Promoting Social Reciprocity in Younger Children with Asperger’s and HFA

A significant issue for children on the autism spectrum is a lack of social or emotional reciprocity, which includes such problems as inappropriate or limited responses to the approaches of others, and limited offers of comfort shown towards others. Let's look at two examples:

Kaci enjoyed going to the hardware store with her father. She could easily locate the items on the shelves, loved to sample the free snacks often available, and figured out the correct change while in the check-out line. However, when the cashier spoke to Kaci and tried to make small talk, Kaci generally did not look at him, did not answer his questions, and sometimes made a remark completely off the topic, but one that was of interest to her.

Similarly, Sarah was walking outside with her grandfather on a cold winter day when her grandfather slipped and fell on the ice. Sarah clearly was aware something was not quite right, as she immediately began to scream. But, she did not ask her grandfather if he was okay or offer to help him as a “typical” youngster her age probably would have done.

From infancy on, “typical” kids show the motivation to engage in joint actions with others (e.g., sharing, playing, talking, etc.). The ability to successfully interact with a peer develops from basic to more advanced levels during the course of early childhood. The first signs of parallel activity emerge at around 2 years of age when groups of toddlers can be seen playing in each other’s proximity and involved in the same type of activity. Gradually, “typical” kids develop the ability to behave in a complementary manner with their playmates. Basic reciprocal behavior can be observed when kids start equal turn-taking and object-sharing.

At about 3 years of age, shared themes (e.g., collaboratively building a house with Legos) among peers emerge. “Typical” kids also begin to understand that playmates have rights as well as intentions to consider. During middle childhood, more advanced, collaborative reciprocity emerges. By then, “typical” children fully understand other’s individual goals and intentions. In addition, they have gained the skills and motivation to share emotional states with one another (e.g., joy, sadness). This sharing of intentions involves the structure for basic and complex reciprocity. It enables these young people to play in more complicated ways (e.g., building a sandcastle together, making a joint drawing) with each youngster participating to achieve a common goal. Collaboration not only depends on the youngster’s increasing cognitive skills, but also on his or her emotional functioning. The willingness to interact, to negotiate, and to emotionally connect with peers are important facilitators for collaboration.

While typically developing kids are attentive to others and show social behaviors at a very early age, children with Asperger’s (AS) and High-Functioning Autism (HFA) often exhibit difficulty engaging in social interactions throughout their lifetime. Many researchers consider “social-interaction deficits” to be the core deficit of AS and HFA.

Impairments in social interaction associated with AS and HFA may include:
• absence of or limited imitation skills
• absence of or limited use of gestures (e.g., pointing to share enjoyment with others)
• deficits in nonverbal behaviors (e.g., eye-to-eye gaze, facial expression, gestures) to regulate social interaction
• deficits in showing (i.e., directing attention)
• difficulties understanding the facial expressions of others
• difficulties with or complete lack of initiating social interactions with others
• failure to develop peer relationships appropriate to developmental level
• lack of friendship-seeking behavior
• lack of interest in peers
• lack of responding to social initiations made by others
• lack of responding to the emotions of others
• lack of social or emotional reciprocity
• lack of spontaneous seeking to share enjoyment and interests (e.g., a lack of showing, bringing, or pointing out objects of interest)

Research has also shown that the social interactions of AS and HFA children are significantly different from those with other developmental disabilities (e.g., Down syndrome). Some children on the autism spectrum have been found to be less likely than those with other developmental disabilities to orient to social stimuli, to respond to the social bids of others, and to initiate social interactions with others (e.g., same-aged peers and adults).

In order to help children on the autism spectrum to better connect and collaborate with others, social skills must be taught. Unlike typically developing children, these skills do not develop instinctively in AS and HFA children.

**Methods to promote social reciprocity:**

1. **Balanced Turn Taking:** Balanced turn-taking entails the youngster and parent participating in a balanced, back and forth interaction to increase the length of attention and engagement. This can include the following:

   • **Playful Construction**— Example: The youngster is exhibiting a repetitive behavior of spinning the wheels on a car. The parent can ask for a turn to spin the wheels, suggest the youngster spin the wheels fast or slow, or use a pretend play scenario like spinning the wheels during a car wash. In this scenario, the parent constructs a repetitive behavior into a reciprocal interaction. The main goal here is to turn something the youngster is doing in solitude into a social interaction.

