A Clinical Conceptualization of Cluttering

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Ad-hoc Committee on Defining Cluttering

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<u>Preamble</u>

Data from recent surveys of speech-language clinicians in countries around the world indicate that a majority of the SLPs canvassed feel the need for more knowledge about cluttering and, in particular, information to help clinicians and nonprofessionals to recognize features that are often associated with cluttering (Adams & Cook, 2016; Reichel, Bakker & Myers, 2010; Reichel & Bakker, 2009; Georgieva, 2000).   At the ICA meeting held during the 2016 American Speech-Language-Hearing Association convention in Philadelphia, an Ad-hoc Committee was formed for the development of an ICA-sponsored definition of cluttering that is:

- *clear and concise, such that nonprofessionals can better understand and recognize cluttering*
- *functional, such that speech and language professionals can use it to assist in the diagnosis of cluttering*
- *consensus-driven to provide a framework for researchers to empirically validate their studies in the area of cluttering*

The committee initiated its charge by soliciting independent input from committee members as well as the ICA community at large.   The co-chairs of the committee, Florence Myers and Klaas Bakker, discussed the ideas that had been gathered to formulate the scope and objectives of the charge to materialize the commission. It became immediately evident that we cannot replace existing published definitions which, after all, are publicly available through the literature and are based on research and clinical experience over the years. It also became obvious that we are in the formative—rather than conclusive--stage of establishing a definitive scientifically-based definition.   Yet we need to address

the needs of constituents such as the respondents to the surveys. What follows is a clinically-based conceptualization of cluttering that is functional for clinicians and clinical researchers, persons who clutter and their families, as well as professionals from other fields who are interested in cluttering.

Most disorders, but especially cluttering due to its multidimensional and perceptually-based nature, are not homogeneous. Not all Persons with Cluttering (PWC) share the same set of symptoms. Even the Lowest Common Denominator definition, for example, offers non-obligatory symptoms (St. Louis and Schulte, 2011). Yet a fundamental commonality among nearly all conceptualizations is that cluttering occurs when the speaker attempts to encode messages at a rate faster than manageable. Symptoms of cluttering become more obvious when linguistic conditions become more complex and the PWC does not monitor, moderate and modulate speech rate to accommodate to the language complexity of the task (Myers 2011). A sentence repetition task requires relatively low linguistic loading. A more challenging task—both at the thought and language processing levels-- occurs during the formulation of a narrative based, for example, on a film with a convoluted storyline when speaking with a friend during informal conversation. Many PWC indicate that the linguistic challenges are due to indecisions about how to encode their thoughts into organized speech and language units. Excessive rate or 'an urge to surge' leads to motoric and linguistic breakdowns that collectively contribute to the perception of cluttering. An indirect yet compelling evidence of the pivotal role of excessive rate is the observation that cluttering severity can be markedly reduced when PWC are more attentive to their speech to modulate their rate, thus allowing time to organize the fluency of thoughts, language and articulatory gestures.

Importantly, **reliance on words alone to describe cluttering is not sufficient** for the conceptualization of cluttering. Cluttering is very much a perceptual phenomenon, the culmination of multiple largely rate-induced speech and language disintegrations that interactively signal cluttering episodes. We, therefore, propose that ICA embark on a long-term and ongoing project to collect audio and/or video clips of cluttering for the ICA website to supplement the attributes listed below.

Additionally we believe that there is **great potential to learn more about cluttering from PWC** by tapping into their inner dynamics for factors that lead to

the surface behaviors that result from a propensity to talk faster than they can handle.

We therefore propose a *three-pronged approach* toward a functional and clinically-based *conceptualization of cluttering* (**TPA-CC**):

1. verbal description of symptoms;
2. video and audio clips of cluttering; and
3. testimony from PWC and their family that lend perspective to the outward behaviors observed

What follows are symptoms associated with cluttering, the first of the ***three-pronged approach using the*** **TPA-CC**. Table 1 provides examples and commentary related to the symptoms. The bullet list itself--in the section immediately below--is intentionally framed as simply as possible. Audio and/or video clips will be added to this document to give perceptual anchors to the symptoms described.
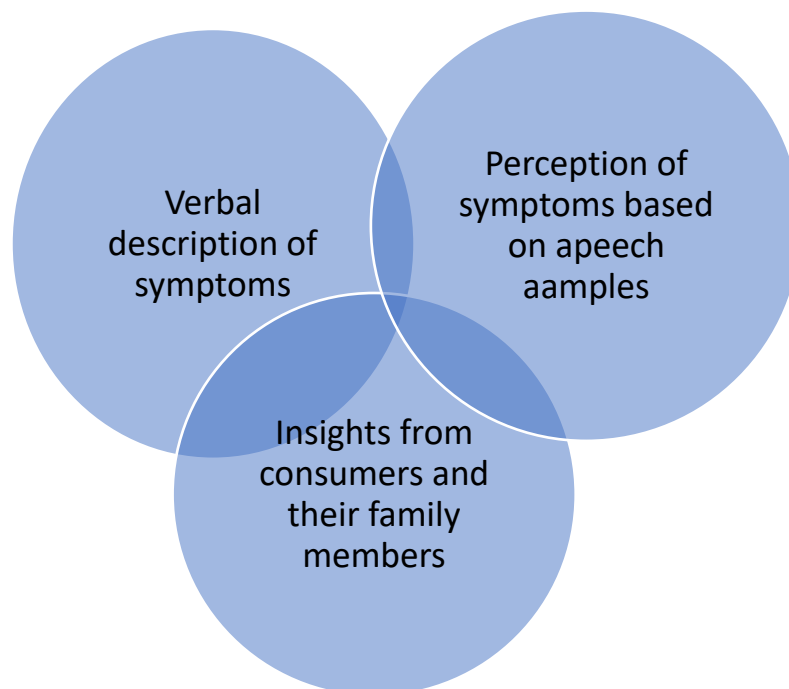
Verbal description of symptoms

