

A product of the American Occupational Therapy Association's Evidence-Based Literature Review Project

Social skills training with parent involvement may benefit children with Attention Deficit/Hyperactivity Disorder (ADHD), especially those on stimulant medications

**CITATION:** Frankel, F., Myatt, R., Cantwell, D. P., & Feinberg, D. T. (1997). Parent-assisted transfer of children's social skills training: Effects on children with and without attention-deficit/hyperactivity disorder. *Journal of the American Academy of Child and Adolescent Psychiatry*, *36*,1056–1064.

**LEVEL OF EVIDENCE: IIA1a** 

## RESEARCH OBJECTIVE/QUESTION

Compares the results of children administered a training procedure with those of a waitlist control group.

Hypothesis: (1) The group receiving treatment will show significantly greater improvement than will a waitlist control group; (2) treatment gains will be evident for children with ADHD for whom stimulant medication was prescribed as well as for children without ADHD, and (3) children diagnosed with oppositional defiant disorder (ODD) will benefit from the social skills training.

#### **DESIGN**

RCT	Single case	Case control
Cohort	Before–after	Cross-sectional

RCT = randomized control trial

Non-RCT (2 groups: treatment group and control group)

#### SAMPLING PROCEDURE

	Random	Consecutive
Χ	Controlled	Convenience

## **SAMPLE**

N = 74	M age = NR	Male = 57	Ethnicity: 63 = White, 1 =	Female =
			African American, 3 = Asian, 3 =	17

	Latino	

NR = Not reported.

Participants were between ages 6 years, 11 months and 12 years, 11 months.

- Treatment group: 49 children (37 boys, 12 girls)
- Waitlist group: 24 children (19 boys, 5 girls)

### PARTICIPANT CHARACTERISTICS

- Children were attending at least 2nd grade.
- Children with a diagnosis of ADHD who did not have stimulant medication prescribed were not included in the study (but participated in treatment).

# MEDICAL DIAGNOSIS/CLINICAL DISORDER

ADHD, ODD

## **OT TREATMENT DIAGNOSIS**

N/A

## **OUTCOMES**

Social skills

Measures	Reliability	Validity
Structured Diagnostic Interview (ADHD Clinic	Y, Agreement 87.9%	Υ
Parent Interview)	for ADHD Kappa =	
	.80), 95.5% for ODD	
Social Skills Rating System	NR	NR
Pupil Evaluation Inventory (PEI)	NR	NR

NR = Not reported.

## **Outcome—OT terminology**

Psychosocial skills and psychological components (social and self-management)

# Outcome—ICIDH-2 terminology

**Impairments** 

### INTERVENTION

Social skills training

## Description

- Child sessions (e.g., conversational techniques, techniques of group entry, techniques
  of persuasion and negotiation, coached play, competitive games, discipline and
  rewards)
- Parent sessions and child socialization homework

### Who delivered

- Psychologist
- Licensed social worker

## Setting

Clinic setting

### Frequency

1 hour per week

### **Duration**

12 weeks

### Follow-up

N/A

#### **RESULTS**

- Analyses of variance revealed a significant main effect for socioeconomic status
   (SES) [F(1, 68) = 5.77, p < .05]. This indicated that the mean SES for the treatment
   group was significantly higher than that of the waitlist group. The group X diagnosis
   interaction was significant for PEI Withdrawal baseline scores [F(1,67) = 6.73, p <
   .05]. No other baseline variable, measurement interval, or demographic variable
   reached significance (p > .05).
- The analysis of the parent-reported Assertion and Self-Control subscales revealed significant main effects of treatment [F(1, 50)] = 11.12, p < 0.1 and F(1, 37) = 3.12, p < .05, respectively]. The treatment group showed significantly greater improvement on both of these scales than did the waitlist group.
- The analysis of the Withdrawal scale revealed a significant group X diagnosis interaction using the presence of ADHD as the diagnostic factor [F(1, 63) = 5.84, p < .05]. Newman–Keuls post-hoc statistics revealed that the treatment group without ADHD was significantly better than the waitlist group without ADHD, but the treatment and waitlist groups with ADHD did not differ significantly.</li>
- The analysis of the Aggression scale revealed a significant main effect of group [F(1, 47) = 5.29, p < 0.5]. Inspection of means revealed that the treatment group was significantly greater than the waitlist group.</li>
- No other main effects or interactions were significant for the above analyses (p > .25) and the analysis of the Likability scale (p = .06 for group main effect, all other p values > .25). The main effect and interactions with presence/absence of ODD were not significant.

#### CONCLUSIONS

The present study, using parents to aid transfer of their child's social skills treatment, confirmed 2of the 3hypotheses. The treatment group was superior to the waitlist group on the Aggression and Withdrawal teacher-reported scales and on the Assertion and Self-Control parent-reported subscales. The effect size for all scales except Hyperactivity and Inattention were large and indicated that at least 82.4% of children in

the treatment group were better off than the average child in the waitlist group after treatment.

- The second hypothesis was partially confirmed: Children with ADHD showed comparable gains on all measures except the PEI Withdrawal scale. The reasons for the lack of improvement are unclear.
- The third hypothesis was confirmed. In contrast to previous research, children with ODD showed treatment generalization comparable with that of children without ODD.
- Children in the treatment group did not demonstrate significant advantage over the those in the waitlist group on the Hyperactivity and Inattention Scales.
- The results of this study demonstrated that socially rejected children may benefit substantially from social skills training when their parents are trained to facilitate transfers of treatment effects.
- The results suggest that children with ADHD are best helped by a combination of social skills training for themselves, training for their parents, and stimulant medication.

### LIMITATIONS

### **Biases**

Χ	Attention	Masking/blinding	Χ	Drop outs
	Contamination	Co-intervention		

Terminology used in this document is based on two systems of classification current at the time the evidence-based literature reviews were completed: *Uniform Terminology for Occupational Therapy Practice—Third Edition* (AOTA, 1994) and *International Classification of Functioning, Disability and Health (ICIDH-2)* (World Health Organization [WHO], 1999). More recently, the *Uniform Terminology* document was replaced by *Occupational Therapy Practice Framework: Domain and Process* (AOTA, 2002), and modifications to *ICIDH-2* were finalized in the *International Classification of Functioning, Disability and Health* (WHO, 2001).

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For more information about the Evidence-Based Literature Review Project, contact the Practice Department at the American Occupational Therapy Association, 301-652-6611, x 2040.

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