   • **Playful Negotiation**— Example: If the youngster asks for juice, the parent will not simply give the child juice. The parent will try to stretch the interaction as long as possible by (a) making comments or questions with expectations for a response (e.g., “I don’t know where the juice is – do you?”), (b) having the youngster follow directions (e.g., “Show me where to get the juice”), and (c) asking for clarification (e.g., “What kind of juice do you want?”). Here the parent is trying to encouraging back and forth interactions during problem-solving situations.
- Playful Obstruction—Example: The youngster is heading towards the back door to go outside. The mother runs to the door to get there first and block the doorway. In this way, the youngster must go through the mother to go outside. The mother may use playful obstruction by moving from one side of the doorway to another turning it into a game, or may simply lock the door to encourage the youngster to communicate with words or gestures to tell her to open the door. In this scenario, the mother obstructs the youngster’s activity to promote a reciprocal interaction.

2. Behavioral Momentum: Motivation is maintained as easy activities or responses are embedded within more difficult or challenging tasks. Easier activities create more opportunities for reinforcement. Varying the difficulty allows the youngster to experience success while also being challenged. Interspersing difficult or new activities with relatively easy components promotes successful interactions, creates more opportunities to get reinforcers, and limits frustration.

Examples:

- A boy is learning shapes. While playing with a shape sorter, the mother has the youngster say the name of each shape before putting it in the sorter. After every few shapes, the mother has the youngster just find a particular shape rather than have to say the name.
- The youngster is beginning to use the phrase “I want” when requesting. She and her father are playing with Legos. The father places the Legos out of reach (environmental arrangement) and when the youngster tries to get them, the father models “I want the Legos.” The youngster says, “I want the Legos” and receives them. A moment later, the youngster reaches for more Legos and says, “More Legos.” The father reinforces her request and hands her more Legos.

3. Contextual Support: This strategy involves the parent positioning herself to maximize face-to-face interactions with the youngster, following his lead to enhance engagement, and identifying materials, actions, and objects that are interesting to him and at his developmental level.

Example:

Ronnie: Playing with his toy cars.
Mom: "Wow, I want to play too" (following Ronnie’s lead).
Ronnie: Shows one of his toy cars to his mother.
Mother: "Yes, you have a car." Mother gets face-to-face and asks, "Which car can I have?"
Ronnie: Gives his mother a blue car.
Mother: "Thank you. I like this one, but I want to have 2 cars."
Ronnie: Gives his mother another car.
4. **Contingent Imitation**: This involves imitating the youngster to promote reciprocal interactions.

Examples:

- The youngster is spinning the wheels on a toy truck. The mother spins the wheels on the truck too. Once the youngster engages with the mother as a response to the mother imitating the youngster, the mother initiates balanced turn-taking by taking turns spinning the wheels, or uses modeling imitation by changing from spinning the wheels to pushing the truck and encouraging the youngster to imitate.
- The youngster is opening and closing the doors to a pretend house. The father opens and closes the door to encourage the youngster to engage. Once the youngster is engaged in some back and forth interactions with opening and closing the door, the father can use modeling imitation to encourage the youngster to display other play skills with the pretend house.
- The youngster is banging a toy on the table. The parent takes another toy and bangs it on the table to encourage the youngster to attend and respond. Once reciprocal interactions are taking place, the parent begins lining up the toys and uses modeling imitation.

5. **Environmental Arrangements**: Environmental arrangements increase the frequency and type of opportunities for the youngster to communicate by doing things like placing desired items out of reach to encourage social communication, interrupting a sequence of activities, giving only a small amount of a desired item, or doing something unexpected or different when interacting with the youngster. Arranging the environment can also refer to adjusting the amount of visual, auditory, or sensory stimuli in the environment to enable the youngster to function without getting overloaded.

Examples:

- If the youngster is used to a routine in which dad helps her put pajamas on and then tucks her into bed, the dad may tuck the child into bed without first having her put pajamas on to encourage interaction opportunities.
- The parent puts the youngster’s favorite videos on the top shelf of the cabinet (but still visible to the youngster) to encourage him to interact with the parent to get the desired video.
- The parent clears all of the toys away from the play area on the carpet except one or two toys to enable the youngster to focus and attend to the toys and interact with the parent while playing.
- The youngster is eating crackers. The dad only gives the youngster one at a time to encourage her to ask for more in various ways.

