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Skills for Life: Promoting Social Participation in Preteens and Teens With Autism Spectrum Disorder

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Occupational therapy practitioners in both clinical and school system practice are working with increasing numbers of children and adolescents with autism spectrum disorders (ASD). A key barrier to inclusion in school and community contexts for these children is deficits in the performance area of social participation (American Occupational Therapy Association, 2008; American Psychiatric Association, 2000). Research has shown that deficits in reciprocal social interaction skills hinder children and adolescents with ASD from establishing relationships at home, at school, and in the community (Barry et al., 2003) and supports the use of social skills groups as one way to encourage appropriate social development for these young persons (Rogers, 2000). This article provides an overview of the development, implementation, and evaluation of a 10-week social skills program for young adolescents with ASD.

Program Development

Before beginning the social skills group, the needs of young adolescents with ASD were identified. A comprehensive literature review was conducted and an informal checklist based on this review was created to guide subsequent observations of both adolescents with typical development and adolescents with ASD. In addition to using the informal checklist, the observers took field notes. The information gained was compiled into a table to compare the key differences observed in social skills between the two groups (Table 1).

The literature review also identified effective methods for teaching social skills to adolescents with ASD, such as the use of video modeling, social scripts, printed cues and schedules, and visual representation of concepts (Ganz, Cook, & Earles-Vollrath, 2006; Laushey, Heflin, Shippen, Alberto, & Frederick, 2009; Rogers, 2000). All the information gathered before program development was used in deciding how to accomplish the overall goal of the group, which was to foster the development of appropriate social skills in young adolescents with ASD.

To make the goals more specific to the participants, one therapist interviewed all the participants and their parents individually before

the first group session. This interview focused on participant strengths, current levels of interaction with peers, interests, behavior challenges, and parent and participant goals for the group. This information subsequently was used to identify specific goals that were priorities for the entire group (e.g., being supportive of one another, using eye contact and facial expressions to communicate). In addition, the program was designed to meet each student's strengths and abilities. After being with the participants for 2 weeks, one additional goal specific to each individual participant was identified and discussed with that participant. For example, one participant spoke so softly that it was difficult to hear him, so his sharing of positive statements was not effective. Thus, speaking louder became his individual goal.

Location and Participants

The program was conducted once a week for 10 weeks in an outpatient center for children with ASD. Interested participants were carefully screened to build a well-matched group of peers. The screening process included phone calls and in-person parent and client interviews to identify peers of similar ages, conditions, and functional levels. The final group consisted of four boys 12 to 13 years of age with high-functioning autism or Asperger disorder. Each boy had a similar goal of wanting to become friends with peers. The group was funded through a fee paid directly by each participant's parents.

Strategies To Encourage Successful Learning and Participation

To encourage participation and support learning throughout the 1-hour sessions, the group facilitators used a variety of strategies. First, the program included an array of visual techniques, such as visual representations of group rules, individual goals, and positive statements placed around the room. When deciding group rules for the session, the facilitators identified the first four rules, which revolved around safety of self, others, and the room. Participants then were encouraged to think of additional rules. These rules were written on a large poster, which was placed in the same location each week. To encourage and assist participants in making positive statements to one another, sample statements (e.g., "nice work," "cool") were posted as a visual reminder.

Another visual support helped group members learn about facial expressions and how to match their expressions to the situation. A

Table 1. Observations of Peer Interaction Behaviors of Children and Young Teens With ASD Compared to Peers With Typical Development

Children and Young Teens With Typical Development Behaviors	Children and Young Teens With ASD Behaviors
Support peers through encouragement and positive statements.	Have difficulty supporting peers through positive statements.
Demonstrate language common among their peers.	Use language common among their peers rarely.
Demonstrate initiation of conversation.	Have difficulty initiating conversation.
Participate in reciprocal social interactions and perceive nonverbal cues.	Have difficulty with reciprocal social interaction and perceiving nonverbal cues.
Use humor and physical contact when talking with peers.	Have difficulty using humor and physical contact in an appropriate manner when talking with peers.
Demonstrate an understanding of personal space when talking with peers.	Have difficulty in understanding personal space boundaries.
Maintain eye contact during a conversation.	Maintain eye contact during a conversation rarely or not at all.
Show emotion and changes in facial expression.	Demonstrate limited or unusual emotion and facial expression.
Speak with inflection in the voice.	Speak with inappropriate voice inflection
Adapt and adjust to changes in routine.	Have difficulty adjusting to changes in routine or schedule.
Speak with friends on the phone often.	Speak with friends on the phone rarely or not at all.

