Research Summary Organization for Autism Grant 2013-2015

A Peer-Facilitated, Multi-component Social Skills Group Intervention for Adolescents with ASD Principal Investigators: Robert Koegel & Ty Vernon

As children grow up and enter the adolescent years, they are faced with increasingly challenging and complex social situations. They must learn to master the art of interacting with individuals and groups, make and maintain friendships, avoid social embarrassment, build self-confidence, and prepare for adulthood. Ongoing social interaction with others becomes a powerful teaching tool that allows adolescents to gradually build their set of social skills through constant practice and trial-and-error learning. In time, many typically developing individuals become better at interacting with other people by learning from their mistakes and accumulating experiences.

Unfortunately, adolescents with autism spectrum disorder (ASD) are not as likely to find success during peer interactions. Because of their use of less effective social strategies, they are more likely to be ignored or even teased and rejected by their peers. This creates a dilemma: these adolescents cannot socially improve without practice, but they cannot practice social skills without a peer group that will accept and include them. Without these crucial experience-based social learning opportunities, it is unlikely that adolescents with ASD will feel accepted or be adequately prepared for the pending social challenges of adult life.

The purpose of the current research study was to develop and evaluate a 20-week social skills program for adolescents with ASD that would provide them with both (a) interactive instruction in key social skills and (b) opportunities to gain social experience within a safe, accepting peer environment. This was the basis of the Social Tools And Rules for Teens (START) program.

The START program consisted with several promising social skill instruction innovations. In addition to using college-aged social group facilitators, the program also included typically developing high school peer models/mentors. These same-aged peers served as social partners, provided valuable insights into high school social life, shared their social experiences, demonstrated how they used different social skills, and gave personalized feedback to the participating adolescents with ASD.

Another component of the START program was the use of individually tracked social skill targets. In addition to the general group social skill lessons, each adolescent was given the opportunity to track their use of a specific social skill that was identified as a crucial ability for that individual person. For one person, that skill might be asking more questions. For another, the skill might be sharing more personal information. Yet another person might need to work on sharing *less* personal information. Each individual was taught to self-manage (track) their use of a particular skill while socializing with others in the group. As they demonstrated mastery of a certain skill, it was replaced with another skill that warranted attention. The use of self-management ensured that the program could address the unique individual needs of each of the 36 participants even though they were part of a larger group intervention.

The groups also made use of an individual check-in session and a check-out session with a parent. These sessions allowed the social facilitators to privately discuss any difficulties that the adolescent was having within or outside of the group and develop a plan to address these issues without embarrassing the adolescent. These times also allowed the facilitator to set

social challenges with the adolescents and parents to be completed over the following week. Finally, they served as a way to introduce and summarize the group session topics.

METHODS

The participants of the project were 36 adolescents (ages 12-17) with a diagnosis of ASD. One parent per adolescent also participated the weekly checkout session (last 10 minutes of the session) and completed measures of social progress.

In order to make sure that any social improvements that were observed could be attributed to the social program and not other events or factors in the adolescents' lives, all participants were randomly assigned to one of two groups. One group participated in the program, while the other was placed on a waitlist. This strategy allowed us to compare the two groups at the end of 20 weeks to more accurately determine the impact of the START program. In the end, all of the adolescents on the waitlist also participated in the program to ensure that everyone benefited from the curriculum.

Each week, the adolescents participated in a two-hour session. Adolescents first completed an individual check-in session with a college-aged social facilitator. Next, they joined the group free socialization time with the facilitators and high-school peers. This time was allowed to unfold without an agenda and was intended to create a natural, comfortable social environment Topics were brought up by the participants and often included video games, favorite foods and places to eat, school and current events, vacation and weekend plans, and memorable personal experiences. Food and refreshments were provided during each group to aid in the creation of a casual, club-like atmosphere. While conversing with one another, the participants and social facilitators kept track of their use of individual target skills through self-management. The high school peer models and the college-aged facilitators also participated in this self-management process to ensure that every group member was held to the same expectations. It was explained that everyone can continue to improve in their social skills.

