, Jones, Li-Grining, Metzger, Champion, & Sardin, 2008)

Note. $p < .10 +, p < .05 *, p < .01 **$
Following up: The needs of teachers and classrooms change over time....

- **We learned that teachers, themselves, face economic and work-related stress**–
  - 2/3rds of teachers were single, primary income-earner in their households with low levels of education, salary.
  - Nearly 30% of teachers reported high stress and low confidence with managing children’s behavior in the classroom.
  - Surprisingly, teachers who reported greater stress in the workplace at baseline, went on to attend more behavior management trainings from October through March, net of teachers’ personal stressors ($B = .52, SE = .24, p < .05, F(2, 17) = 2.88, p < .08, R^2 = .08$).

- **Classrooms as developmental systems that change over time**–
  - What are growth trajectories of classroom climate?
Preliminary answers to policy questions--

- Teachers make major improvements (d = .5 to .8) in the ways that they run their classrooms *when they are given extensive opportunities for training as well as support* in implementing that training in the “heat of the moment” during their daily routines.
  - Teachers’ greater enthusiasm for working with the children in their classrooms, more responsiveness, lower use of harsh or emotionally negative practices

- So far, findings tell us about the short-term benefits of classroom processes. Teachers’ socialization practices are malleable

The good news is that these classroom improvements translate to improvements in children’s mental health, as well.
Upshot – combining scientific rigor and policy relevance

- Using “the gold standard” (i.e. randomization to treatment vs. control) allowed us to test key hypotheses re:
  - Whether a package of supports for teachers led to experimentally-induced changes in classroom processes
  - Whether that package of professional development supports “translates” to improvements in mental health for low-income, ethnic minority children.
Recommendations for programs and policies

- Teachers benefited from (and expressed appreciation for) *training when combined with coaching* from an MHC (Masters’ level specialist with clinical training).

- Improvements in classrooms were measurable and substantial, and yielded benefits for children.

- Currently analyzing whether benefits extended to teachers’ mental health, feelings of confidence, burnout… can we reduce turnover?
http://steinhardt.nyu.edu/appsych/faculty_bios/view/C._Cybele_Raver


