



Classroom Management Teacher Training Program in Head Start

Stephanie A. Shepard, Greta Doctoroff, Susan Dickstein, & Ronald Seifer

Brown University Medical School, E.P. Bradley Hospital



Introduction

Low-income children often develop in environments that undermine adjustment and academic success. One key challenge facing schools serving children in poverty is that teachers lack the training and ongoing support needed to manage challenges these children present. The Incredible Years Classroom Management Teacher Training Program (IYS-TP) is one program that improves classroom atmosphere and teacher practices, encourages social-emotional development in the classroom, and ultimately reduces behavior problems and enhances school readiness skills among high risk, low-income children.

Because independent replications are rare, little is known about IYS-TP transportability into "real world" settings. IYS-TP also has not been explored in isolation of other costly interventions. We report on a randomized effectiveness trial of IYS-TP as part of a larger investigation of IYS dissemination by a Head Start-University partnership.

Study Questions

- Does participating in IYS-TP lead to improvements in classroom environment relative to standard HS training received by teachers?
- Do teachers who participate in IYS-TP demonstrate improvements in classroom management practices and improved teacher-student relationships?
- Do children whose teachers participate in IYS-TP demonstrate greater improvements in social competence and reductions in problem behaviors relative to children in classrooms with standard HS care?
- Do all classrooms and teachers benefit in the same way from IYS-TP?

Participants

- 13 lead teachers (M=11.7 years experience, 50% with 4-year degree) and 13 teacher assistants (M=6.8 years experience, 23% with 4-year degree).
- 231 children (126 boys) between 30 and 60 months of age (M = 49, SD = 7).
- Children were 45% White, 6% Black or African American, 25% Hispanic or Latino, 12% Asian, 1% Native Hawaiian or Pacific Islander, 2% American Indian or Alaskan Native, 9% Biracial or Multi-racial.
- 30% of children were classified as English Language Learners.

Procedures

7 teaching teams and 1 education manager were randomly assigned to receive IYS-TP. The education manager participated in training and subsequently supervised only IYS-TP classrooms. IYS-TP was delivered in 6 full-day workshops (36 hours) by a university partner trained by the IYS developer. According to IYS protocol checklists, the trainer covered 84% of required content and activities and reviewed 90% of handouts. She facilitated discussion of 77 recommended video vignettes.

Measures

Classroom Environment: Trained observers blind to classroom condition rated classrooms in the Fall prior to IYS-TP (Baseline), the Spring following IYS-TP (Post-Test) and the following Fall (Follow-Up). They used the Early Childhood Environmental Rating Scale-Revised (ECERS-R; Harms et al., 1998), a global assessment of classroom structural quality. Classroom environment quality was rated on 43 items (1=low quality to 7=high quality) that were averaged together.

Teaching Practices: Teachers and assistants completed the 35-item Teacher Strategies Questionnaire (Webster-Stratton, 2005) to rate how frequently (1=rarely/never to 5=very often) they use positive strategies (i.e., praise and incentives, positive strategies, limit setting), inappropriate strategies, and positive approaches with parents.

Student-Teacher Relationships: Teachers reported on their relationships with each student using the STRS (Pianta & Nimetz, 1991). Levels of conflict, closeness, and dependency on teacher scales were assessed with 28 items on a 5-pt scale.

Child Social Skills: Teachers rated students' levels of assertiveness, self-control, prosocial behavior, cooperation, and peer exclusion using the Social Skills Questionnaire. The 41 items were rated on a 3-pt scale.

Child Behavior Problems: Teachers rated children's behavior problems at school with the Teacher Report Form (Achenbach, 1991). Total behavior problem T scores were used.

Results

Teaching staff in intervention and comparison conditions did not differ at baseline with respect to years of experience ($F(1,19)=1.06, ns$) or level of education ($Yates\ corrected\ \chi^2(1)=0, ns$).

Classroom Environment

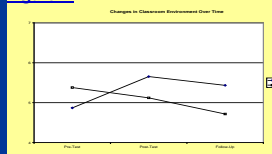
IYS-TP classrooms had slightly lower classroom environment scores than comparison classrooms at baseline ($F(1,11)=4.17, p=.07$), but had slightly higher classroom environment scores following IYS-TP ($F(1,11)=4.01, p=.07$). The classroom environment improved in all IYS-TP classrooms, whereas only 1 comparison classroom improved over the year. The classroom environment declined over the year in 4 comparison classrooms (1 was unchanged). The difference between IYS-TP and comparison classrooms in amount of change was significant, and a large effect size was achieved (Cohen's $d=2.65$).

Table 1. Changes in Classroom Environment Following IYS-TP

	Baseline	Post IYS-TP ^a	Follow-Up ^b
IYS-TP Classrooms	4.87	5.65	5.43
Comparison Classrooms	5.38	5.12	4.72

^aChange = .78 (IYS-TP) vs -.26 (comparison), $F(1,11)=22.14$, $p=.0002$.
^bChange = -.18 (IYS-TP) vs -.40 (comparison), $F(1,11)=11.08$, $p=.004$.

Figure 1.



Although scores in both groups declined somewhat by the follow-up assessment, improvements following IYS-TP were maintained into the next year but scores in comparison classrooms continued to decline (see Figure 1).

