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Social Emotional Learning in Young Children with Autism Spectrum Disorder

Brittany A. Dale, Kristin Rispoli, and Lisa A. Ruble

Abstract

Interventions for young children with autism spectrum disorder (ASD) often focus on reducing negative behaviors or increasing the frequency of positive behaviors. Little discussion, however, focuses on the underlying mental health and developmental factors or ancillary skill deficits that may be contributing to problem behaviors. With social emotional standards built into the educational system, schools are uniquely positioned to provide social emotional support and instruction to students with disabilities, especially children with ASD. Often, Individualized Education Programs (IEPs) of preschool and early elementary school children with ASD focus on state academic standards rather than the social-emotional needs often associated with the underlying core symptoms of ASD that are the true driver of “educational need” in the school setting. This manuscript provides a framework for incorporating social emotional learning (SEL) goals into the IEPs of young children with ASD. The family-school partnership approach, including effective relational (i.e., communication, collaboration, parent-teacher relationship/alliance) and structural (i.e., behavioral supports, home-based involvement) components (Sheridan et al., 2019) will be emphasized to meet the mental health and developmental needs of children with ASD via pivotal SEL goals across home and school environments. We conclude with a case study of the COMPASS parent-teacher consultation intervention for improving SEL outcomes through shared parent-teacher decision making and collaboration for SEL goal selection, individualized intervention planning, teacher coaching, and outcomes-based monitoring.

Keywords: *autism, social emotional learning, young children*

The social emotional learning (SEL) needs of young children with autism spectrum disorder (ASD) are often poorly understood. SEL skills include being able to recognize and regulate one's own emotions, developing insights into how emotions affect one's thoughts and actions, working collaboratively with others through positive communication and conflict resolution, taking the perspective of others and developing empathy, and developing skills to engage in critical analysis of topics (Oliver & Berger, 2020). State educational boards have developed their own set of standards, and although they vary from state to state, most reflect the core goals of developing self-awareness, developing positive relationships, and demonstrating positive decision-making skills. With the core deficits of ASD related to social communication skills, it is not surprising that children with ASD often require additional support beyond the general social-emotional curriculum implemented in schools. Therefore, it is imperative for children with ASD to have Individualized Education Program (IEP) goals that directly relate to their social needs (National Research Council, 2001). IEPs of students with ASD, however, often fail to include the critical SEL goals necessary for positive developmental outcomes (Ruble et al., 2010). Analysis of IEPs showed that many fail to include goals associated with the characteristics of autism that are both predictive of post-school outcomes and critical for school success (Findley et al., 2021). IEP-based instruction in social, communication, and learning skills promotes opportunities for addressing pivotal development of self-initiation (e.g., asking for help), problem solving (e.g., staying calm when routines change or using alternatives to aggression), and self-regulation (e.g., completing an undesired activity). This manuscript focuses on the importance of developing individualized educational goals for young children with ASD that focus on enhancing their SEL in school. Schools and families must partner together to improve the SEL outcomes of children with ASD, and we discuss this partnership through the COMPASS consultation model.

Social Emotional Needs

Vasa and colleagues (2020) described the “mental health crisis” in children with ASD and found that the most common behaviors children engage in which are defined as crises are elopement and self-injurious behaviors. Although behavioral functioning is an important aspect of mental health, it is often the only area of mental health discussed in young children with ASD. The social and emotional needs of young children extend beyond these maladaptive behaviors and encompass building prosocial early social communication skills necessary to function within the school environment. Moreover, understanding the emotions that underly the maladaptive behaviors is critical for meeting the needs of these students in the classroom.

