

BACKGROUND

Executive functioning refers to a person's ability to plan, organize and regulate their emotions in order to engage in functional tasks (Barkley, 2004). Kids and Teens with difficulty in this area often struggle with managing their daily routine, tasks at school or extracurricular activities and engaging socially.

Providence Children’s Development Institute provides therapy to many children and young adults with deficits in executive functioning skills that impact their ability to carry out age-expected daily tasks. Children receiving these services often have diagnoses such as autism, intellectual disability.

This clinic provides group summer intensives addressing a variety of impairments. However, this program is unique in that there are no other hands-on programs designed for teens with executive functioning deficits to gain these life skills. Other programs exist in the community but meet the needs of different populations. The therapists at this clinic saw a need for a program that promoted executive functioning skills in a real-life collaborative community-based environment, and thus the plan for a coffee cart intensive was developed.

PROGRAM DETAILS

Clients/Participants: Teenagers with deficits in executive functioning.

Goals: The main objective of this intensive program is to provide teenagers with the opportunity to improve social skills and executive functioning through practice implementing strategies for money management, meal planning, communication with customers and peers, safety awareness and following multi-step instructions within the context of meaningful experiences. Due to the real-life activities included in this intensive, the skills developed during this program can be easily transferrable to roles at school, home and work.

The first 3 sessions will consist of 2 group members an OT and an SLP for a 1:1 client to therapist ratio. After the 3 preparation sessions, teens will participate in 4, 4-hour sessions with a group of 4 peers to operate coffee cart. OT and SLP will be present for 4-hour coffee cart sessions for a 2:1 client to therapist ratio. The clinic plans to carry this program forward in future summers using the funds generated from the coffee cart to help sustain the program.

FOCUSED QUESTION

How can executive functioning deficits be addressed in a community-based intensive group treatment program for teens using a client-centered, evidenced-based approach?

METHODS

A literature review was conducted to evaluate the existing research that has been conducted involving group treatments for children and youth with executive functioning deficits. 7 articles were selected and included in the literature review. 2 level I articles, 3 level II articles, 1 level IV and 1 level V were included in the literature matrix. Preliminary evidence in support of group programs for executive function was obtained through the literature review. Research has demonstrated that group interventions for children and youth with deficits in executive functioning demonstrate preliminary effectiveness (Levanon-Erez et al, 2019).

Support from the program came from a charitable foundation within the Providence Children’s Developmental Institute. All of the proceeds from the coffee cart will be put back into the foundation to sustain the coffee cart program in future years.

Research was conducted into existing community programs. Therapists identified what other programs exist in the community and how their participants needs and their overall objectives differ from those of the coffee cart program at PCDI.

An itemized list of all supplies was developed. Therapists made efforts to obtain sustainable items as much as possible. The process for obtaining the Oregon’s food handler’s license was also evaluated as well as available accommodations for people with disabilities to take the food handlers test..

Regular meetings were held to plan and develop the program. At each meeting Megan Volk and Cherie Swain utilized a planning timeline to check track progress towards meeting deadlines and progress towards the objectives of the program. Other providers collaborated during meetings as needed to provide input and support.

A virtual presentation was given to the staff at the clinic on the evidence examined during the literature search and the program plan. The presentation included PowerPoint slides with an overview of each study reviewed and its bottom line for this program as well as OT practice in general.

A pre and post participation survey was developed to gain information about the child’s needs as well as their independence with participation in functional activities at home and in the community before and after participating in the program. Questions about parent’s overall satisfaction were also included.

RESULTS

This program will be carried out by 1 OT and 1 SLP with assistance from volunteers as needed. Teens will participate in 3 1-hour sessions prior to intensive to take the state Food Handler’s Test and train for daily job specific roles to operate the coffee cart. Visual recipes were developed to train the teens on preparing the various drink and food items. Each 1 hour session will consist of 2 teens, 1 OT and 1 SLP for a one-to-one therapist to patient ratio. During the weekly intensives, clients will participate in coffee cart group for 4 days Tuesday through Friday from 9-12. Participants will prepare their cart in the morning, serve coffee and food for 2 hours and use the final hour to clean up their space and debrief.

There will be 3 roles within the coffee cart. Teens will rotate between roles as appropriate. Each role includes the following:

- 1.Order Taker:** Order takers will greet the customer, write the number of drinks or food items on order sheet, ask the customer their name and write it on the top of the order sheet and pass the order to the cashier.
- 2.Cashier:** Cashiers will add the totals for the customer’s order and let the customer know their total, take the customer’s money and thank them, pass the order sheet to an order preparer, tell the customer where they can wait and what will happen when the order is ready.
- 3.Order preparer:** Order preparer’s will follow the drink preparation steps and make sure to follow drink order sheet correctly, check for any food items on the order sheet and put food item in separate bag, call the customer’s name and let them know their order is ready, thank the customer, wipe off order sheet and bring it back to the order taker.

An evidence table was developed and shared with the team outlining the existing evidence in this area. Treatment outlines were developed outlining each session leading up to the intensive. Worksheets to be used during the intensive to manage each client’s order.

A parent handout was developed including the objectives of the clinic and providing information on the evidence behind this group. An additional home program handout was developed to provide parents with more background on executive functioning, how these deficits impact their child’s ability to carry out every day activities as well as accommodations and activities they can incorporate at home.

BOTTOM LINE FOR OT

While more evidence in this area is needed, there is preliminary data supporting the use of skills-based group treatment programs for children and youth with deficits in executive functioning.

The steps taken to develop this program as well as the plan that has been developed can be used to inform other practitioners who are considering implementing a similar program.

These steps include:

- Needs Assessment
- Obtaining funds for group
- Literature Search
- Planning the structure of the group
- Research into state requirements for food handlers license
- Planning an outline for each session (3 weekly 1 hour sessions, 4 daily 3 hour sessions)
- Developing handouts to promote the group and to provide helpful information to families
- Developing a list of needed items and obtaining items
- Finding children at the clinic who would be eligible to participate and evaluating them (OT and SLP) to assess readiness for the program and the amount of support they will need during the program

REFERENCES

Barkley, R. A. (2004). Attention-deficit/hyperactivity disorder and self-regulation: Taking an evolutionary perspective on executive functioning. In R. F.Baumeister & K. D.Vohs (Eds.), *Handbook of self-regulation* (pp. 301–332). New York: Guilford Press.

Levanon-Erez, N., Kampf-Sherf, O., & Maeir, A. (2019). Occupational therapy metacognitive intervention for adolescents with ADHD: Teen Cognitive-Functional (Cog-Fun) feasibility study. *British Journal of Occupational Therapy*, 82(10), 618–629. <https://doi-org.cuhsl.creighton.edu/10.1177/0308022619860978>