Introduction

Social difficulties for people with autism are varied and multiple. Some are subtle and some involve severe socially acting out behavior. All involve problems with social understanding and may be affected by difficulties with attention, communication, problem solving, cognition, sensory processing, and motor problems. However, difficulties in social understanding and ability to engage in reciprocal interactions with people are basic to autism and one of the characteristics. Social isolation, lack of social inhibition, lack of social awareness, and difficulties with social timing may all be part of the picture. Sometimes children who are higher functioning learn to follow routines and rules and their social impairments are masked in a structured setting, while other children have great difficulty in group settings where they can’t manage all the stimuli. It’s vital to assess basic interaction skills in children with autism in order to build the base for future success. One of the pivotal skills is joint attention and another is imitation. Children learn through reciprocal interactions and play that involve joint attention and imitation with adults and with peers.

Let’s consider Social Skills and what they are. When we look at some social skill checklist for school age children we are often confronted with skills that mostly involve work behaviors or personal habits such as listening, following directions, sitting, organizing, attending, ignoring, taking correction, or finishing work rather than on reciprocal interactions or social understanding. There are many areas of social skill development and for children with autism most of these are challenges.

Reciprocal Social Interactions

Joint Attention

Joint attention is a basic skill that needs to be taught and encouraged in children with autism of all ages. When the child isn’t certain, or doesn’t feel supported previously acquired joint attention abilities may diminish. Time factors should also be considered in joint attention activities. The child with autism may not be moving at the pace of the other children and may have delayed initiating, responding, and processing time. Joint attention involves pre-linguistic communication skills that are used to initiate or maintain turn-taking routines and used to request or obtain help in obtaining objects or events. Joint attention is used to direct attention in order to share the experience of an object or event with another person.

Children with autism display pronounced difficulty initiating joint attention acts. They have trouble alternating eye contact between an interesting object and person or pointing or showing an object for the social purpose of sharing enjoyment. Young children with autism do better responding to social bids in structured situations. There appear to be difficulties shifting attention and monitoring the attention of a communicative partner. Children with autism often manipulate the partner (take by the hand or turn head). This may be an adaptation to compensate for difficulties in shifting attention. Children with joint attention problems do better with one partner at a time and need lots of practice in back and forth social engagement.
Joint attention is used to direct attention in order to share the experience of an object or event with another person. It involves the following:

- showing something to someone and looking for that person’s reaction
- looking at something someone else points to or is looking at, and
- pointing at something to direct someone to look at an object or event as an end in itself (this doesn’t mean that the child points at candy to get candy, but points as if to comment about the object and share this comment with a partner.)

Joint attention is important because it is a nonverbal social communication skill or a pre-linguistic developmental skill that is observed in typically developing children before the age of 18 months. Children with autism lack this skill at 18 months.

Often joint attention first occurs when a child is actively involved with an adult and a toy. The adult, child, and toy serves as a “triangle” of interaction. When the child holds a toy toward an adult and manually activates the toy while looking at both the adult and the toy in a back and forth manner joint attention is taking place. The child also engages in joint attention when she is actively involved with the toy that an adult manipulates in such a way as to change the child’s experience with the toy. In other words, when the child laughs at an adult when the adult demonstrates the toy to the child and the child reaches for the toy. This behavior indicates that the child is sharing her attention and enjoyment of an object with another person. This type of interaction can also occur with actions and when engaged in daily activities such as dressing and eating. Joint attention may often be used initially to make requests or ask for help in obtaining objects or activities. Children with autism make more requests to get a need met and comment less than other children. They are also more likely to directly manipulate a person to make a request.

