Communication Profile for Dual Diagnosis of Down Syndrome and Autism

Information from a presentation by Liv Meriano, MSc, Speech-Language Pathologist, February 28th, 2026.

Attention and Listening:



- Autistic people can report eye contact to be taxing or stressful, so they may prefer not to. Reported feelings include: adverse reactions, being invaded, sensory overload, socially confusing, and not rewarding.[1]
    - Eye contact could look like the following: shorter or fleeting, longer or staring, side glances, looking down or focusing on the mouth, preference for looking at objects rather than people.
    - It should never be forced.
    - Eye contact is not necessary to learn language – we now know there are many different ways of "listening" and "attending" to something.
- ***Joint attention*** means sharing focus on something with another person. It plays a pivotal role in the emergence of language.
    - Autistic individuals with DS may show less back-and-forth gaze shifting and may achieve joint attention by focusing on one thing at a time.
    - Some children may acquire language without typical joint attention skills.[2]
- Supporting joint attention without eye contact can look like: following the other person is looking at, being side-by-side, and pointing out interesting things in their day.

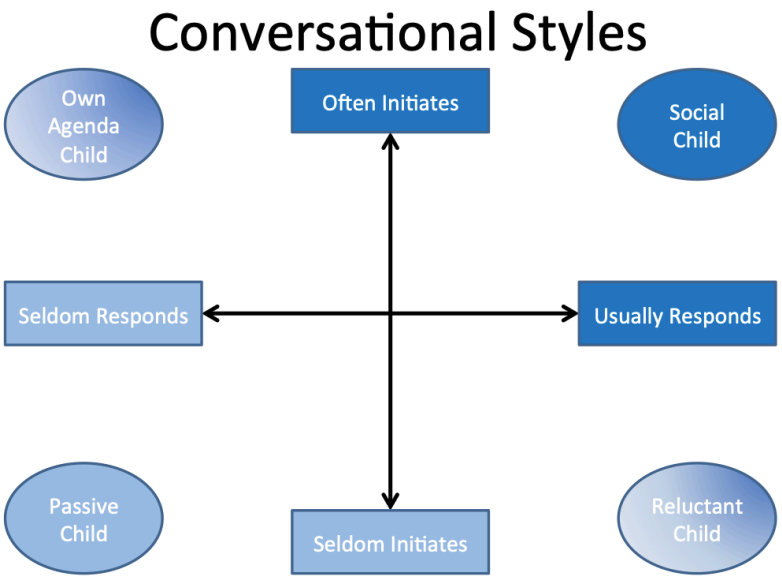
Social Interactions:

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- Autistic people can and do have meaningful relationships! Many have a genuine desire for friendship but may find making and sustaining friendships difficult, and they may need more downtime between interactions because socializing can be depleting. Being socially fulfilled may look different.
- Individuals with a dual diagnosis may have differences in their: interaction style, imitation skills, use of gestures, and experience and expression of emotions.
    - Interaction styles[3]
        - ***Sociable*** means they initiate and respond quickly, and keep trying to communicate even with a few words.
        - ***Reluctant*** means they respond more than they initiate, may need time to "warm up," and communication attempts can be easily missed.
        - ***Passive*** means they rarely respond or initiate, and may seem uninterested in people or toys.
        - ***Own agenda*** means they usually initiate only to get a need met, and often play alone, "in their own world."

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From The Hanen Program: Weitzman, E. (1992). Learning Language and Loving It,: A Hanen Centre Publication. Canada: The Beacon Herald Fine Printing Division.

- Imitation skills
  - Differences in imitation can be an indicator of Autism. ***Gestural*** and ***motor imitation*** are the most difficult. ***Verbal*** or ***vocal imitation skills*** can vary.
  - Single-component symbolic actions are imitated more often than multi-component actions.[4]
  - ***Echolalia*** is the repetition of others' utterances, either immediate or delayed. Non-autistic children also use it while learning language, but it eventually fades.
    - Autistic individuals with DS may use more echolalia, especially delayed, often with the same rhythm and intonation, and across their lifespan.
  - Imitation helps people learn new skills from each other and may be the strongest predictor of intentional communication growth.[5]
  - Tips: make it fun through play, sounds, videos, and songs with actions. Follow their lead by expanding on actions they already do, simplifying movements, using objects, or copying them first.
- Use of gestures
  - Autistic individuals with DS may use fewer symbolic and conventional gestures (e.g., waving, pointing), especially when communication breaks down.

