

Abbreviations

PWA - a person with aphasia

PRA - person recovering from aphasia

SLP - a speech-language pathologist

FA - formative assessment

A

AAC: an acronym for Alternative and Augmentative Communication. AAC is a comprehensive collection of communication strategies that provide external support (through picture boards, speech-generating devices, gestures, apps, etc.) for people who cannot generate messages independently. These devices would allow the PWA to communicate with others, from necessary information to conversations.

Agnosia: an acquired problem with the ability to recognize a stimulus (objects, persons, sounds, shapes, or smells) even though sensory information and memory are relatively intact. Agnosia is common in individuals who have suffered some form of brain injury.

Agraphia: an acquired problem with writing and spelling. LIFE Speech Pathology treats agraphia initially with the Keyboarding and Flash Spelling treatment modules.

Alexia: acquired difficulty reading printed language. LIFE Speech Pathology treats alexia initially with the Keyboarding and Flash Spelling treatment modules and then moves into Propositional Reading activities. Alexia refers to regular, adult sight-reading. The AphasiaPhonics treatment module provides additional recovery tools.

Anomia: is a type of aphasia characterized by problems recalling words or names. People suffering from anomia often use circumlocutions to access a specific word mentally. Anomia is similar to when a person without aphasia cannot remember a word saying, "It is on the tip of my tongue." Recent clinical advances have emphasized the importance of

activation and coordination of brain processes in spoken word production rather than a simple word recall explanation.

Anosognosia: a lack of awareness or recognition of one's disabilities or impairments. People may have anosognosia following a stroke or traumatic brain injury. Anosognosia may be confused with learned non-attention or learned helplessness.

Aphasia: is an acquired communication problem frequently caused by a stroke. Aphasia affects a person's ability to use and understand language to varying degrees across some or all language modalities (reading, writing, talking, listening). Aphasia is different for each person. Attention to the cognitive skills that support speech and language is essential to maximizing aphasia recovery. The key to effective aphasia treatment and recovery is taking advantage of neuroplasticity.

Aphasia Coach University: the course created by LIFE Aphasia Academy that trains spouses and caregivers to prepare the person with aphasia (PWA) to become the person recovering from aphasia.

Aphasia Phonics: an innovative treatment approach for speech problems associated with aphasia. It involves phonetics, basic phonics, and phonology to help PWA process, says, and spell words using letter-sound correspondence. It is part of the Brain Compatible Aphasia Treatment Program (BCAT). We found that the better a PWA spells, the better he/she will talk and vice versa.

Aphasia Myth: There is, according to legend, a specific point at which a person with aphasia (PWA) stops improving, and the implication is that he/she cannot improve anymore. The myth places the blame on the PWA for the lack of progress. Besides other therapists, PRA, and researchers, we have clearly shown that is a myth. PWA, who becomes a person recovering from aphasia (PRA), can continue to travel the recovery pathway with smart, effective treatment and practice that truly exploits neuroplasticity.

Aphasia Conversation Group: a group of people whose goals are to converse with each other naturally. The benefits of conversation groups include practicing with others, team support, and natural social engagement.

Aphasia Phonics: a treatment approach that includes sound substitutions to make rhyming or other words

Aphasia Practice Coach (APC): a formalized training program specifically designed for spouses and caregivers who are willing and able to coach their person with aphasia with the daily practice process, but also by supporting the person with aphasia in successfully utilizing reconnected skills and newly-learned information into everyday conversation and interaction.

Aphasia Recovery Connection (ARC): an organization dedicated to ending the isolation that aphasia so often brings. "ARC provides a place where people with aphasia & their families can learn, share and connect." It has a website, a Facebook page, and other resources.

Apraxia: a disorder of programming body movements. When it affects speech (often referred to as apraxia of speech), it is difficult for a person to program and coordinate speech muscle movements to say words. It may also impair the ability to initiate voicing or sequence sounds into syllables. It is essential to recognize that apraxia may affect other body movements (arm, leg, vocal folds, swallowing, head shake/nod, etc.). One early key to speech recovery is to overcome apraxia that affects the voice, something too often overlooked. The staff at LIFE Speech Pathology have successfully used the exclusive Motor Reconnect Apraxia Program to address apraxia affecting voice and speech.

Aprosodia: an acquired difficulty with using and interpreting emotional prosody, which can result after brain injury. Prosody refers to the speech elements of intonation, blending of

syllables, melody, rhythm, etc. LIFE Speech Pathology treatment incorporates activities to reconnect prosodic skills throughout each person's program.

Asymbolia: a form of aphasia that causes a person to have difficulty using, selecting, and interpreting symbolic meanings of things such as images, gestures, and signs. To communicate, we decide which symbol(s) we will use speech, gesture, writing, or facial expression. For effective aphasia recovery, the SLP needs to identify issues with symbol use and then implement activities to remediate the problems.

Ataxia: a disorder that involves a lack of muscle coordination during voluntary movements such as walking or picking up objects. Ataxia can affect speech movement and coordination, resulting in ataxic dysarthria.

Attention: how we attend to and process information present in our surroundings. Recent aphasia research has emphasized the need to improve cognitive skills such as attention to maximize aphasia recovery. Some studies show improvement in aphasia when the treatment only focuses on cognitive skills such as attention. LIFE Speech Pathology excerpts always address the cognitive underpinnings for aphasia recovery. Attention could be of the following types:

- Focused attention - active attention to one thing; being able to focus.
- Sustained attention - ongoing attention to a stimulus; sustaining attention long enough to practice.
- Selective attention - the ability to avoid distractions; being able to overcome distractibility;
- Alternating (shifting) attention - the ability to shift focus from one task to another; to attend to speech, then text, then back to speech.