concept called “changing your screen” emerged as the result of participants’ interest in “screen talk” (i.e., video games, movies). This phrase, which was referred to throughout the sessions through verbal cuing from the group facilitators and in the form of a poster of a television screen with a face and a body, helped participants to identify appropriate times to change their screens in order to match their facial expressions to the situation.

This particular visual became a favorite of the participants. Not only did they understand it, but also it became a stimulus for social conversation. For example, one participant commented that the picture on the poster looked “creepy.” The other boys agreed that it was weird or silly. Similar conversations often ensued and led to longer ones about a variety of subjects.

Another visual support frequently referred to was a rewards chart, which helped participants to monitor how many points they needed to earn an end-of-group party. They could earn points in two ways. First, they could earn a point by making a positive statement during snack time. The participants were encouraged to refer to the poster of positive statements to help them achieve this goal. Second, participants could earn points by completing their weekly homework.

In addition to using visual supports, other sensory-based strategies, including proprioceptive and auditory techniques, were used throughout group sessions to improve successful participation by all participants. Each session started with a sensory-based snack (e.g., crunchy, salty, or sour foods), and optional transitional activities involving proprioceptive input (e.g., jumping jacks, chair push-ups) were added as needed throughout each session to assist participants in achieving optimal arousal levels and to support participation. Alternative seating devices, such as exercise balls in place of chairs, also were offered, with the stipulation that they would be taken away

if they became a distraction (e.g., bouncing into others or around the room). Finally, the sessions were held in a quiet therapy room with the door shut to decrease potential distractions.

Group Sessions

Routines and environmental structure were used to create a sense of comfort in the sessions. A schedule of each session was posted on a white board and the other visual reminders of the goals and rules were posted around the room as previously described. The general structure involved two activities specific to the lesson of the day and one optional transitional activity that involved movement for sensory input. Although activities changed, the general schedule was as follows:

1. Snack talk
2. Introduction of the day’s topic(s)
3. Activity one
4. Optional transitional activity
5. Activity two
6. Review
7. Weekly homework and parent letter distribution
8. Dismissal

Each session began with “snack talk” to allow participants to start with a predictable activity and for slight variations in arrival time. During this time, participants sat at a large table and shared conversation and sensory-based snacks. Cards with pictures of activities, facial expressions, or words were available on the table to serve as visual prompts to facilitate discussion. Snack talk also provided opportunities for participants to learn about socially appropriate mealtime skills, such as eating slowly and considering others when taking portions of food.

After snack talk, the topics and related activities for that day’s session were introduced. Topics for each session were chosen based on participant goals as well as parent and leader input about appropriate social skills for this age group. Topics included, for example, eye contact, voice modulation, and body language. Appendix A shows a sample lesson plan and activity handout related to making a phone call. For this activity, participants used cell phones and practiced making plans with peers.

All activities conducted throughout the sessions were based on effective teaching methods identified in the literature review. Activities included use of visual aids, such as studying pictures of peers with typical development and identifying facial expressions. Other activities included giving participants social scripts to read and practice and then videotaping them acting out the scenarios. These videos were played back as a way of helping them to identify areas of success and areas in need of improvement. Emphasis was placed on the use of age-appropriate activities, such as talking on the phone or playing common games such as UNO® and Apples to Apples® (Mattel Inc., El Segundo, CA) to facilitate understanding and acquisition of age-appropriate social skills. In addition, physical play was incorporated into activities. For example,

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when working on conversation skills, participants played zoom ball, a game where participants make a ball move back and forth on two strings by alternately separating their sets of handles. Like zoom ball, a conversation is successful only when both individuals participate and take turns.