Young children make substantial gains in social and emotional skills during the preschool period. Specifically, they learn how certain facial expressions symbolize specific emotions in others, how their behaviors elicit emotions from others, and that individuals may feel a certain way given a specific situation (Cole et al., 2009). They also come to school with joint attention, imitation, and turn-taking skills. When young children lack these social and emotional skills, as is common for children with ASD, externalizing behaviors can occur. Specifically, frustration and aggression in social situations have been linked to deficits in understanding and overall negative emotionality (Trentacosta & Fine, 2010). Emotional regulation is another important skill that determines the social success of young children. Emotional regulation includes the ability to self-soothe, recognize one’s own emotional state, and continue in activities in the face of negative emotions (Berkovits et al., 2017). Studies have shown that young children with ASD (ages 3-10) have lower rates of emotional regulation compared to typically developing peers (Konstantareas & Stewart, 2006; Jahromi et al., 2012). Berkovits and colleagues (2017) studied the relationship between emotion regulation in children with ASD and their social and behavioral

skills. They found that emotional dysregulation was generally stable throughout preschool and early grade school for children with ASD, and that this dysregulation was likely the core of the behavioral problems seen during this period. This research highlights the need to incorporate SEL goals into the IEPs of children with autism.

Oliver (2018) identifies several social emotional skills required for academic success including emotional awareness, problem solving, teamwork, decision making, and conflict resolution. School-based SEL programs focus on building a student's skills as interacting effectively with others through developing appropriate self-regulation, social awareness, decision-making, and relationship building skills (Denham et al., 2012). State educational boards have developed standards that are incorporated into the general curriculum, and schools are expected to create programming that aligns with these goals. Ideally, children will benefit from the SEL curriculum implemented in the school setting. However, with the skills targeted in these programs often presenting as core deficits for children with ASD, these skills must be taught through targeted interventions that integrate evidence-based instructional and developmentally appropriate practices for children with ASD. Moreover, the heterogeneous presentation of ASD requires SEL curriculum to adjust to the individual social needs of the child (Sansosti, 2010).

Children with ASD vary in their ability to benefit from standardized social emotional training programs. Ryan and Charragain (2010) found that children with ASD improved their facial recognition skills through a structured intervention program. Other research indicated children with ASD who have comorbid intellectual disability did not gain emotion recognition skills from a structured intervention program (Williams et al., 2012). Findings from these studies highlight the need for individualized social emotional programming adapted to the needs and strengths of children with ASD. This programming should align with targeted goals established through the student's IEP.

Teacher-Parent Collaboration

Teachers and parents are ideally positioned to identify and support the mental health and SEL needs of young children with ASD given their frequent interactions, high levels of familiarity with children's social and emotional skills, and direct knowledge of the areas of challenge and unique demands of the school and home contexts. Indeed, family-school interventions are effective at addressing children's SEL needs, with meta-analytic research suggesting moderate effects on both social-behavioral and mental health outcomes (e.g., internalizing issues; Sheridan et al., 2019). Collaboration between teachers and parents is critical to coordinate strategies to address SEL needs of vulnerable young children with ASD, and to capitalize on the specific expertise that both teachers and parents bring to discussions about children's SEL needs and supports.

Both structural and relational components are evident in research-supported family-school interventions that target children's SEL needs. These components associated with positive effects for children include home-based involvement in the provision of social-emotional programming, behavioral supports, the parent-teacher relationship, and collaboration (Sheridan et al., 2019). The first two of these components comprise the structural aspect of family-school interventions, or the "what" that is done to address children's concerns and/or build their skills. The remaining two components reflect the relational aspects of family-school interventions and focus on the interplay between parents and teachers as they attempt to address children's mental health and SEL needs together across the home and school settings. Collaboration includes activities such as co-creation of student goals and intervention plans, sharing responsibility for implementing these plans, and jointly and intentionally monitoring student's progress toward social-emotional goal attainment (Sheridan et al., 2010; 2017).