        - Caregivers often report more non-symbolic gestures, such as pulling, pushing, reaching, or using your hand as a tool, for longer before language emerges.
    - Experience and expression of emotions
        - Facial expressions may show less variety, or be tied to specific situations, so parents may find it hard to read thoughts and feelings from the face.
        - Parents often understand their child better through body movement (e.g., hand flapping, teeth grinding, leaving) and vocalizations.
        - ***Alexithymia*** is difficulty in identifying and describing feelings. It is common in Autism and linked to differences in insula activity.
            - Internally (interoception), it can affect registering pain, hunger, and arousal. This is why labeling emotions and co-regulation are important.
            - Externally, it can affect identifying emotions in others and showing or managing emotions in socially expected ways.
- ***Stimming*** (e.g., flapping, rocking, humming, tapping, twirling) is more common in Autism but not exclusive to it, with higher rates and intensity in Autism-DS.
    - It helps regulate the nervous system, either by decreasing overload or increasing stimulation.
    - The goal is to support regulation, not eliminate the behavior, so we first need to understand why it happens.
- To support emotional regulation…
    - Make it visual (e.g., signs, pictures, symbols, photographs) and personalized.
    - Let the child's emotional state guide how we teach emotions, rather than imposing ours.
    - Link energy states, feelings, and behaviors (e.g., energy meters).

Play and Interests:

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- Common concerns about Autistic play include preferring to play alone, playing differently from other children, not seeming to notice others, and getting absorbed in play. Caregivers often also share concerns of wanting their child to make friends and play with siblings.
- ***Play*** is defined as experiences that are joyful, individually chosen and meaningful, intrinsically motivating, in a non-stressed frame of mind. It supports ***learning*** (social, physical, cognitive development), ***regulation*** (emotional well-being and restoration), and ***independence*** (sense of self, confidence, and creativity).
- Play can look different for children with a dual diagnosis.
    - It may be more repetitive, with toys explored using all the senses and interest in the parts of toys and how things work. Repetitive play amy include opening and closing doors, lining up objects, or dumping toys in and out of bins. It can also be a form of self-comfort, bringing familiarity, predictability, and an anchor.
    - They may prefer sensory, cause-and effect, and constructive play, and may have different social play preferences.
- Many neurodivergent individuals have a strong, intense, or unique interest that may change over time.
    - ***Hyperlexia*** is a strong interest in letters or numbers. It can look like reading far beyond age expectations, fascination with letters and numbers,

love of books, strong decoding skills, and more. Therapists can use these strengths in therapy.
    - Attachment to objects may last far beyond childhood for Autistic individuals.



- Types of play include…
    - ***Sensory-motor play***: Stimulating one or more senses.
        - Many Autistic children and children with DS have a natural affinity for music, possibly because it is predictable, repetitive, and activates brain areas involved in hearing, movement, emotion, pleasure, and memory.
    - ***People games play***: Simple, repetitive, structured games with little-to-no toys, which can include sensory preferences.
    - ***Cause and effect play***: Manipulating something to make something fun happen.
        - It is predictable and repetitive.
    - ***Pretend play****:* Imitating what the child sees around them.
        - Autistic individuals are *concrete thinkers* (a person who processes information in a literal, direct way), so not using pretend or symbolic play can be an indicator.
        - They tend to use single-step pretend acts and need more support for multi-step ones.
    - ***Constructive play***: Making or building something and learning how things interact.
    - ***Cooperative play***: Games with rules, which involve turn-taking and fairness.

        - This works best when it is of interest, structured, has clear roles and rules, uses short turns, and includes peer-mediated support.
- Social play preferences…
    - ***Solitary***: On their own, often for recuperation.
    - ***Spectator****:* Observing others.
        - Many Autistic individuals prefer this, and prefer playing with other Autistic people.
    - ***Associative***: Close with minimal interaction, often 1:1 or small groups.
    - ***Cooperative***: Usually predictable play that supports sensory preferences, including “info-dumping” about shared interests.
- Our role in play and interests:
    - It’s okay if their play looks different! Follow their lead, tune into their interests.
    - Join in respectfully, and don’t try to make the play look more neurotypical.
    - Build on their interests and skills, recognize how interests support well-being, and keep regulation tools available.