6. **Modeling Imitation**: Model imitation involves demonstrating words, phrases, or gestures about objects and activities the youngster is interested in, and specifically requesting him or her to imitate.
Examples:

- Parent and youngster are reading a book. The youngster likes the part when the train is huffing and puffing to climb a mountain. The parent huffs and puffs heavily like the train and encourages the youngster to do it too.
- Father and daughter are playing with a dollhouse. The father says, “The mommy is tired” and puts her in the bed. The father then gives the mommy to the youngster and says something like, “The mommy is still tired” to encourage the youngster to imitate what the father did.
- Mother and youngster are playing in the sandbox. The mother begins to fill her bucket with a shovel. She then gives the youngster a different shovel and encourages him to do the same thing she is doing.
- The youngster wants to eat some crackers, but he needs help opening the box. His mother models how to ask for help and says, “Open.” The boy imitates, “Open,” and the mother opens the box.
- A girl wants to play with the teddy bear that her father is holding. The father places a picture of the teddy bear available to the youngster and shows her how to give the picture in order to receive the teddy bear. The father also models vocally to repeat the word, “teddy bear.”

7. **Prompting and Fading**: The parent helps the youngster interact or communicate by using extra cues and supports. The parent then gradually reduces the level of support to allow the youngster to be more independent in routines and social interactions. The support can be in the form of gestures, physical, or verbal.

Examples:

- The parent is giving the youngster a bath. The parent says, “Wash your feet.” The youngster doesn’t respond, so the parent says it again and points to the youngster’s feet (and touches them). The youngster then washes his feet. Then the parent says, “Wash your legs.” The youngster doesn’t respond, so the parent says it again and points to the youngster’s legs (without touching them). The youngster washes his legs. The parent then says, “Wash your tummy” (without pointing or touching). The youngster washes his tummy.
- Father and daughter are reading a book. The father says, “Can you find the monkey in the bush?” The youngster doesn’t respond, so the father says it again and points to the monkey. The youngster then says “monkey” and points to the monkey. On the next page, the father says, “Can you find the bear in the tree?” The child says “bear” and points to the bear.

8. **Repetition**: Here the parent is providing multiple opportunities for the youngster to practice a skill that is being learned. This repetition may be back-to-back when initially learning a skill, and later becomes dispersed throughout the day to promote independence.
Example:

- The youngster is beginning to use ‘yes’ and ‘no’ to respond to questions. To practice, the parent holds up a stuffed toy and says, “Do you want the toy?” The youngster requires a prompt to respond initially, so the parents models, “Yes.” The youngster imitates by saying, “Yes,” and the parent gives the youngster the toy. A moment later, the parent takes the toy back and repeats, “Do you want the toy?” The youngster says, “Yes,” and resumes playing. A few minutes later, the parent says, “It’s my turn.” The parent takes the toy, plays with it for a minute, and then repeats, “Do you want the toy?” The child responds, “Yes.”

9. **Time Delay**: With this technique, after making an initiation or a request, the parent waits for a response using an expectant look. An expectant look may involve symbolic gestures (e.g., putting arms up to indicate confusion), body language, high levels of affect, or exaggerated facial expressions.

Example:

Father: “Michelle, look what I have!” The father uses time delay with an expectant look showing a piece of candy to his daughter.
Michelle: “It’s candy.”
Father: “Who wants this candy?” Father uses time delay with an expectant look.
Michelle: “I do.”
Father: “Oh! This is for you?” Father uses time delay again.
Michelle: “Uh huh.”
Father: “O.K. It’s yours.”

Social reciprocity is critical for the long-term success of children on the autism spectrum. Sometimes referred to as “emotional intelligence,” it is a combination of the ability to (a) understand and manage your own emotional state, and (b) understand and respond to others. Although social reciprocity includes understanding and using social conventions, it also includes the ability to (a) understand the ways in which peers communicate and interact, and (b) build interpersonal relationships.

Kids with AS and HFA do not have extensive understanding of social conventions, and often need instruction in:

- taking turns
- sharing
- shaking hands
- appropriate greetings depending on relationships (e.g., peer-to-peer, or youngster to grown-up)
- cooperation
- smiling
- giving positive feedback (e.g., praise) to peers
- appropriate and polite ways to make requests (e.g., please) and express gratitude (e.g., thanks)
- addressing teachers and other adults

Difficulty managing emotions, especially tantrums or aggression in response to frustration, is common in kids with AS and HFA. These young people commonly have difficulty with emotional self-regulation and understanding emotion. Difficulty with social situations is a component of the disorder, which reflects deficits in understanding and expression their own emotional states.

Social reciprocity needs to be explicitly taught to AS and HFA children. This requires teaching the ability to (a) identify emotions by looking at faces, (b) identify cause and effect for emotions and scenarios, and (c) deal effectively with personal emotional states.