After approximately 20 minutes, the group transitioned into a group social activity. These activities varied each week, but generally resembled commonly used team-building activities and party games. This phase was intended to foster sharing of personal information, encourage learning about peer interests, increase comfort in the group, and promote cooperation and teamwork. They were selected to be highly enjoyable and motivating to increase the engagement of the group participants. Other benefits included opportunities to work on effective communication, compromise, teamwork, and sportsmanship skills.

After the activity phase, the social facilitators then introduced the week's social skill topic, which was discussed for the remaining time of the group session. After a brief introduction of the target skill, the topic was then modeled by the social facilitators in a series of two brief role-plays—one "bad" example demonstrating poor implementation of the skill and a follow-up "good" example depicting proper use of that particular skill. Social facilitators then discussed the main points of the topic and illustrated them by describing relevant personal experiences. The adolescent participants were then encouraged to contribute to the topic—discussing their experiences related to that topic and providing their own suggestions regarding the successful use of a particular social skill. Finally, for the last five minutes of the group, all participants practiced the related skill with a partner. A written curriculum of key points and sample stories and scripts were used to structure and guide these discussions. This portion of the group was intended to increase understanding of a social skills topic and provide opportunities to both observe and practice the skill. Social skills topics covered included: making introductions, maintaining a

conversation, respectfully disagreeing, and group interactions. At the end of the group, individual checkout sessions were conducted with each participant and parent.

In order to determine if the program was successful, a number of techniques were used to measure social improvement. These measures were administered prior to starting the START program and after every five weeks. These social measures included parent ratings of their child's social skills and difficulties, adolescent ratings of their own social skills and difficulties, and the use of video-recorded conversations completed before, during, and after the program. The survey measures included both established tools in the field of autism research (the Social Skills Improvement System [SSIS] and the Social Responsiveness Scale, Second Edition [SRS-2]) and an experimental new survey tool (The Social Competence & Motivation Scale). In each video-recorded probe, the adolescents with ASD met separately with both male and female social partners (who they had never met before) and engaged in two five-minute "get to know you" conversations. These video-recordings allowed the researchers to carefully observe and track changes in their use of effective social skills. Also, these videos were also shown to outside observers to see if they endorsed differences in the social skills of the adolescents before and after they completed the program (without actually knowing that the individuals they were rating had an autism diagnosis or that they were part of a social skills program).

RESULTS

Adolescents in the immediate treatment group experienced significant increases in parent and self-report ratings of social competence (an average of a 13.8 point improvement in standard score on the SSIS and a 15.0 point increase in raw score on the SCMS) and a significant decrease in ratings of social impairment (a 7.6 point reduction in standard score on the SRS-2). Follow-up surveys administered 20 weeks after the group was over indicated that their social skills continue to improve with time even though they were no longer participating in weekly sessions.

When video-recorded conversations of the participants were analyzed, the majority was noted to increase in their use of key social skills, including overall statements made and questions asked to their social partner. Additionally, 97% of individuals that were in the immediate treatment group received higher social ratings from outside observers, whereas there was no significant improvement was noted in the waitlist group.

DISCUSSION

Both parents and the participating adolescents provided survey endorsements that indicated that the program was highly effective in rapidly increasing social skill use and comfort in social situations. Because the follow-up surveys revealed that the socialization scores continued to increase, it suggests that the program provided the adolescents with the necessary skill foundation to be able to seek out new social experiences and learning opportunities on their own.

The video-recorded conversations provided additional evidence that the START program was highly effective. The fact that observable social skills increased and that outside observers saw improvements adds important evidence that the program achieved its intended objectives. While parent and adolescent surveys of social skills are often used to evaluate social programs, individuals and their family members do not always possess the most accurate, objective picture

of the adolescent's social skill use. Adding video-recorded measures and the impressions of outside observers ensures that everyone (even people not related to the adolescent) note an improvement. This is very important, because we want everyone who interacts with the participants in the future to also view them as a desirable social partner. This improvement in social skills and comfort is crucial for the challenges of adult life – forging and maintaining new friendships, interviewing for desired jobs, and pursuing romantic relationships.

Life is social. Maximizing an adolescent's ability to feel confident and competent in a variety of social situations helps to ensure that their social vulnerabilities do not hold them back from the tremendous potential that each of them possess. This OAR-funded evaluation of the START program yielded important outcomes that suggest that this novel experience-based social program was highly effective in increasing the social competence of adolescents with ASD.