Some Ideas that can be used to help with joint attention:

- Remember to look for the child alternating his/her eye gaze between an object and a person.
- Get at the child’s level at first to make it easier to shift gaze from object to face.
- Imitate what the child is doing with an identical toy or object that the child has.
- Take the toy a child is playing with and show it to her, comment, and wait for her to reach for it.
- Play with toys that draw the child’s attention to your face. (bubbles, pinwheels, balloons)
- Play with toys that draw attention to the adult’s actions. (toys that make noise and need to be activated, musical toys)
- Play with toys that facilitate reciprocal interaction (balls, blocks in a form box, a train, puppets, telephone)
- Play with toys that facilitate requests for help (a jar that is too hard to open, an favorite object out of reach, wind-up toys that are too hard to turn)
- Hold onto an object that you are giving to the child until the child looks at you. Bring it to eye level.

**Imitation**

Imitation requires attention to a partner and a motor response from the child. Attention must be gained, the message must reach the brain and tell the body what to do, then the body must respond. Time to do all this must be considered for the child with autism as well as distractions in the environment. Motivation to imitate often stems from joint attention and desire to engage in reciprocal interactions with other people. Sometimes children with autism can be
seen watching others, but they don’t seem able to figure out what to do. Sometimes they don’t watch at all and their attention must be directed. Children with autism sometimes don’t know who to watch or what they are supposed to do. Sometimes their motor problems are a deterrent. Most children do best learning imitation skills when they have one partner at a time and are directed by the partner or a facilitator. It’s often easier to imitate the movement of an object at first rather than a body movement.

A Way to Assess Joint Attention and Imitation Skills
(N. Dalrymple and L. Ruble, 2001)
Assessment of joint attention and imitation is helpful before intervention starts. Assessment should be considered across environments, people, and objects. The child needs to be observed with other children rather than only with adults. Sometimes older children with autism have not acquired or seldom use some of these skills. Note how often, with whom, and in what situations the child does the following behaviors:

<table>
<thead>
<tr>
<th>Joint Attention</th>
<th>With Adult</th>
<th>With Peer</th>
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</thead>
<tbody>
<tr>
<td>1. Looks at person when given something</td>
<td></td>
<td></td>
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<tr>
<td>2. Looks at person when giving something</td>
<td></td>
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<tr>
<td>3. Follows someone’s point when object is close</td>
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<tr>
<td>4. Follows someone’s point when object distant</td>
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<tr>
<td>5. Looks at person, looks at object person pointed to, looks back at person</td>
<td></td>
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<tr>
<td>6. Points to direct someone to look to share enjoyment, not just to desire something</td>
<td></td>
<td></td>
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<tr>
<td>7. Looks at partner in back and forth way to share enjoyment</td>
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| Imitation                                                                 |            |           |
| 8. Does same thing partner is doing with same object at the same time             |            |           |
| 9. Does same thing partner does with an object after a demonstration             |            |           |
| 10. Imitates two different movements of an object                               |            |           |
| 11. Imitates a changed movement when engaged in a repetitive game with a partner |            |           |
| 12. Imitates body movements simultaneously                                      |            |           |
| 13. Imitates body movements after demonstration                                 |            |           |
| 14. Imitates two body movements after seeing them                                |            |           |
| 15. Imitates mouth movements, sounds, or words                                  |            |           |
Sharing
A child can’t learn what sharing and taking turns means without joint attention skills. It also helps to be able to imitate. However, it isn’t necessary to understand the perspective of others to learn how to take turns and share. Sharing involves rotation or turn-taking of space, time with an object, place in line, time at an activity, or place to sit in a car. Sharing involves learning when to produce a sound, when to move, or what possession means. For instance, is it mine because I have it in my hand, because it is in front of me, or because it is in my house? If a child with autism is admonished for not taking turns or sharing, she is not likely to understand the other child’s perspective or the reasons for the need to share. A rule must be applied, rather than a problem-solving strategy.

Play
Play is defined as “pleasurable, active engagement in freely chosen activities, intrinsically motivating without external reward or demands, flexibility to change rules and be novel, non-literal” (Wolfberg from Quill Book, Teaching Children with Autism)

Play routines often encourage joint attention and imitation. Play is enjoyable and fun. Many children with autism first play by playing chase-type games. When children engage in solitary play that involves placement of objects in certain ways, reciprocity and joint attention from this type of play can be encouraged. Play is to be enjoyed and takes place at the pace of the child while encouraging choice making and expanding interests.