Perception of symptoms based on apeech aamples

Insights from consumers and their family members

Figure 1. Three-pronged approach for the conceptualization of cluttering (TPA-CC).

Prong #I - Description of Symptoms

Cluttering is **a rate-driven fluency disorder** that results in symptoms to include one or more of the following that reduce the *intelligibility* (degree to which the

person's speech is clear) and *comprehensibility* (degree to which one can follow what the person is saying when engaged in a monologue or narrative):

- speech rate perceived to be too fast
- speech rate perceived to be irregular due to pauses occurring at unexpected places, or surging and slowing down
- numerous disfluencies such as fillers, incomplete words and revisions that are largely not stuttering-like
- misarticulations comprised of deletions or distortion of sounds and syllables that are not phoneme-specific
- inappropriate prosody such as monotone or trailing off at the end of utterances
- limited self-monitoring and self-correction skills while speaking culminating in issues related to the pragmatic aspects of communication
- language formulation and organization issues due to
  - trying to talk about various often competing ideas at the same time
  - trying to select the right word to encode

The outward manifestation of these formulation issues include not getting to a point efficiently, pauses that do not coincide with thought or language unit, linguistic maze behaviors such as incomplete phrases and revisions.

Table 1. Descriptions, explanations and examples of clinical signs associated with cluttering itemized in Prong #1.

*Cluttering is **a rate-driven fluency disorder** that results in symptoms to include one or more of the following characteristics that reduce the **intelligibility** (degree to which the person's speech is clear) and **comprehensibility** (degree to which one can follow what the person is saying when engaged in a monologue or narrative):*

Clinical signs of cluttering:	Further explanations:	Examples:
speech rate perceived to be fast	- speech is fast in a physical sense - or is perceived as fast because of speech differences suggesting the speaker may be going over his/her speech delivery limit	n.a. This feature is difficult to capture in written form and can vary for different listeners. [one is recommended to listen to sample ##]
speech rate perceived to be irregular	- pauses occurring at linguistically unexpected moments - speech may literally be surging and/or slowing down	"I had a lot … of homework … to do and I … didn't know I … was supposed to have … it was due to…. no yesterday"
excessive incidence of typical disfluencies	- frequent use of "fillers," repetitions incomplete words, and revisions; - disfluencies are largely not stuttering-like and do not reveal physiological effort in the production of an intended word - reflect not knowing which word or thought to express or what to say next	"Elphant ehh … what I mean to say is … elephant, … the elephant … um, you know what I mean?" "Phildephi is a well sort of nice city, d'you visit it? No, I think you should see it in the sum—no, in fall. My sister lives in … ehh ..remember, …I just said it …"
frequent misarticulations which are <u>not</u> associated with intrinsic difficulties in producing the sounds	- non-phoneme specific misarticulations - deletions of sounds or syllables - distortions of syllables	"nucular damage" [/nuclear damage] "stescope" [/stethoscope] "ameny" [/anemone] "frigrator" [/refrigerator]

use of atypical forms of prosodic expression	• involves atypical patterns of intonation that:
	  o do not adequately express the intentions of the speaker (e.g., a monotonous speaking pattern, a trailing off at the end of utterances, or use of a repetitive stereotypical prosodic drone)
	  o as with other attributes, reflect limited attempt to self-monitor, or self-correct
		n.a.;
		These clinical signs can be observed in the sound clips with cluttered speech that will be added to this conceptualization.
		
		Example: monotone; using the same prosodic pattern for every sentence (Peter's video on ICA website)

language formulation and/or thought organization issues	• outward manifestation of the formulation issues include not getting to a point efficiently, pauses that do not coincide with thought or language units, linguistic maze behaviors such as incomplete phrases and revisions
	
	• typical reasons for language or thought organization breakdowns:
	  o trying to talk about various, often competing, ideas at once
	  o trying to select the right word, or concept, to encode
		"It really wasn't my fault, … ehh, I do this well most of the time; did you get my text? ehh .. you know ..it is unfair, I mean, I just did this yesterday. "

issues with the pragmatic aspects of communication	• conventional pragmatic patterns often not followed:
	  o frequent interruptions of other speakers
	  o inability to release a turn or end a conversation
	  o not reacting to verbal or nonverbal cues from conversational partners
	  o incoherent forms of expression
	  o information doesn't flow
		n.a.,
		This **macro**scopic feature of communication is better appreciated from recordings of speakers who vary in level of pragmatic or discourse skills.