Language:



- ***Comprehension*** is defined as what a person understands. Autistic individuals with DS may have higher ***expressive language*** (words they use) than their *receptive language* (words they understand), and may have greater receptive language needs.
- In typical and in DS language development, receptive language tends to be stronger than expressive language.[6,7] Conversely, in Autistic language development, expressive language tends to be stronger than receptive language.[8]
- To support understanding…

    - Use simple, direct language and phrase things positively (i.e., “what to do” rather than “what not to do”).
    - Pair speech with visual support, emphasize key words, chunk information, and give processing time.
    - Visual supports include pictures, line drawings, writing, demonstrations, picture symbols, objects, signs, and gestures.
    - Visual strategies include visual schedules or sequences, timers, work systems, video models, and social stories.
- In typical and in DS language development, individuals are analytical language processors. They learn 1 word, then 2 words, then 3 words, and so on. For example, they learn “bus,” then “bus go,” then “yellow bus go” and so on.
- In Autistic language development, individuals are gestalt language processors. They may use scripting or process language in *gestalts* or “chunks” rather than individual words. These chunks are tied to context and may look like an overgeneralization.
    - Signs your non-speaking child may be a gestalt processor:
        - They pick up on songs even when no words are used.
        - Single words seem “stuck.”
        - Speech has rich intonation.
        - They study and replay the same movie clips.
        - They show little progress with AAC despite modeling single words, or say the same strings of words on the device.
        - They use the same words to mean different things.
        - They like to see the “whole picture” in play.
- Supporting a possible gestalt language processor can look like…
    - Treating all communication attempts as communication.
    - Consulting an SLP, and keeping records to work out underlying meanings.
    - Modeling language from the child’s perspective with rich intonation.
    - Limiting questions and making more comments.
    - Modeling a variety of functions: commenting, requesting, protesting, sharing, asking for help, and so on.

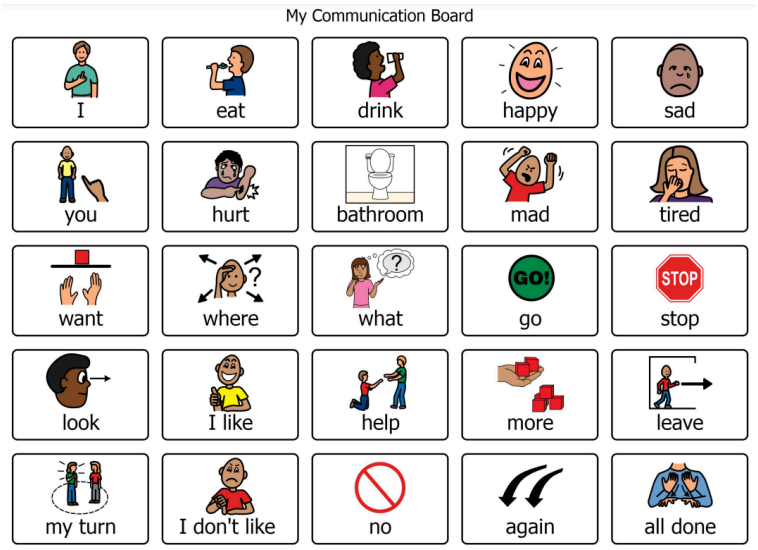
Speech:

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- ***Speech*** is defined as how we produce sound using our voice and mouth.
- Speech characteristics include:
    - ***Motor planning****:* The ability to coordinate movements.
        - Neurological motor difficulties such as *Apraxia of Speech* and *stuttering* occur at higher rates and severities in Autism and DS.
        - There are also higher rates of nonspeaking individuals.
    - ***Intonation/Prosody***: What speech sounds like. How we change the length, loudness, and tone of our voices which conveys meaning.
        - Autistic people have different speech patterns.
- Communication supports for expression include…
    - Consulting an SLP about ***augmentative and alternative communication (AAC)****.*
        - Low-tech AAC includes objects, picture symbols, text, demonstrations (e.g., acting out an expression), sign language, and communication boards or books.
    - Speech-generating devices include buttons or switches and devices such as an iPad or tablet.

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Summary:



- Compared to people with Down Syndrome without Autism, it is more common for people with a dual diagnosis to have:
    - Differences in their communication and social engagement.
    - Restricted or repetitive behaviors.
    - Greater sensory processing and emotional regulation needs.
- Compared to Autistic individuals without Down Syndrome, it is more common for people with a dual diagnosis to:
    - Show more social awareness and interest in others

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    - Use more gestures and imitation
- Your child may listen and engage with others differently. They may show what they know or what they think in different ways. But remember, all communication is valid – everyone deserves to be heard!
    - When we tune in, meet them where they are, and honor how they communicate and how they share the world with us. Create space for connection and growth.

Resources:

- Observation Guide for logging and observing a student's conversational styles with different partners and in different activities

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