Family-school interventions provide a comprehensive path to addressing the complexity of the co-occurrence of ASD symptomology and mental health difficulties (Ruble et al., 2012a). The presentation of ASD is complicated and frequently evolving. A comprehensive approach to meeting children's needs must coordinate home, school, and community providers such as caregivers, behavioral therapists, psychologists, physicians, and teachers. A strong focus on coordination and team-oriented service provision is warranted to adequately address skills that enable success in the school environment and long-term social-emotional competence.

The Collaborative Model for Promoting Competence and Success (COMPASS; Ruble et al., 2012a) is a research-supported family-school intervention that focuses on implementing high-quality IEP goals and intervention plans to help children meet SEL goals through shared-decision making across the home and school settings. COMPASS engages parents, special education teachers and other relevant school team members in a collaborative, individualized, problem-solving process to identify communication, social, and learning/work skill goals specific to the child's needs as well as underlying behavior interfering with positive developmental outcomes. Goals are targeted through mutually-developed supportive intervention strategies and teacher coaching across a full school year. COMPASS employs a consultation-based approach, meaning the focus is on transferring skills from the consultant to the parent and teacher in supporting children's skill building well beyond the conclusion of the 9-month intervention. The COMPASS process includes an initial consultation with the child's parent and teacher to identify personal/environmental challenges and supports, identify measurable goals, and develop evidence-based intervention plans for each goal. Following the initial consultation, four coaching sessions are implemented throughout the school year which include feedback on children's goal attainment, assessment of implementation fidelity, and adaptation of teaching plans as necessary.

The COMPASS model includes the structural and relational components of family-school interventions associated with positive effects on social-emotional skills. COMPASS intervention plans target social-emotional and behavioral goals, or structural components, providing teachers and parents with specific steps for implementing evidence-based practices to target these skills. Fidelity to implementation of these goals is monitored throughout the school year, and consultants provide teachers and parents with feedback on their implementation during each coaching session to maximize the quality of teaching plan implementation.

Relational components, or the parent-teacher relationship and collaboration, are central to COMPASS. With respect to the latter, the COMPASS process embeds shared decision-making and goal planning, as the consultant invites parents and teachers to provide structured input on the child's strengths and needs, coordinates identification of priority areas of need during the consultation process and guides the group in making decisions on adaptations to teaching plans depending on student progress throughout the coaching sessions. Parents and teachers must therefore work together to agree upon goal foci, the strategies to address each goal, and how to proceed if teaching strategies need to be altered throughout the coaching process (Ruble et al., 2012a). The former component, the parent-teacher relationship, is cultivated through the consultant's use of collaborative language and facilitation of egalitarian group processes and effective communication throughout the COMPASS process. In a previous trial of COMPASS, parent-teacher alliance was correlated with parent reported IEP goal outcomes ($r = .55$, $p < .001$). Further parent reported IEP outcomes correlated with teacher report of IEP outcomes ($r = .44$, $p < .001$) and objective assessment of IEP goal attainment change ($r = .245$, $p < .05$; Ruble et al., 2021), underscoring the critical nature of the parent-teacher relationship in child outcomes following COMPASS.

Evidence of positive effects of the COMPASS model suggests it is efficacious in providing individualized support for the SEL needs of children with ASD in a manner that is well-integrated into the curriculum and school services. COMPASS has been tested through three randomized controlled trials targeting children in the elementary and high school grades. Results suggest children's skills on IEP goals in the areas of social, communication, and work/learning skills were 1.5 to 2 times greater at the end of the year, following COMPASS participation (Ruble et al., 2010, 2013, 2018). Students with ASD are unlikely to fully benefit from Tier 1 SEL supports and instead will require targeted or individualized (Tier 2, Tier 3) evidence-based strategies to equip them with the SEL skills needed to manage mental health challenges. These supports are primarily available outside of school systems, such as through specialized clinics and hospitals, creating a service gap that impedes children's educational progress. COMPASS uses a well-defined model to coordinate implementation of evidence-based practices to build the SEL skills of young children with ASD in the school setting in a manner that is aligned with regular implementation of special education services (i.e., through the child's IEP). Table 1 provides sample COMPASS goals aligned with state SEL standards and highlights how the deficits of ASD align with SEL. To illustrate COMPASS in action, we provide a case study example.

Table 1. *State SEL Standards and deficits in ASD*

Standard and Examples	Related ASD Impairments	Sample COMPASS Goals
Develop self-awareness and self-management skills: recognize and label emotions; impulse control; identify one’s own likes and dislikes; identify strengths in others	Theory of mind/ perspective-taking Executive functions Emotional recognition	Will independently use visual cues and gestures to initiate requesting asking for help or asking for objects, activities or food strengths 4 times a day. Student will make a choice when presented with one preferred and one non-preferred object 4 of 5 opportunities over a two-week period. When offered a nonpreferred item, Student will say “no” by tapping/giving a “no” card 4/5 trials over 1 week.
Use social awareness and interpersonal skills to develop and maintain positive relationships: recognize that others may experience situations different than oneself; use listening skills to identify the perspectives of others; describe positive qualities of others; identify ways to play well with others; demonstrate appropriate social behavior in the classroom; identifying and resolving conflicts between peers	Theory of mind/ perspective-taking Emotional processing Early social skills of joint attention, imitation, play Social reciprocity and turn taking Receptive / expressive language / listening and conversing Central coherence / not comprehending the whole context	Will engage in conversational turn-taking through 4 turns (back and forth as 1 turn) with peer(s) and in a structured group, staying on topic with visual prompts 4 of 5 times a week. When a peer initiates an interaction, Student will verbally respond independently (without adult prompts) 4 of 5 opportunities during 2 structured small group situations 4 of 5 consecutive sessions. Student will imitate actions with 5 different objects with a peer and with peer prompts 5 times each day over a two-week period.

Standard and Examples	Related ASD Impairments	Sample COMPASS Goals
Demonstrate decision-making skills and responsible behavior: identify social norms; explain why certain acts might hurt another person; make positive choices when interacting with others; be a good citizen of the classroom	Impaired comprehension and use of nonverbal signals Central coherence / not comprehending the whole context Theory of mind / perspective-taking Abstract concepts like “good citizen”	In academic activities Student will independently use the strategies of asking for help and a relaxation routine to stay calm (rather than tearing up work and walking out of room) in order to finish the activity 8 of 10 selected activities for one week. When given the direction to wait or walk with teacher (rather than elope), Student will stay within arm’s length of adult or wait for 1 minute with written and/or visual cues twice a day for ¾ times / week. Given a teacher directed lesson, Student will raise his hand (rather than yell out the answer), wait to be called on, and give his response to a teacher question with visual cues for 4 of 5 consecutive sessions.

Note: Adapted from Illinois Learning Standards and Instruction, Social/Emotional Learning Standards <https://www.isbe.net/Pages/Social-Emotional-Learning-Standards.aspx>. *Theory of Mind* is defined as the ability to reflect on and reason about one’s own and other’s perceptions, knowledge, etc. *Executive function deficits* include poor inhibitory control, mental inflexibility, poor working memory, difficulty shifting attention to a new topic, difficulty initiating behaviors, etc. Weak central coherence refers to the tendency of children with ASD to focus on a particular detail rather than seeing the whole picture.

Case Study: Sam

Background Information

Sam is a 5-year-old Caucasian boy diagnosed with autism at age 2. He attends an inclusive preschool program 12 hours a week. His teacher has taught for 18 years and has received numerous professional development opportunities such as training in TEACCH, PECs, ABA, social stories, video modeling, etc. She notes that the biggest challenge working with students with ASD is cohesion and consistency in implementing intervention plans across all team members, especially teaching assistants.

