Autism and disfluent speech

For decades, researchers have identified patterns of “disfluent speech” in autistic individuals, i.e. speech that exhibits deviations in continuity, fluidity, ease of rate and effort, with hesitations or repetition of sounds, words, or phrases. More recently, the nature and presence of this disfluent speech has become clearer. Three different types of disfluency have been identified:

Stuttering

Stuttering occurs when a person is clear on the words they would like to say, but physically has difficulty getting these words out. People who stutter have difficulty moving forward in producing their words and may:

- repeat sounds (s-s-s-speech)
- Repeat syllables (ru-ru-running)
- prolong sounds (sssspeech, whaaat)
- become “stuck” (blocked) on a sound (s-----speech)

During a stuttering block it will take time for the word to come out, and during the block struggled attempts at sound production may be heard, or there may be silence.

Cluttering

Cluttering occurs when a speaker speaks at a rate that is too fast for their system to handle. Those who clutter sound fast to the listener, and listeners have difficulty understanding the person with cluttering due to the presence of at least one of three symptoms:

- Excessive repetitions of phrases, revisions of ideas, filler words such as “um” or “uh”
- Excessive over-coarticulation. Sounds in words run together and sounds or syllables may be deleted. For example, “It’s like this” may sound like, “slikethi.”
- Pauses in places where they would not be expected grammatically.

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Atypical disfluency

Atypical disfluencies occur when the speaker has easy repetitions or prolongations of sounds at the ends of words (speech-eech, light-t, misssss) or inserts a sound in the middle of a word (e.g. boy becomes (boy-hoy.).

Research is in its infancy regarding these atypical disfluencies. Observations among researchers suggest that these disfluencies differ from stuttering in that the repetitions often occur after the speaker has completed the word.

Whereas the individual with stuttering has difficulty starting a word, a speaker with atypical disfluency seems to have difficulty ending the word. Sometimes the end-of-word repetitions occur immediately (speech-eech) and other times after a pause (speech (pause) -eech).

The length of the pause varies between individuals, and some have been known to insert another thought in between the pause and the repetition (e.g., “Can you turn out the light (“Oh I like that book”; pause) -ight so I can go to sleep?”).

Life impact

In addition to the outward symptoms of disfluencies, some speakers experience negative feelings and perceptions about their difficulties. Although these negative feelings and perceptions are most common among those who stutter, feelings such as shame, embarrassment, or fear can also occur in response to cluttering, or atypical disfluencies.

Additionally, speakers may have cognitive misperceptions about their fluency disorder, such as thoughts that they will always stutter when they say their name, or that they will never be able to be employed in a career that involves speaking. These negative feelings and perceptions can lead to communication avoidance. Individuals with stuttering, in particular, may exhibit tension in their face or other areas of the body when attempting to speak.

Disfluency in autism

Awareness of disfluency is variable in many autistic people, especially among those who clutter and/or exhibit atypical disfluencies. It is important to note that awareness occurs along a continuum. Each person should be assessed as an individual to determine which factors may be contributing to difficulties with efficient and effective communication and therefore may need to be addressed in treatment.

Speech and language professionals specifically trained in assessment and treatment of fluency disorders can help with assessing disfluency and any accompanying characteristics. It is
important to remember that multiple types of disfluencies can present themselves in the same speaker.

Although research continues to emerge, all types of disfluencies have been found in preschoolers, school-age children, teens and adults on the autism spectrum. Disfluencies have also been identified across all cognitive abilities. The overall negative impact upon communication should be considered when prioritising goals for speech and language therapy. Communication avoidance and limits to social interaction should be red flags for prioritising fluency assessment and possible therapy.

**How speech and language therapy can help autistic individuals:**

The first thing that a speech and language therapist (SALT) can do is to help identify any disfluencies by type. If there is negative life impact, the SALT can work with the client. If the SALT is not comfortable working with fluency disorders, they can refer the individual to someone experienced in treating fluency disorders.

- If stuttering, treatment strategies will focus on changing the timing and tension of speech.
- If clumping, treatment will focus upon rate regulation through natural pausing and emphasis of sounds for clarity.
- If atypical disfluency, the proposed function of the disfluency will be determined and the corresponding underlying "root" cause(s) may be addressed. For example, if a client seems to be repeating the end of a word to hold their place due to difficulties with word finding, the SALT may work directly on word finding to eliminate the need to hold their place, as well as natural pausing (instead of repetition) to hold their place when more time is needed.

**Further reading**

For review of disfluencies in autism spectrum disorders, see:


For therapy management techniques for clumping, including clumping in the ASD population, see:

For more information regarding assessment, differential diagnosis, and treatment of individuals with fluency disorders and other diagnoses including autism, see the forthcoming guide: