The Incredible Year Teacher Classroom Management Program: Initial Findings from a Group Randomized Control Trial

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March 6, 2014
Funding

This research reported here was supported by:

- R305A100342, Institute of Education Sciences, U.S. Department of Education

Thank you!
Overview

- Describe IY Teacher Classroom Management Program
- Discuss the Training and Coaching Infrastructure to Support the Program
- Initial Findings on Teacher Classroom Management Practices
- Initial Findings on Student Outcomes
- Next Steps
Incredible Years Teacher Classroom Management Program (IY TCM)

- The program is for teachers grade K-3 to improve teacher use of effective classroom management practices.
  - 6 full day training workshops
  - Ongoing on-site coaching
Teacher Skills Trained

- **Domains**
  - Positive Relationships
  - Praise and Rewards
  - Preventing Problems Behaviors
  - Effective Limit Setting
  - Social Coaching
  - Individual Student Planning
The Role of the Coach

- Build on teacher strengths
- Prompt and model skills
- Support generalization to classroom
- Promote use of strategic behavior plans
- Encourage, praise and reinforce steps in the right direction
Study Design

- Blocked cluster randomized wait-list control trial
- Teachers were randomized within school to account for school level differences in Student Race and FRL
- Teacher participants were recruited cross 3 cohorts
  - Year 1: 34 teachers (17 intervention)
  - Year 2: 34 teachers (17 intervention)
  - Year 3: 37 teachers (19 intervention)
# Sample

## Teacher Sample
- N = 105
- (52 intervention, 53 control)
  - 97% Female
  - 22% African American
  - 1% Asian
  - 1% Hispanic
  - 75% White
  - 1% Other

## Student Sample
- N = 1818
  - 48% Female
  - 50% Free or Reduced Lunch
  - 76% African American
  - 2% Hispanic
  - 22% White
Intervention Implementation

- 3 groups held across three years (n=52 teachers)
- 6 sessions held over course of year
  - Workshop 1 & 2 in End of October
  - Workshop 3 & 4 in End of November
  - Workshop 5 & 6 in Beginning of January
- Teacher rating workshop sessions highly (scale 1-7):
  - information presented useful (average = 6.75)
  - group discussion useful (average = 6.75)
  - approach was appropriate (average = 6.44)
  - would recommend to other teachers (average = 6.65)
Intervention Dosage

<table>
<thead>
<tr>
<th>Session</th>
<th>Percent of Teachers in Attendance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>98%</td>
</tr>
<tr>
<td>2</td>
<td>100%</td>
</tr>
<tr>
<td>3</td>
<td>100%</td>
</tr>
<tr>
<td>4</td>
<td>96%</td>
</tr>
<tr>
<td>5</td>
<td>94%</td>
</tr>
<tr>
<td>6</td>
<td>94%</td>
</tr>
</tbody>
</table>

- The IY TCM coach met with teachers who missed sessions to review.
- The IY TCM coach met with teachers between workshops sessions.
## Coaching Activities (Minutes)

<table>
<thead>
<tr>
<th>Coaching Activity</th>
<th>Mean</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Role Play</td>
<td>0.42</td>
<td>0-6.42</td>
</tr>
<tr>
<td>Modeling</td>
<td>6.99</td>
<td>0-108.00</td>
</tr>
<tr>
<td>Scheduling</td>
<td>7.15</td>
<td>0-66.30</td>
</tr>
<tr>
<td>Goal Setting</td>
<td>8.89</td>
<td>0-61.05</td>
</tr>
<tr>
<td>Other</td>
<td>26.12</td>
<td>0-105.83</td>
</tr>
<tr>
<td>Reviewing</td>
<td>27.84</td>
<td>1.03-116.90</td>
</tr>
<tr>
<td>Performance Feedback</td>
<td>33.41</td>
<td>0-174.55</td>
</tr>
<tr>
<td>Action Planning</td>
<td>53.28</td>
<td>0-226.95</td>
</tr>
<tr>
<td>Reviewing</td>
<td>27.84</td>
<td>1.03-116.90</td>
</tr>
<tr>
<td>Observing</td>
<td>170.02</td>
<td>82.00-343.20</td>
</tr>
<tr>
<td><strong>Total Coaching</strong></td>
<td>358.13</td>
<td>185.92-774.62</td>
</tr>
</tbody>
</table>
Teacher Outcome

- **Research Question:** Did teachers in the intervention increase implementation of proactive classroom management strategies as compared to teacher who did not receive the intervention?

- **Analysis:** Two-way repeated measures ANOVA
Teacher Outcome Measure

- Direct Observation of Teacher Behavior
  - Brief Classroom Interaction Observation (BCIO-R; Reinke & Newcomer, 2010)
  - \([(\text{Praise} + \text{Precorrection}) - (\text{Reprimands})] \times 100\%

- Measure 4 times across the year.

- Inter-observer Reliability (IOA of 80% acceptable)
  - Time 1 (29% of observations): 88.29% IOA
  - Time 2 (56% of observations): 89.97% IOA
  - Time 3 (38% of observations): 91.93% IOA
  - Time 4 (30% of observations): 92.55% IOA
Teacher Use of Proactive Classroom Management

Wilks’s $\lambda = .89$, $F (3, 97) = 4.22$, $p < .01$, $\eta^2 = .12$. 