Child Assessment

Sam received a cognitive, language, and adaptive behavior assessment. Sam required assistance throughout the assessment in terms of physical prompting, verbal cuing, environmental arrangement, and work-reward routines. He tried repeatedly to escape, made vocalized grunting sounds, and pushed items away to indicate 'no' or 'stop.' His teacher remained close by and assisted with reminders and verbal cues. Eventually the work-reward routines were successful and task engagement improved. Sam's performance on initial cognitive and language assessments indicated abilities in the low range on general cognitive, receptive and expressive communication, socialization, and daily living skills (≥ 2 standard deviations). He required assistance throughout the assessment including physical prompting, verbal cuing, environmental arrangement, and work-reward routines.

Initial Consultation: Review of COMPASS Profile and Setting Goals

Both Sam's mother and teacher completed the COMPASS profile prior to the initial consultation meeting. During the meeting, the team discussed information about the purpose of COMPASS,

expected outcomes, philosophy, and overview of best practices. The discussion began with a review of Sam's strengths and interests, for identifying reinforcers and motivators to use in his intervention plan. Sam has many preferences including music and singing, tactile input from hugs, deep touches, and rough play, rocking, swinging, and running. He has a very strong and circumscribed interest in small animals that could be held in his hands. His mother described this as "obsessive" and interfering with activities at home. His mother also reported that he has strengths in responding to and engaging in joint attention with adults, identifying pictures, and using pictures to understand work routines, the daily schedule, and making requests.

Much of the discussion, however, focused on Sam's personal challenges. Challenges include personal management and adaptive behavior skills, such as responding to others, and group social skills. Fears and frustrations include going to new places, being told no or being denied a request, or being asked to complete a new task that he does not understand. The frequency, severity, and intensity of problem behaviors reported from home and school greatly concern his parents. His teacher reports that he aggresses toward others more than 12 times daily on average. Hitting occurs, but not as much as pinching. The problem behaviors are so severe that his teachers are concerned about the safety of the other students in the classroom and therefore feel that an adult should always accompany him. His aggression results in attention to keeping him and his peers safe; therefore, he has limited to no opportunities to be independent and to learn how to interact with other children in the classroom.

Review of Sam's communication means (how he communicates) and functions (why he communicates) indicates that he uses physical means to communicate all messages. For requests, he moves adults to the objects and activities he desires by taking them by the hand. To express refusals, confusion, and feelings of anger, he yells, hits, scratches, and sometimes shakes his head

“no.” He uses a Boardmaker picture to communicate “finished” and to choose activities when requested. The consultant helped the participants understand the connection between his problem behaviors and lack of communication skills. The consultant made notes to ensure that communication skills related to requests and refusals would be addressed as a priority.

A review of teacher and parent reports of social skills indicated that Sam has weaknesses in most areas of early social development including imitating, turn-taking, and playing with other children. Most interactions involving children are limited and, as mentioned, he has few opportunities to learn interaction skills because of teacher’s concern for peers (although he has never hurt a peer). The consultant made notes on these concerns so that the team could include social skills as a priority in the teaching plan and considered as replacement behaviors to the aggression.

The teams discussed Sam’s learning skills next. His teacher reports that he does not start or complete any tasks independently. Often when presented with an undesired task, he sometimes aggresses. Teaching assistants often sit beside him, physically prompting him to complete tasks. They created a choice board from which he can choose work activities. The consultant reminded the participants that if Sam did have the ability to start and complete undesired tasks, then problem behaviors would decrease.

At the conclusion of reviewing the COMPASS profile, Sam’s mother and teacher both reported concerns with peer interactions and aggression. Sam’s teacher also reported issues with developing adaptive and independent skills. All concerns reported by Sam’s teacher and mother confirm the issues brought out using the review of the COMPASS profile and noted by the consultant. Because of concerns of aggression, the team focused on understanding the reasons for Sam’s behaviors. The consultant hoped to help Sam’s teacher and parent understand that with better work skills, communication skills, and social interaction skills – that is, the underlying SEL and replacement skills, Sam’s aggression

