Evaluating the Impact of the *Second Step*® Out-of-School Time Program

FINAL REPORT

Jun 26, 2024

xSEL Labs

Background

The purpose of this report is to summarize work completed and key findings from a cluster-randomized trial evaluating the impact of the Second Step Out-of-School Time program (SS OST) during the 2022-2023 and 2023-2024 school year. This final report provides a high-level overview of milestones met and key findings.

Activities Completed

During Year 1 (2022-2023 school year), the xSEL Labs team, in partnership with an after-school provider located in Chicago, IL, completed a cluster-randomized field trial of the Second Step OST program in 71 after-school sites. The after-school site team was motivated to engage in this collaboration because (a) student social and emotional development is a strategic priority, (b) the site team has developed a culture of data-informed decision-making, and (c) the site team wished to garner support from its board and the community for SEL by demonstrating its positive impact on student outcomes.

As described in the draft manuscript, during Year 1 (2022-2023 school year), approximately half of the sites were randomly assigned to receive the Second Step OST curriculum (SS OST condition). The other half of the sites did not receive any SEL instruction (control condition).

Student and staff measures were collected in the fall and spring at SS OST sites and control sites. Students completed assessments measuring their social and emotional competence and their perceptions of the OST site climate. Site staff completed rating scales assessing the strengths and difficulties of participating students. Staff also completed a survey measuring their beliefs about social and emotional learning and a weekly implementation survey. Finally, research staff conducted monthly phone calls and periodic site observations.

During Year 2 (2023-2024 school year), all participating sites received the SS OST curriculum and the same data collection process was completed.

Summary of Findings

During Year 1, (with data directly from 350 students and staff rating scale data on 499 students) and Year 2 (with data directly from 535 students and staff rating scale data on 804 students), participation in intervention sites was associated with significant reductions in staff-rated problem behaviors and some increases in staff-rated prosocial skills and directly assessed social and emotional skill. In addition, in both years, fall staff-rated behaviors moderated the impact of the intervention such that students with

greater fall problems benefited substantially from the intervention and students with fewer fall problems continued to have few problems in the spring. During Year 2, greater dosage was also associated with a larger implementation effect size. There were no significant effects of the program on staff attitudes towards SEL or student-rated site climate. Apart from eligibility for free or reduced-price lunch, no student demographic characteristics moderated the impact of SS OST on student outcomes.

Effect sizes for main effects are summarized in Table 1. The significance of main effects and moderator effects are described below.

Effect Size Estimates in Context

The standardized mean difference, or Cohen's *d*, is a widely used effect size metric that is easy to interpret and allows ready comparisons across studies of the magnitude of an intervention effect. Despite its advantages, it can sometimes be difficult to determine how an intervention affects more readily visualizable skills, such as the odds of engaging in aggressive behavior or the amount of money saved when an intervention is implemented.

None of the outcome metrics used in this study lend themselves to easy reduction to an easy-to-grasp metric. Overall, main effects in this study were comparable in magnitude to a meta-analysis examining the impact of after-school programs on student social and emotional skills. When examining subgroups, particularly students whose fall staff-rated problem behaviors were high, effect sizes were robust and comparable to effect sizes found for well-implemented SEL programs in and out of schools.

Specifically, we found that:

- Main effects on social and emotional skills were comparable to effect sizes reported in some meta-analyses (Cipriano et al., 2023) and smaller than effect sizes reported in others (Durlak et al., 2011).

- Main effects on staff-rated behavior were comparable in magnitude to effects reported in some widely-cited meta-analyses (Durlak et al., 2010, 2011) and larger than in others (Cipriano et al., 2023).

- When fall student problem behavior was high, particularly during Year 1, and when implementation dosage was high during Year 2, effect sizes were

substantially greater than main effects reported in meta-analyses and were comparable to or greater than meta-analytic effect sizes for programs that were particularly well-implemented (Cipriano et al., 2023; Durlak et al., 2010, 2011).

After-school settings are arguably difficult contexts in which to implement a structured curriculum or program: student enrollment is inconsistent; after a day of school, students may be resistant to additional “classroom instruction”; staff are less credentialed and have high turnover; and activities are often unstructured. In contrast, school-based SEL programs benefit from more stable student and staff participation, more credentialed staff, and a more natural fit with the context of instruction. That we found effects with magnitudes comparable to those found in school-based SEL programs suggests that SS OST has great potential to support positive youth development.

Summary

We are grateful to the Committee for Children for entrusting us as independent program evaluators. As external evaluators, our goal is to rigorously and dispassionately evaluate program impact and report the results without bias or favor. We will admit, however, that we are thrilled to have obtained such positive evidence of impact. We hope the Committee for Children shares in our excitement and belief that this study provides compelling evidence that their SS OST program can make a significant contribution to the well-being of youth participating in after-school programs.

References

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Table 1

Spring estimated marginal means for intervention and control groups, and effect sizes by year and outcome

Study Year 1 Score	n	Intervention EMM	Control EMM	SD	*d*
Overall Combined SE Skill	350	.10	-.06	1.00	.16
Early Elementary SE Skill	256	-.01	-.07	1.00	.06
Late Elementary SE Skill	94	.18	-.15	1.00	.33
SDQ Total Problem	531	7.10	8.03	3.16	.29 *
SDQ Internalizing	531	3.80	4.47	2.29	.29 *
SDQ Externalizing	531	3.31	3.57	1.64	.16 *
SDQ Prosocial	531	4.25	4.13	1.65	.07
Climate	344	3.33	3.37	.72	-.06
Study Year 2 Score	**n**	**Intervention EMM**	**Control EMM**	**SD**	***d***
Overall Combined SE Skill	535	.18	-.01	1.04	.18 *
Early Elementary SE Skill	408	.20	-.01	1.00	.21 *
Late Elementary SE Skill	127	.15	.10	1.02	.05
SDQ Total Problem	791	6.39	7.03	4.36	.15 *
SDQ Internalizing	791	3.74	4.07	2.74	.12 †
SDQ Externalizing	791	2.62	2.97	2.48	.14 *
SDQ Prosocial	791	4.25	4.06	1.66	.12 †
Climate	535	3.41	3.66	.75	-.07

SDQ = Strengths and Difficulties Questionnaire

EMM = Estimated Marginal Mean from mixed effects analysis of covariance with age, sex, gender, race and FRPL characteristics as covariates; *d* = standardized mean difference (Cohen's *d*); * $p < .05$