Pretend Play can be solitary or with a partner. It can be engaged in with objects having actual properties like drinking from an empty cup as pretend or pretending an object is something else like a block is a car. Pretending involves disengaging from reality and understanding it is pretend like Barney flying or Toy Story toys talking. It also involves transforming people and objects to roles and understanding that it is play as well as imagining and simulating feelings, desires, and beliefs; and socially coordinating play. Children engage in fantasy in middle childhood but know what is real and what is fantasy.

Additional Areas of Social Skill Development
These develop as the child grows, but need to be specifically taught to children with autism.

Emotions/Feelings
- Social referencing involves awareness of and responsiveness to emotional cues of others which develops through shared attention.
- Understanding emotional cues of others develops as children grow.
- Expressing own emotions through socially acceptable means - deal with anxiety and frustrations as well as express excitement and joy and sadness.

Perspective Taking
- Understand that other people think and feel differently from self.
- Interpret and understands feelings and emotions of others.
- Adjust actions based on this knowledge.
- Build friendships around common interests with some give and take.
- Accept explanations of fairness.
Conventions of Society
- Uses thank you, please, I’m sorry, and others as required.
- Uses greetings/closings - good bye, shakes hands, says hi, gives Hi five.
- Uses eye contact socially - when? how long? to whom?

Group Skills dictated by Environment and Culture
- Some of these might include: being quiet, raising hand, standing in line, cleaning up, using common property, sitting in appropriate place, or listening.

Some Rules of Society
- Not aggressing, but standing up for yourself
- Not threatening others because they believe you will do what you say
- Following possession and boundary rules
- Following waiting rules
- Telling the truth, whole truth? whose truth? what is truth?
- Being flexible - when? where? with whom?

Some Strategies and Interventions for Teaching Early Social Skills

1. Teach social skills like you do other skills. Write specific objectives and plan specific strategies. Provide lots of opportunity to learn across people and settings. Teach in a structured, planned way. Teach often.

   Examples:
   - Will look at the person handing an object every time he is given an object.
   - Will imitate one action that a partner does with an object/toy at the same time the person does it.
   - Will respond to a peer invitation to join an activity by engaging with peer.
   - Will play a role that has been shown to him by a peer, i.e. setting table, being fireman by putting on hat, using a puppet, or engaging in a game.
   - Will use hugging, cuddling and touching at appropriate times with appropriate people.
   - Will accept that others may want to do something different from what she wants to do and participate in problem solving routine to decide what to do.
   - Will attend to a cartoon social story depicting a real situation explaining what other’s think and feel.
   - Will initiate social contact by offering a greeting, a compliment, or asking an appropriate question.
   - Will express need to leave or withdraw from group activities appropriately.
   - Will respect boundaries, specifically - leave other people’s materials alone and ask to borrow if needed.

2. Provide structure and routine so there is predictability and comfort.

3. Teach peers to be models and encourage the skills desired. Provide peers with cues, feedback, and reinforcement.
4. Provide visual cues in the form of arrangement of materials, consistent objects and movement of objects, routines, picture cues, written cues, and any other visual information that will help the child.

5. Consider motivation. Use materials and activities of highest interest.

6. Teach skills with one partner at a time. Several children can interact with the child for the same skill, but only one at a time. Different materials might need to be used for some children.

7. Consider generalization across people, settings, and materials both while teaching and once attained in one setting. It helps to video tape and look at cues and progress.

8. Emphasize reciprocity. You want to encourage multiple exchanges even if repetitive at first.

9. Teach social routines that are appropriate to the situation and environment.

10. Develop integrated play groups that are structured and emphasize specific skills. Teach and reinforce peers.

11. Use social scripts in the form of practiced routines that have been learned through repetition and/or through use of written and/or pictured social stories.

12. Use social stories or cartoon stories.

13. Teach perspective of others through interpretation of what is occurring (TV and video are good for replaying), and through written/pictured cartoons, pictures, and stories.


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