should decline. A visual template of an iceberg helped facilitate the discussion of Sam's problem behaviors. Descriptions of Sam's behaviors appeared at the top of the iceberg. These include hitting, pinching, and slapping. Below the iceberg, the team generated reasons for the behaviors as identified from the review of the COMPASS profile. Three primary functions were hypothesized: (a) wanting a desired activity or object and being told "no;" (b) wanting to be finished with an undesired activity; and (c) wanting to say "no" to a request to start an activity. Further contributors to behavior included Sam's personal challenges of lack of negotiation skills that stem from communication problems, a lack of understanding the impact of his problem behaviors on others, and a lack of motivation to "please" others. Additionally, the consultant encouraged the team to identify replacement skills, those underlying social-emotional skills that Sam lacked. As a result, the team identified potential prosocial and replacement skills for aggression, specifically those that focused on peer interaction and initiating requests. After much discussion, the following replacement skills and teaching objectives were identified and written as measurable IEP objectives (Table 2). Due to space, we limited our case study to one goal (social) with the corresponding intervention plan. Table 2 also describes the challenges and supports for Goal 2 to consider in the intervention plan.

Table 3 lists the strategies and environmental supports included in Sam's intervention plan. The teaching sequence included descriptions of (a) pre-teaching activities Sam needs to be successful, (b) plans to develop a meaningful teaching activity that is related to the skill, (c) strategies to obtain and maintain Sam's attention, (d) reminders for prompting and cuing with allowance of a sufficient amount of time for responding, and (e) reinforcement, correction, and maintenance/ generalization strategies (Table 3).

Table 2. *Sam’s COMPASS Objectives, Challenges and Supports*

Objectives

1. When presented with a work activity, Sam will start and complete four, 2-3 minute tasks daily without aggression and with 1 adult verbal cue (e.g., time to work) and picture cues across 2 weeks.
2. During structured play with an adult, Sam will imitate actions with objects for 5 minutes with at least 3 different preferred objects (dinosaurs, animals, doll) without aggression each day across two weeks.
3. Sam will initiate 10 different requests per day independently (go home, eat, help, more, finished, various objects/activities) using sign, pictures, or verbalization daily.

Challenges and Supports for Goal 1: During structured play with an adult, Sam will imitate actions with objects for 5 minutes with at least 3 different preferred objects (dinosaurs, animals, doll) without aggression each day across two weeks.

Personal Challenges

Lacks joint attention skills with most adults and all children

Lacks motivation to please others

Lacks motivation for many objects/activities

Personal supports

Likes animals and small animal toys he can hold in his hand and hand puppets

Has better receptive compared to expressive language skills

Can imitate some actions with objects (drink from a cup) with adult

Likes praise and hugs

Environmental challenges

Is in an integrated setting with a lot of other students

Physical distractions in the environment

Living arrangements at home have changed and are unstable

Environmental supports

Mother and teacher want same outcomes

Teacher and assistant know Sam well

Has many social peers in his classroom

See teaching plan for specific supports and strategies to teach this skill

Table 3. *Sam’s intervention plan*

Teaching Plan	Description
Pre-teaching activities and other considerations:	<p>Refer to the Evidence-based Online Resources for Teachers, especially those on discrete trial training, prompting, and peer-mediated instruction.</p> <p>Assemble objects that Sam likes. Decide if you would like to use two identical objects so he can see what to do while simultaneously doing it or use one object with which to take turns.</p> <p>Develop a communication board with Boardmaker or photos that Sam can pair with desires/needs</p> <p>Make sure that the team is clear on the method he needs to use to indicate the request (for instance, picture with verbalization or picture only). If he is not making requests independently or is being taught to request new items, he may need a second person who prompts him from behind when requesting with a picture.</p> <p>If Sam is taking turns imitating with one object, two objects are not needed. Twirling and spinning things are highly preferred and interfering. They are not used to work on this skill, but might be used as reward if he understands when to give them up. Keep the toys that are allowed for spinning and reinforcement separate from those being used to teach appropriate use and imitation.</p>