Session Review, Homework, and Parent Letters

Each session ended with a review of its topics and activities. Participants were encouraged to share what they learned that day and positive observations about their peers. Additionally, visual displays that tracked targeted behaviors were reviewed, and positive social accomplishments during the session were highlighted. Then, homework, designed to reinforce the lesson of the day and to support skill generalization across environments, was distributed. The top of each homework page included a brief sentence about the social skill topic addressed during that session. Homework often included practicing the skill learned in that particular session (i.e., asking a family member about his or her interests). Along with the homework assignment was a page for the participant to fill out regarding completion of the activity. Upon dismissal, parents were given a letter summarizing the topics and activities from that session, the homework assigned, and the next week's topic. Appendix B shows a sample homework page.

Outcomes

Parent perception data, facilitator ratings, and participant input were used to evaluate the success of the group. To measure parent perception, each parent was given pre-program and post-program questionnaires that asked him or her to rate the frequency of his or her child's performance on a variety of social skills, such as introducing himself to a peer, showing interest in others' opinions, asking appropriate questions during a conversation, and exhibiting appropriate sportsmanship. The same questions were asked at both times. After each group session, facilitators rated participants on behaviors similar to those rated by the parents, as well as on the use of positive statements, energy level, and participation during snack talk. The results of the facilitator ratings helped to guide weekly topics and were compared at the completion of each group session. During the last session, participants were given a questionnaire asking what they had learned and about their perceptions of the group experience.

Improvements in participants' social skills were reported by both parents and facilitators. Even more impressive was that each participant could clearly identify at least one goal that he had accomplished during the program. Further, all participants indicated that they enjoyed coming to the sessions and would be interested in attending another social skills program. Their perfect attendance over the 10 weeks reflected their interest and involvement in the group and provided further evidence of the value of this approach.

Conclusion

The overall success of this social skills group lends merit to the continued use of similar groups to assist with social skill development for adolescents with ASD. Carefully planning strategies to meet the various needs of this population as well as addressing group goals and more-specific individual goals were important factors that contributed to this program's success. Parent dedication, group cohesiveness, leadership consistency, and participant input also were important to success. As the population of children and adolescents with identified ASD continues to grow, occupational therapy practitioners will have increasingly important roles in designing and implementing social skills groups to assist these individuals in participating successfully in their home, school, and community environments. Further, such programs could be extended to older teens with the focus on transitioning from high school to the post-school environment. ■

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Appendix A

Sample Lesson Plan: Making a Phone Call

Activity Goals

- Learn how to ask questions and to make responses using a phone.
- Learn how to invite someone to do an activity and to decide on a place and time to meet.

Materials Needed

- Cell phones, matching the number of participants.
- "Making Plans With Friends" work sheet.
- Pen or pencil.

Activity: Making a Phone Call

- Introduce the topic using a social story as a means of teaching the group reasons teens talk on the phone. For example, a social story might emphasize that (a) talking on the phone is one way of communicating with friends and (b) teens make phone calls to ask a friend to "hang out."
- Discuss the reasons why people make phone calls, what things are hard about phone conversations, and what to do when making a phone call (e.g., greeting, making plans, and ending the conversation).
- Model a phone conversation with your teaching assistant.
- Hand out the "Making Plans With Friends" work sheet and go over the instructions for this activity.
- Have participants practice making and receiving phone calls with one another.
- Help participants discuss what went well and what could be improved upon in future calls.

Making Plans With Friends	
GREETINGS	_____
WHO	_____
WHEN	_____
WHERE	_____
WHAT will you do?	_____
PHONE NUMBER	_____
E-MAIL	_____
ENDING (goodbye)	_____

Appendix B

Talking on the Phone Homework

This week, we practiced our conversation skills using cell phones, focusing on our voice and listening skills.

Now you can *call someone you know*, such as a family member or a friend, and practice your phone skills.

- You can ask about his or her day or weekend, and you can tell him or her about yours.
- You can make a plan to meet (including the activity, time, and place).

Remember to begin and end the conversation appropriately (e.g., "Hi, is Tim there?" "It was nice talking with you. I will see you soon, bye").

1. Did you complete this assignment?
 - a. Yes
 - b. No, because _____
2. Who did you call? _____
3. What did you talk about? _____

(If you made plans with the person, write the activity and the time and place you will meet the person.)

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