Social Programs That Work Review

Evidence Summary for the Start Making a Reader Today (SMART) Program

HIGHLIGHTS:

- **PROGRAM:** A volunteer tutoring program for at-risk readers in early elementary school.
- **EVALUATION METHODS:** A well-conducted randomized controlled trial (RCT) with a sample of 127 first-graders at risk of reading failure from six elementary schools in a diverse range of communities in Oregon.
- **KEY FINDINGS:** Sizable positive impacts on students' reading ability over a two-year follow-up period.
- **OTHER:** Limitations in the evidence include the fact that this was a small RCT conducted in a single state, and the effect on the most important reading measure comprehension approached but did not reach statistical significance. A replication RCT in another jurisdiction would be valuable to hopefully confirm these positive findings and establish whether they generalize to other sites.

I. Evidence rating: SUGGESTIVE TIER

The standard for Suggestive Tier is:

Programs that have been evaluated in one or more well-conducted RCTs (or studies that closely approximate random assignment) and found to produce sizable positive effects, but whose evidence is limited by only short-term follow-up, effects that fall short of statistical significance, or other factors. Such evidence suggests the program may be an especially strong candidate for further research, but does not yet provide confidence that the program would produce important effects if implemented in new settings.

II. Description of the Program:

Developed in 1992 in Oregon, SMART (Start Making a Reader Today) recruits community volunteers to tutor low-performing K-2 students in reading. The program operates statewide, serving approximately 11,000 students in 260 elementary schools each year. The Oregon business community provides

significant financial assistance to the program, and many of the volunteer tutors are recruited from the business community.

Volunteers receive minimal training (1-2 hour orientation and introduction to reading strategies), and are encouraged to use their own judgment when tutoring. The program also provides volunteers with a handbook describing four reading strategies a volunteer can use with the student: i) reading to the student; ii) reading along with the student; iii) reading a passage and having the student re-read it; and iv) asking the child questions during reading.

Teachers identify students at-risk of reading failure to participate in the program. These students attend 30-minute sessions twice a week during school hours, and can take home two books per month to build a home library.

Each school has a part-time SMART coordinator with no formal training in elementary reading instruction who manages the logistics of the program. In the version of SMART that was rigorously evaluated, each student participated in tutoring for six months in both first and second (but not third) grade.

The program, which has primarily been paid for by donations, costs \$400 per child per year (2017 dollars), making it a very low-cost program. Click here for the SMART website.

III. Evidence of Effectiveness:

This program was evaluated in one randomized controlled trial of 127 first-graders at risk of reading failure from six elementary schools in a diverse range of communities, who were randomly assigned to a program group that received SMART or a control group that did not. Program group students participated in SMART for six months per year in both first and second grade. They received an average of 37 hours of one-on-one tutoring over the two years.

47% of the students were white, 30% were African American, 10% were Native American, and the remainder were Asian American or Latino.

At the 2-year follow-up, the SMART group outperformed the control group on all reading outcomes, <u>specifically</u>:

- In word identification, the average SMART group student scored in the 29th percentile nationally compared to a 21st percentile average score for the control group (i.e., an effect size of 0.44 standard deviations).
- In word comprehension, the average SMART group student scored in the 31st percentile nationally compared to a 19th percentile average score for the control group (i.e., an effect size = 0.43 standard deviations).

- The average SMART group student correctly read 62 words of a second-grade reading passage in one minute compared to an average of 46 words for the control group (i.e., an effect size of 0.53 standard deviations).
- In passage comprehension, the average SMART group student scored in the 28th percentile nationally compared to a 22nd percentile average score for the control group (i.e., an effect size = 0.32 standard deviations). This effect approached, but did not quite reach, statistical significance at the .05 level.

Discussion of Study Quality:

- The study included a two-year follow-up.
- The study measured outcomes using an intention-to-treat analysis.
- There were no significant differences between SMART students and control students prior to the program.
- Standardized outcome measures were used to measure reading progress (e.g. Woodcock Reading Mastery Test-Revised), and the staff collecting outcome data were blind as to students' group assignment.
- The study evaluated SMART in a diverse range of communities and typical classroom settings, providing evidence of its real-world effectiveness as a statewide program.
- <u>Study Limitations:</u> This study had moderately high attrition due to students moving out of the district (outcome data were collected for 66% of the original sample at the two-year follow-up). Statistical tests suggest that the attrition did not result in any observable differences between the SMART and control groups that might undermine the randomization. However, the study results should be treated with caution because it is possible that the attrition may have resulted in *unobservable* differences between the two groups, leading to inaccurate estimates of SMART's impact. Also, although this is a well-designed randomized controlled trial whose results are reinforced by findings of effectiveness for some other one-on-one tutoring programs, we would caution that this is the only such trial of SMART, and additional trials are needed to confirm the program's effectiveness.

IV. References:

Baker, Scott, Russell Gersten and Thomas Keating. When less may be more: A 2-year longitudinal evaluation of a volunteer tutoring program requiring minimal training. *Reading Research Quarterly*, Volume 35, Number 4; Oct-Dec. 2000.