Teaching Sequence

Meaningful and goal-directed activity to teach the skill:	Identify activities, objects, and other items that Sam likes and would be motivated to imitate (small animals; hand puppets)
Teacher/peer/environment cues to get and maintain his attention:	Set up activity with materials (pictures) and preferred objects to start. Get Sam's attention "Sam, look" and imitate an action with the object (make a plane fly, a bear walk, a dog run, a rabbit hop, a car roll, etc). Be creative and try out different things.
Initial request (verbal, picture, gesture) from teacher/peer/environment:	Give the object to Sam and cue him "You do it" or a phrase you prefer to use to verbally cue him to perform the action with the object. If he has the same object you might say, "Let's play, do this."
Pause between each cue (3-5 seconds) for student to respond after initial and following prompts:	After the initial verbal and visual cue to start, pause and allow him time to respond. Use a system of least prompts and avoid physical assistance as much as possible. As long as he is watching, give him time to respond, otherwise cue him to look.
Reinforcement for successful completion:	If he does the behavior, reward him with smiles, humming, and/or acknowledgment; if not, repeat from the second step.
Correction strategies:	If he does not respond, show him the reward card and cue again. Repeat one more time. If no response, wait 15 seconds then shorten activity so he sees he has to do 1 or 2 steps for reward.
Maintenance and Generalization	Generalize the verbal cues to include phrases paired with a gesture of holding a hand out to indicate "my turn." Once the skill is mastered with one adult, generalize the skill to other adults and then begin to include a peer.

Coaching Sessions

After the initial consultation that established the goals and intervention plans, the consultant created a Goal Attainment Scale (GAS) for each goal and conducted coaching sessions. Figure 1 shows Sam’s GAS that was used for progress monitoring during each coaching session that took place about every 4 to 6 weeks. The following four activities took place during each coaching session: (a) observe Sam demonstrating each targeted skill/objective/goal (this could also be from a video); (b) review the GAS and score Sam’s progress; (c) complete the Teacher Interview for Coaching Form for each objective; and (d) complete summary activities.

Table 1. Sam’s Goal Attainment Scale

-2 Present levels of Performance	-1 Progress	0 Expected level of outcome (GOAL)	+1 Somewhat more than expected	+2 Much more than expected
Has difficulty imitating others, especially children using actions with objects. Likes objects he can manipulate.	Sam will imitate play activities for five minutes with at least three different preferred objects (dinosaurs, animals, doll...) each day across two weeks	Sam will imitate adult play activities for five minutes with at least three different preferred objects (dinosaurs, animals, doll...) each day across two weeks.	Sam will imitate adult play activities for five minutes with at least three different preferred objects (dinosaurs, animals, doll...) each day across two weeks.	Sam will imitate adult (peer) play activities for five minutes with at least three different preferred objects (dinosaurs, animals, doll...) each day across two weeks

Over the four coaching sessions, the teaching plans were adjusted based on Sam's progress, engagement with instruction, and teacher input. At the first coaching session, Sam's teacher set up the teaching situation. Sam watched his teacher and imitated actions with two different objects, a toy dog and bird. However, his play with the bird became repetitive as he flicked its wings repeatedly. For the second coaching session, the consultant observed Sam and his teacher imitating and taking turns with a dog puppet. Sam was smiling, following his teacher's directions of what to do with the object, and readily taking turns with the object by handing it back to his teacher when she used a verbal and gestural (hand extended outward) cue. During the next coaching session, the consultant observed Sam playing a role in a skit about Brown Bear. He took a turn in the role of Brown Bear and was cued to hold a large cutout of a circle in front of his face. He responded well, was a part of the group, and was doing what the other children were doing. This was the first time Sam was involved in a whole group activity with his peers. During the last coaching session, Sam's teacher used video to capture naturalistic interactions and instruction that occurred during regular classroom routines (rather than setting up a situation when the consultant was there). In one clip, Sam was sitting on the floor with a baby doll and other toys. Two children sat next to him. Infrequent interaction occurred between the two other children and Sam, but it was clear that the children were comfortable being around Sam, and Sam was showing more awareness of the other children. In the second video clip, Sam was sitting on a chair next to the sandbox where all the children were playing and using a scoop to put sand in a container as the other children were doing. Figure 2 shows Sam's progress over the school year.

