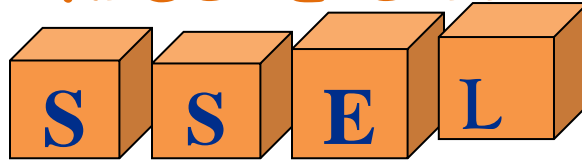


KIDSTEPS II



RESULTS FOR PARTICIPATING PRESCHOOLS AND HEAD START Funded by US Department of Education/Institute for Education Sciences Early Learning Efficacy Study # R305A130336

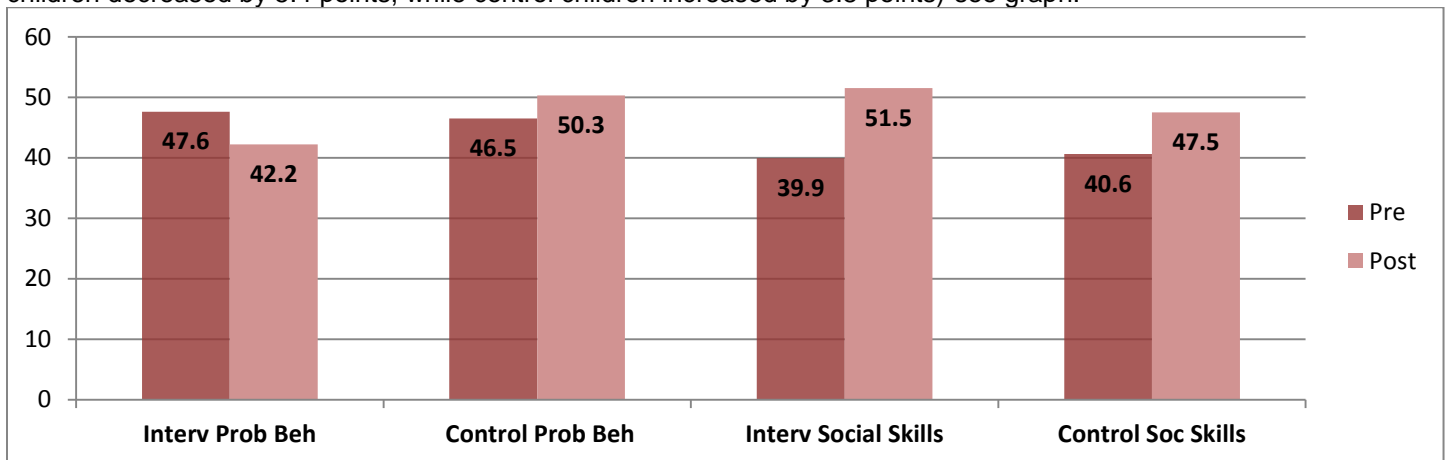
This study involves 64 preschool and Head Start classrooms in Worcester County over four years and follow-up of three cohorts of children into kindergarten. We are evaluating if a new preschool Second Step Early Learning curriculum (Committee for Children) helps children develop better social skills and executive functioning; if this affects their preliteracy and math skills; and if participation in the curriculum affects their kindergarten readiness and performance. Some classrooms, selected at random, receive the SSEL curriculum and some deliver their usual curriculum. This report provides preliminary findings of the first two years of the study. We have results on 34 classrooms, 747 children, and 232 kindergarten follow-ups so far. We need to complete the rest of the study to make final conclusions but our first two years have been very promising!

PRELIMINARY PRESCHOOL OUTCOMES

Description of the participants: Children attended 34 preschool or Head Start classrooms:

- 51% of the children were male; 38% Hispanic, 25% white and 15% Black
- 62% of families had income under \$20,000 and 25% were married couples
- 60% of parents had a high school education or less

Preschool teacher SSIS ratings: In Year 1 there were no statistically significant differences in preschool teacher ratings of children's change in social skills or behavior problems by intervention condition, however, in Year 2, intervention children made statistically significant gains in social skills compared to control children (11.6 points versus 6.9 points). They also decreased problem behavior more than did control children but this was not statistically significant (intervention children decreased by 5.4 points, while control children increased by 3.8 points)-see graph.



Study assessments of four year olds: Combining all four year olds over the two years, children in the intervention curriculum made significantly more gains in a composite social emotional functioning score as well as in a composite executive functioning score compared to children in the control classrooms who received other early childhood curricula.

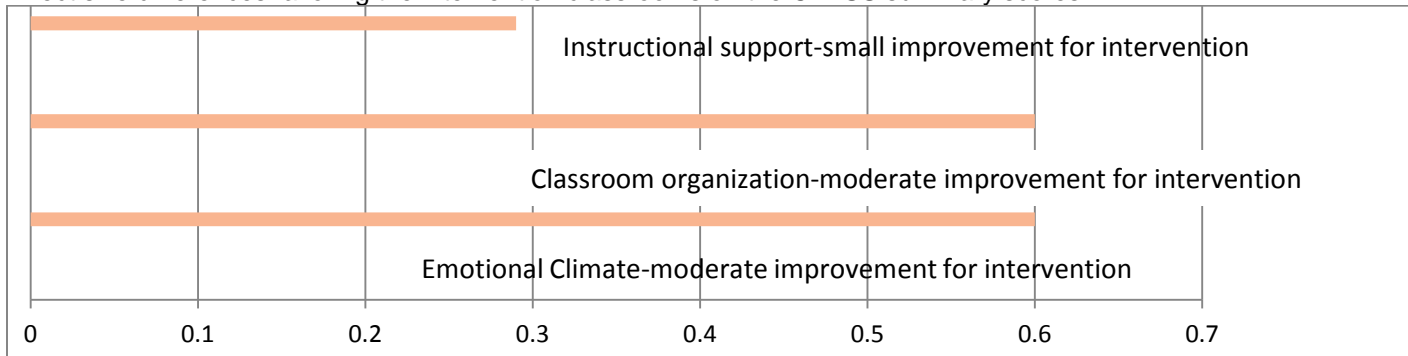
Statistical modeling of how social and executive functioning skills affect school readiness skills:

Controlling for baseline socio-emotional and executive functioning skills, 4 year old children in the intervention classrooms had greater end of preschool socio-emotional and executive functioning skills than children in control classrooms. These socio-emotional and executive functioning skills, in turn predicted better end of preschool school readiness outcomes (including pre-math, pre-literacy, understanding directions and vocabulary).

