

Evaluating the Effectiveness of an Organizational Skills Training Intervention for Children with Executive Function Difficulties

Statement of Problem

Throughout early schooling, children are expected to increase their organization skills, and by 3rd grade experience a relatively high demand for these skills. Organization, time management and planning (OTMP) skills are behavioral manifestations of executive function, a cognitive ability associated with persistent goal-directed behavior. OTMP skills are strongly connected to a child's academic progress and lay the foundation for future success. Despite support from teachers to help foster these skills in late elementary school years, some students still struggle to develop OTMP skills, which can put them at increased risk for academic failure. These difficulties are particularly common among children with attention deficit/hyperactivity disorder (ADHD).

In order to help build these critical skills, our colleagues at New York University developed a clinic-based skills training intervention, known as [Organizational Skills Training](#) (OST), for students in 3rd through 5th grades who have ADHD. They initially adapted it for use in schools in small groups for a broader population of children. Our team further adapted the OST program in collaboration with the original developers as a Tier 2 intervention to be implemented in the context of a multi-tier system of support (OST-T2), and we evaluated the effectiveness of this program.

Description

We conducted a cluster randomized controlled trial of OST-T2 in 22 schools serving a diverse population in the Greater Philadelphia region. As part of this project, general education teachers referred 3rd to 5th grade students whose OTMP deficits particularly impacted their academic performance to OST-T2.

This intervention used small group child skills training and practice in addition to consultation to parents and teachers to support a child's acquisition and use of skills. The program included strategies for training and coaching school staff to effectively implement OST-T2, as well as guidelines to adapt strategies to meet the needs of each school's uniquely diverse student body. Student sessions addressed four key organization challenges:

- tracking assignments
- managing materials
- managing time
- planning for long-term assignments

Each session included cognitive framing to promote a growth mindset; teaches a specific skill that addresses one of the four organizational challenges; provides opportunities for practice of skills; and prepares students to practice skills between sessions. Parents and teachers receive consultation to help students practice skills between sessions.

Our study findings indicated that:

- Participation in OST-T2 results in immediate and short-term improvement in OTMP skills and homework performance among students in grades 3-5.
- OST-T2 is effective when delivered in a school setting by well-trained and supported school professionals as a small-group, Tier 2 intervention.
- Participation in OST-T2 appears to improve academic performance for a limited number of students;

students with OTMP deficits and academic skills difficulties likely need targeted academic skills training in addition to OST-T2.

- The effects of OST-T2 were lower, although still perhaps meaningful, nine months after intervention when students advanced to the next grade level. Ongoing sessions to continue the practice likely would be useful to maintain the benefits of the program.

Additional research is needed to investigate whether OST-T2 can be effective under routine school conditions that can be supported by schools over time.

Next Steps

Our team is examining whether students respond differently to the intervention based on grade level, resources of the school, and child characteristics such as the presence of ADHD and level of child anxiety. Further, we will examine whether the quality of intervention implementation by school professionals and the degree of engagement by participating students has an effect on outcomes. Our team will also complete a cost effectiveness analysis to examine the cost of implementing OST-T2 in relation to student outcomes.

Improving the OTMP skills of students likely will have important downstream effects, including improved study skills and academic performance in middle and high school, which will increase the likelihood students stay in school and achieve social and occupational success in adulthood. In addition, training school professionals to provide the intervention on their own will substantially increase the capacity of schools to offer this intervention.

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Project Leads

Thomas Power, PhD



[Jennifer Mautone](#)
PhD, ABPP

Jenelle Nissley-Tsiopinis, PhD

Team



[Alex Holdaway](#)

PhD

Jaclyn Cacia, MS, CCRC

Phylicia Fleming, PhD

Abbas Jawad, PhD, MSc

Russell Localio, PhD

Shannon Ryan, PhD

Funders of Project

Institute of Education Sciences

Project Contact

Jennifer Mautone

MAUTONE@chop.edu

Related Tools & Publications

- [Multi-informant Assessment of Organizational Skills: Psychometric Characteristics of the Children's Organizational Skills Scale \(COSS\)](#)
[Article](#)
Apr 2024
- [School-based Organizational Skills Training for Students in Grades 3-5: A Cluster Randomized Trial](#)
[Article](#)
Oct 2024