Table 2. Changes in IYS-TP Classrooms by Baseline Classroom Environment Scores

Classroom	Fall	Difference
1	4.13	1.38
2	4.33	.93
3	4.68	.55
4	5.15	.80
5	5.15	.93
6	5.24	.23
7	5.41	.93
Average	4.87	.78

The correlation between baseline scores and amount of change in IYS-TP classrooms ($r(6) = -.59^*$) suggests that teachers with the lowest initial classroom quality scores demonstrate greater gains and may benefit the most from training (see Table 2). The extent to which teachers benefit did not differ by years of experience ($r(5) = -.17, ns$) or by whether or not they earned a bachelors level degree ($F(1,4) = .80, ns$).

Classroom Management Strategies

At baseline, there were no significant differences between IYS-TP and comparison teachers on use of positive or inappropriate strategies, or use of positive approaches with parents. IYS-TP teachers demonstrated greater gains in use of positive strategies than comparison teachers (Cohen's $d=.110$), but neither group maintained improvements (see Table 3). The less positive teachers were initially, the more improvement they demonstrated following IYS-TP, ($r(11) = -.54$). There was no relation between years of experience and changes in positive classroom management strategies ($r(7) = .01, ns$), and amount of change did not differ by level of education ($F(2,5) = 2.72, ns$). The amount of change in use of inappropriate strategies and positive approaches with parents did not differ between the two groups. Both groups saw additional increases in use of inappropriate strategies at follow-up, and both returned to baseline scores on positive approaches with parents.

Teacher-Student Relationships

Table 3. Changes in Classroom Management Strategies Following IYS-TP

	IYS-TP			Comparison		
	Baseline	Post IYS-TP	Follow-Up	Baseline	Post IYS-TP	Follow-Up
Positive Strategies	3.48	3.84 ^a	3.57	3.62	3.65	3.50
Inappropriate Strategies	1.68	1.81 ^a	1.88	1.44	1.54	1.63
Positive Approaches with Parents	4.51	4.67 ^a	4.38	4.41	4.70	4.34

^aChange = .01 (IYS-TP) and .01 (comparison), $F(1,23)=7.58^*$; Change = .16 (IYS-TP) and .10 (comparison), $F(1,23)=16$; Change = .16 (IYS-TP) and .21 (comparison), $F(1,23)=.05$.

At baseline, IYS-TP teachers perceived more closeness ($F(1,192)=5.55^*$) and more conflict ($F(1,192)=4.63^*$) with students than comparison teachers (see Table 4). Although the amount of change in conflict scores did not differ in the two groups, $F(1,192)=.16, ns$, reductions in conflict ratings in IYS-TP classrooms following training decreased the difference between the groups at post-test, $F(1,192)=2.31, ns$. There was no improvement in closeness within the IYS-TP group, but closeness scores decreased over time in the comparison group, and this difference in change scores was significant (Cohen's $d=.42$).

Table 4. Changes in Teacher-Student Relationships

	Implementation			Comparison		
	Baseline	Post IYS-TP	Difference	Baseline	Post IYS-TP	Difference
Conflict	2.82	2.76	-.06	2.68	2.65	-.03
Closeness	1.82	1.86	.04	1.67	1.56	-.11 ^a
Dependency	3.00	2.94	-.06	3.10	3.10	.00

^aThe group difference in amount of change was significant, $F(1,192)=6.42^*$.

Child Social Skills and Problem Behavior

Few effects were found at the child level, and some findings were contrary to expectations. There was no group difference in either problem behavior scores at post-test or on changes in problem behavior over the course of the year ($F(1,187)=2.71, ns$). Among children with an elevated score at baseline ($T > 63$), 50% of children in IYS-TP classrooms and 75% of children in comparison classrooms demonstrated greater than .5 standard deviation reduction in their score.

Little improvement was demonstrated on children's prosocial or cooperative behavior, or on peer exclusion, regardless of condition. Contrary to expectations, children in comparison classrooms improved more on self control ($F(1,192)=6.85^*$) and assertion ($F(1,192)=10.72^*$) than children in IYS-TP classrooms.

Summary and Future Directions

Results of this independent replication support the effectiveness of IYS-TP for improving classroom level functioning and teacher practices in high-risk schools, particularly among those teachers who appear to struggle the most prior to training. Results are particularly promising given that classroom climate typically declines over the year, as demonstrated in 4 of 6 comparison classrooms. The decline in comparison teachers' classroom environment, classroom management scores, and ratings of closeness between teachers and students suggests deterioration in the absence of ongoing training or support.

One strength of this study is the use of an observational tool to assess classroom quality not used in other studies examining IYS-TP. However, there remains a primary reliance on teacher reports of their use of classroom management strategies and on children's behavior. Results of standardized child interviews and direct child observations will be reported in future presentations. Nonetheless, patterns of child-level findings reported do not suggest that IYS-TP teachers are biased in favor of reporting positive change.

The lack of child-level effects are not surprising given that teachers are the target of IYS-TP. Delivering the multi-component IYS intervention, including a social and emotional curriculum targeting children [IYS-DP] and parent management training [IYS-PT], is expected to lead to improvements in social-emotional functioning and reductions in problem behaviors. Children identified as most at risk due to initial behavior problems or their family risk index scores are expected to make the largest gains from the multi-component program.

IYS-TP was delivered by a doctoral level child clinical psychologist. One goal of our project is to test the effectiveness of the additional IYS components (i.e., IYS-PT and IYS-DP) when delivered by Head Start staff under less controlled, "real world" conditions. The cascading dissemination design we used is described in a companion poster (Doctoroff et al., 2008), and results are forthcoming.