Effects on preschool classroom quality: Using the CLASS (a well-respected classroom quality measure) with half the classrooms in Year 2, we found moderate to large improvements (although not statistically significant due to the small sample) on all the summary scores and the following items that favored intervention classrooms:

- a. Instructional Learning Formats (materials, effective facilitation and clarity of learning objectives)
- b. Quality of Feedback (providing scaffolding, feedback loops, information and encouragement)
- c. Productivity (maximizing learning time and managing transitions)
- d. Regard for Student Perspectives (flexibility/student focus, autonomy, leadership, expression)

Effect size differences favoring the intervention classrooms on the CLASS summary scores:



Implementation fidelity: 14 of 16 intervention classrooms in Year 2 met an adequate standard for delivering the curriculum based on monthly study staff observations.

- 73.4% of intervention teachers felt well or very well trained in the curriculum & 77% said they would be continuing with the curriculum even though not in the study; 83% said it improved classroom environment
- Best aspects of the curriculum: the puppets, story cards, story books, using think time, and help for children's behavior. Challenging were the brain games, and integrating with other requirements.

What does this mean?

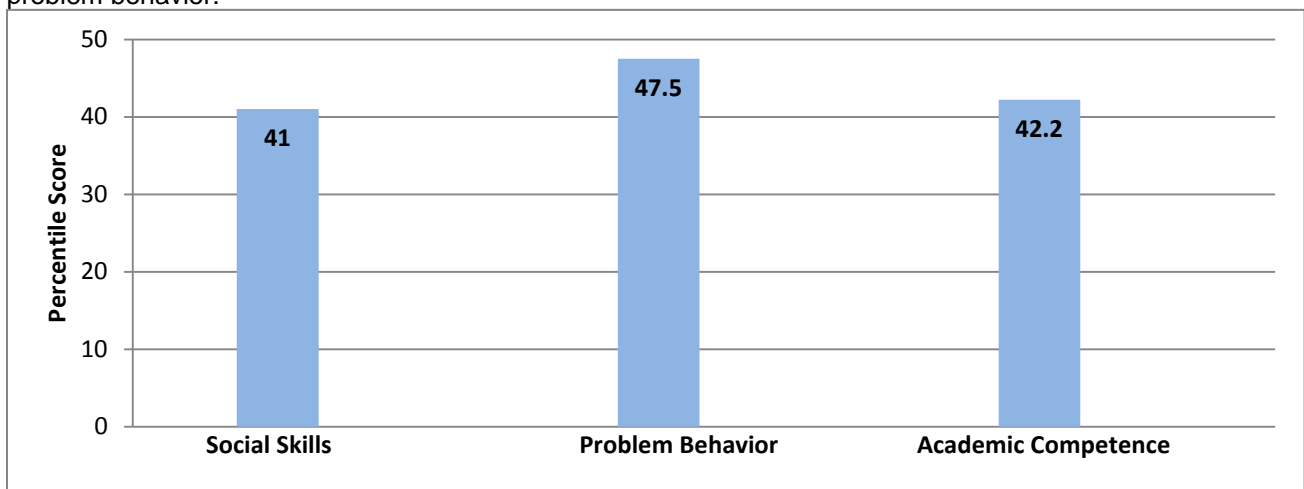
The preschool classrooms are of high quality so demonstrating that a different curriculum increases classroom quality and/or children's skills is challenging. However, we found that 4 year old children in the intervention classrooms improved more in socio-emotional and executive functioning skills than children in the control classrooms, and that these skills were predictive of better school readiness. Intervention classrooms also were rated better on climate and instructional quality than control classrooms.

PRELIMINARY KINDERGARTEN OUTCOMES

Thanks to cooperation from over 90 kindergarten teachers and 13 school systems we were able to collect Social Skills Improvement System questionnaires for 232 kindergarteners in our study who were still in Central MA.

Kindergarten SSIS teacher ratings of social skills, problem behavior and academic competence:

- Children as a whole were rated somewhat below the population mean (50th percentile) on social skills (mean at 41st percentile) and academics (mean at 42nd percentile), but also below the population mean for problem behavior (mean at 47th percentile)-see graph.
- There were no statistical differences overall in teacher ratings of intervention versus control children, although the intervention children scored slightly higher in social skills and academic competence, but also slightly higher for problem behavior.



What does this mean? We don't have strong findings about kindergarten performance from the first group of children who went through the study. Because they participated in the intervention program when the preschool teachers were just learning how to deliver it, we expected this and anticipate that this year's follow up will show more differences.

THANK YOU FOR YOUR CONTINUED SUPPORT OF THE KIDSTEPS II STUDY!

Questions: Please call or email Dr. Carole Upshur, Department of Family Medicine and Community Health, University of Massachusetts Medical School, Carole.upshur@umassmed.edu or 774-443-7267 Check out our new study website: <http://www.umassmed.edu/fmch/research/kidsteps-ii/>