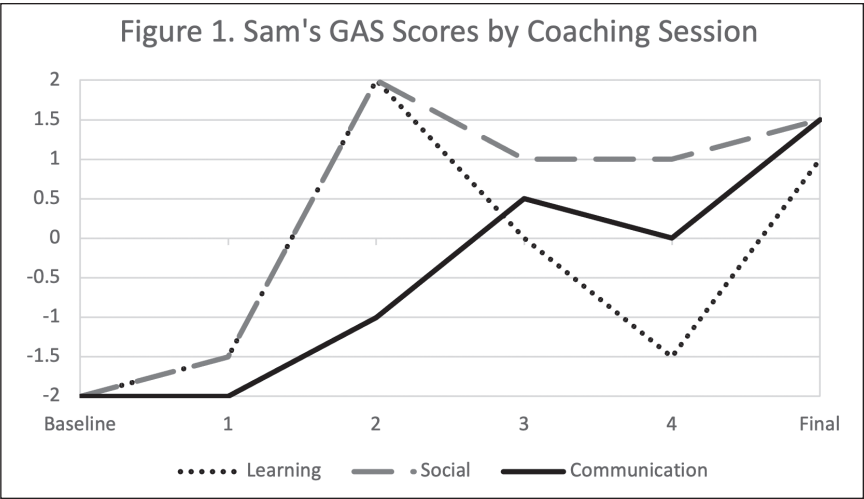


Figure 1. *Sam's Progress Graph*

Reviewing Sam's progress over the four coaching sessions and at final evaluation at the end of the school years shows that he exceeded his annual goal above expectations for all the goal areas. Nevertheless, progress was not linear. At coaching session 3, following the holiday break, Sam's progress dropped. At the next coaching session, 4, he continued to have some difficulty but was maintaining some skills. By the end of the year, however, his skills increased across the three learning domains. Most importantly, Sam's aggression (hitting others and pinching) disappeared. By the second coaching session in February, Sam had exhibited no aggression during the previous six weeks. His teacher reported he was accepting redirection and "no," and was able to work on 4-5-minute-long tasks without aggression. At the third coaching session, his teacher reported she was beginning to make transition plans for next fall and wanted to generalize skills to different conditions (adults/classroom). At the final assessment, Sam rarely exhibited any aggression, and his teacher was quite pleased with his progress working with other adults. She provided a video of Sam participating in a "Little Miss Muffet" role play activity where

he carried a big spider and walked next to a peer pretending to be Miss Muffet and sat down beside her. She stated that Sam had exceeded her expectations.

Conclusions

Deficits in social emotional skills often underlie the maladaptive behaviors that are typically targeted through school-based interventions. Unfortunately, the IEPs of children with ASD often ignore these foundational social skills in favor of academic goals. Given the characteristics of autism, children with ASD might not make the same gains from school wide SEL programs as their typically developing peers. Therefore, young children with ASD should have SEL goals incorporated into their IEPs. Research-based family-school interventions offer a promising approach to supporting development of social-emotional competence aligned with school-based SEL programming. The COMPASS model is a research-supported family-school consultation intervention that provides school teams with a framework for individualizing goals to enhance SEL for young children with ASD, in a way that complements existing Tier 1 SEL curricula and the special education service provision system. Teams should consider the use of research-supported family-school consultation for the delivery of individualized supports to enhance the SEL of young children with ASD in school settings.

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