<table>
<thead>
<tr>
<th></th>
<th>T1</th>
<th>T2</th>
<th>T3</th>
<th>T4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training</td>
<td>46.76</td>
<td>65.71</td>
<td>66.65</td>
<td>64.35</td>
</tr>
<tr>
<td>No Training</td>
<td>48.73</td>
<td>55.87</td>
<td>60.78</td>
<td>53.64</td>
</tr>
</tbody>
</table>
Mean Rates of Intervention Teacher Praise, Precorrection, & Reprimands (n=52)

<table>
<thead>
<tr>
<th>Teacher Behavior</th>
<th>Time 1</th>
<th>Time 2</th>
<th>Time 3</th>
<th>Time 4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean (SD)</td>
<td>Mean (SD)</td>
<td>Mean (SD)</td>
<td>Mean (SD)</td>
</tr>
<tr>
<td>Praise</td>
<td>0.68 (0.40)</td>
<td>1.23 (0.64)</td>
<td>1.20 (0.63)</td>
<td>1.03 (0.71)</td>
</tr>
<tr>
<td>Precorrection</td>
<td>0.02 (0.03)</td>
<td>0.03 (0.04)</td>
<td>0.02 (0.05)</td>
<td>0.02 (0.03)</td>
</tr>
<tr>
<td>Reprimand</td>
<td>0.84 (0.53)</td>
<td>0.65 (0.45)</td>
<td>0.61 (0.44)</td>
<td>0.51 (0.34)</td>
</tr>
</tbody>
</table>
Student Outcomes

- **Research Questions:**
  - Do students in classrooms of teachers who receive training in IY TCM demonstrate reductions in concentration problems, disruptive behaviors, and problems with emotional regulation in comparison to students in classroom of the control group teachers?
  - Do students in classrooms of teachers who receive training in IY TCM demonstrate improvements in emotional regulation, prosocial behavior, and academic competence in comparison to students in classroom of the control group teachers?
**Student Outcomes**

- **Main Effect Analyses:** Three-level hierarchical linear models, in which students (level 1) are nested within teachers (level 2) and teachers are nested within schools (level 3), were conducted using SAS PROC MIXED.

- **Covariates:**
  - **Teacher Level**
    - Grade Level  Cohort Year
  - **Student Level**
    - Sex  Race  Lunch Status  Pretest on Outcome
Student Outcome Measures

- Teacher Report of Student Behavior
- TOCA-C (Koth, Bradshaw, & Leaf, 2009)
  - Disruptive behavior
  - Concentration problems
  - Poor Emotional Regulation
- T-COMP (CPPRG, 1995)
  - Emotional Regulation
  - Prosocial Behavior
  - Academic competence
### Student Outcomes

<table>
<thead>
<tr>
<th>Outcome</th>
<th>b</th>
<th>se</th>
<th>p</th>
<th>ES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TOCA</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Concentration Problems</td>
<td>-0.08</td>
<td>0.08</td>
<td>0.31</td>
<td>0.06</td>
</tr>
<tr>
<td>Disruptive Behavior Problems</td>
<td>-0.04</td>
<td>0.05</td>
<td>0.41</td>
<td>0.05</td>
</tr>
<tr>
<td>Emotional Regulation Problems</td>
<td>-0.16</td>
<td>0.04</td>
<td>0.001</td>
<td>0.14</td>
</tr>
<tr>
<td><strong>T-COMP</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prosocial Behavior</td>
<td>0.20</td>
<td>0.07</td>
<td>0.007</td>
<td>0.17</td>
</tr>
<tr>
<td>Emotional Regulation</td>
<td>0.12</td>
<td>0.06</td>
<td>0.06</td>
<td>0.10</td>
</tr>
<tr>
<td>Academic Competence</td>
<td>0.11</td>
<td>0.06</td>
<td>0.08</td>
<td>0.09</td>
</tr>
</tbody>
</table>
**Moderation Analyses:** Moderation analysis was conducted to examine if the treatment effects on child outcomes differed by:

- Grade level
- Sex
- Pretest scores
Academic Competence: Pretest X Intervention

Pretest: Academic Competence

Posttest: Academic Competence

Treatment
Control

1 SD below
Mean
1 SD above
Mean

$b (se) = -0.08 (.03), p = 0.001$
Summary of Findings

- Teachers who receive intervention use more proactive classroom management strategies.
- Students have fewer problems with emotional regulation and increased prosocial skills.
- Students with poorest academic competence demonstrate significant improvement in comparison to students in the control classrooms.
Next Steps

- Conduct mediation analyses to determine mechanisms on student outcomes
  - Teacher time teaching
  - Reduction in classroom level disruptive behavior
- Look at student outcomes on measures that are not teacher report, including direct observation of student behaviors and academic achievement data
Acknowledgements

- Teacher & Student Participants
- School District
- Research Team Members
  - Lori Newcomer, Ph.D.
  - Melissa Stormont, Ph.D.
  - Crystal Lewis, Angela Colletta, Marcus Petree, Katie King, Ph.D., Dana Darney, Ph.D., Lindsay Borden, Ph.D., Kim David, Tracey Latimore, Mayo Fujiki, Chi-Ching Chuang, David Rohrer, Reuben Faloughi, Ze Wang, Ph.D., Dan Cohen, Melanie Morgan, Heather Klemp
More Info

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- Incredible Years
  - www.incredibleyears.com