Prong #2 – Audio and/or Video Clips of Cluttering

[Clips of cluttering will be acquired by ICA and archived over time. We can start with the insertion of clips onto this document that are already on the ICA website. Perhaps references to exemplar clips of cluttered speech from the Fluency TalkBank can also support Prong 2. Table 1 supplements the verbal descriptions of cluttering in Prong 1 as well as these audio/video clips. Insights and perspective of consumers and their family below also reinforce the verbal descriptions and clips.]

Prong 3 - What PWC and Family Tell Us

Learning from consumers and their families about cluttering can be a powerful way to gain insight into the nature of cluttering.

(from Scaler Scott, K. and St. Louis, K.O. (2011).   Self-help and support groups for people with cluttering. In D. Ward & K. Scaler Scott (2011) *Cluttering: A Handbook of Research, Intervention and Education* (pp. 211-229). Hove, England: Psychology Press.)

In lay terms, Raymond has a tough time communicating his thoughts. He has a lot to say since he loves to talk. Unfortunately, he has trouble coming up with words, so it takes him a considerable amount of time to get out what he is trying to say....Can't always come up with the words that he needs, which makes speech more disfluent and he gets way off from the point that he is trying to make. (p 219)

[I have] disorganized thoughts...[I am/tend to be??] rambling [and] talkative. [I have] difficulty maintaining a topic;...[I find myself] jumping back and forth between topics over the course of the conversation. ..[I have] difficulty 'getting to the point. " (p. 219)

Raymond has an uneven rate of speech…He collapses multi-syllable words into slightly more than one syllable words. He drops off weak syllables such as 'nother' for 'another', 'usie' for 'usually', 'member' for 'remember'…. (p. 218)

Excessively fast rate of speech, especially when excited, caught off-guard, or unsure of how to explain something. Condensing of syllables, e.g., 'therapy' might become 'terpy'. (p. 218)

'My thought process is fast. I have trouble expressing myself. I say the wrong words at the wrong time.' (p. 219)

…Often impulsive with conversational turns…Difficulty interpreting cues that others are having a hard time following….' (p. 220)

(from personal exchanges with PWC)

I have multiple things I want to say, don't know how to organize it all, but keep on talking anyway.

Even when I repeat syllables, it's because I am still trying to decide which word to use.

I don't talk too fast. You just have to listen faster.

The first thoughts are relevant but further thoughts may not be relevant to an [sic] given strategy in respect of [sic] the original thought. Whilst speaking, or even thinking my mind can and does wander off to other totally unrelated subjects. Although I try to stabilise my thoughts, words etc and to project them, they may not be projected in the same way that it was planed [sic] and the resulting [sentec [sic] can be out of context

I don't display many of the signs/symptoms to the degree many people seem to. I do have a bit of disorganized thoughts/speech. I do have a tendency to want to repeat things at times. Sometimes entire sentences or phrases.

(from van Zaalen, Y. & Reichel, I. (2015). Cluttering: Current Views on Its Nature, Diagnosis, and Treatment. Bloomington, IN: iUniverse Publishing.

The cluttered thought processing can be pictured as a crash at a locomotive depot, when a sudden stop causes the thoughts to clash, and run over each other.

I also had to learn how to overcome the wish to never open my mouth again after running sentences in an unknown direction and not looking smart.

... It became an apparent problem when it became more frequent and when I would intend to say a word, but something completely different would come out. I always attributed this sort of mental dyslexia as normal...

Why could I not slow down with my speech, and just had to spit it out?

When cluttering occurs, my speech is fast and unclear or, as I say, a ball of words tumbles out with no beginning and no end.

I had never heard another person jumble sentences into one verbal mass the way I did.

My thoughts run faster than I can verbalize, resulting in the most mosh-pit words.

There were instances when my thoughts raced faster than my mouth could catch up. The competition usually resulted in a jumbled mass of words exiting my mouth, leaving both the recipient and myself perplexed.

Note [*])

The **Three-Pronged Approach to the Conceptualization of Cluttering** (TPA-CC) was presented at the World Congress of the IFA, ICA, and ISA in July 2018 (Myers, Adams and Cook, 2018). This document provides a clinical conceptualization of the nature of cluttering and can be accessed from the ICA homepage. The TPA-CC was developed by an ICA ad hoc committee comprised of Florence Myers, Klaas Bakker, Susanne Cook Isabella Reichel, Ken St. Louis and Yvonne van Zaalen. The TPA-CC was approved by the ICA Board in May 2017.

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Recommended Readings

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