- **Divided attention** - the ability to attend to more than one task, to remember words while organizing them into a sentence.

Auditory Comprehension (AC): the ability to understand other people's speech. During aphasia treatment and practice, be aware that AC in aphasia is a catch-all term for several contributing factors. They may include: length and complexity of the word or sentence; attention or working memory issues; decoding and processing of speech sounds and syllables; learned helplessness or inattention; background noise or speaker mumbling, are just a few. Maximize aphasia recovery by identifying and addressing the core features of the auditory comprehension deficit.

Automaticity: the ability to do things automatically without needing to use a significant amount of mental processes (e.g., counting numbers, reciting the alphabet, etc.). Automaticity is often the result of learning, repetition, and practice. Overusing automatic speech (counting, saying the alphabet in sequence, or the days of the week, for example) during aphasia treatment and practice may, in the long run, be detrimental to optimal aphasia recovery. Instead, using propositional speech and the person's memory is emphasized by the staff at LIFE Speech Pathology.

B

C

Circumlocution: the use of indirect language or roundabout expressions. People with aphasia may circumlocute, talking around a word they cannot recall or say. Circumlocution should not be confused with the aphasia word recall technique of self-cueing (an example of this technique is: "It's cold....I put in my drink ... it's ice... I need an ice cube.").

Cognition: the mental process involved in thought and includes thinking, knowing, remembering, judging, problem-solving, executive function, attention, memory, etc. Recent research has confirmed that improving cognitive skills in incisive ways will improve aphasia.

Strengthening our client's cognitive skills early in their treatment programs decreases the time necessary for recovery.

Cognitive Flexibility: the ability to adapt thinking to new and unexpected happenings. Mental flexibility includes generating various solutions and multiple ways to interpret an event.

Conjugation: the modification of a verb from its base form. It is a treatment activity in the Brain Compatible Aphasia Treatment Program designed to help a PWA fluently say sentences aloud by reconnecting the client's ability to say the subjective pronouns and add a verb. An example is: "I walk.; You walk.; He walks, etc."

Conversation: the goal of recovery and includes the spoken, informal exchange of information, ideas, or thoughts by two or more people following etiquette rules such as turn-taking. Recovering the ability to converse is nearly always one of the most important goals for people with aphasia.

Correspondence: Refers to communication by exchange of letters or emails. Contact by correspondence can be used in telepractice and should not be the only way speech/language therapy is provided.

D

Decoding: the process through which meaning is extracted from written letters. Decoding is essential to reading.

Dementia: progressive deterioration of intellectual functions, such as memory and attention.

Divergent Thinking: the ability to explore various possible solutions. See also cognitive flexibility. These are essential skills to take advantage of his/her full vocabulary.

Dysarthria: includes muscle strength and tone, range of motion, speed, and precision of movement. People with dysarthria may have difficulty being understood by others because of disturbances in their speech, which may affect articulation, voice, rhythm, resonance, and breathing in various ways.

Dysfluency: a breakdown or blockage in the smooth forward flow of speech.

Dyslexia: a learning disorder distinguished by an impaired ability to recognize and comprehend written words.

Dysphagia: difficulty with swallowing.

E

Echolalia: the immediate or delayed pathological repetition of words previously spoken by others. When a PWA immediately mimics what another person says, it is often a result of overuse and dependence on imitation in treatment and practice.

Encoding: the process of hearing a sound and being able to write the symbol that makes the sound; learn the sound that each letter of the alphabet makes as well as each of the 44 phonemes

F

Field cut: loss of peripheral vision (hemianopsia).

Formative Assessment (FA): an ongoing (minute-by-minute; day-by-day) assessment, observation, and review used to maximize the positive effect of client practice and aphasia treatment. Rather than treatment adjustments based on a calendar, FA used the PRA's progress, strengths, and weaknesses observed daily to make clinical decisions.

Speech-language pathologists and practice coaches can use formative assessment to keep

individual aphasia treatment programs fresh and practical based on changes in a client's performance.

G

H

Hemianopsia: a disorder characterized by blindness or decreased vision in half of one or both eyes' visual fields; it is common with stroke. Also known as a field cut. This problem may resolve over time or remain permanent. It is critical to improving visual neglect and inattention. Leave no stone unturned in therapy.

Hemiparesis: weakness on one side of the body.

Hemiplegia: paralysis of one side of the body resulting from a stroke or another neurological injury.

I

Intent(ion): what a person planned or wanted to communicate before speaking or writing. The underlying message a person is trying to convey. In aphasia recovery, PWA must reconnect their ability to abstract what others intend to communicate when they speak.

J

K

Keyboarding: refers to a person's ability to use a keyboard to interact, such as a computer, iPad, cell phone, ATM, or TV remote control. Reconnecting keyboarding skills is critical in aphasia recovery and day-to-day function.

L

Learned helplessness: the condition of a person who has learned to rely on others for help and will avoid taking steps to help him or herself, even though he/she may be capable of doing so. People may often believe they cannot do things independently after a stroke or brain injury and rely on family or caregivers to do something for them. Replacing learned helplessness with focused cognitive attention and independently initiated action is crucial in maximizing aphasia recovery. See also learned non-attention.

Learned non-attention: the condition of a person who is either unsure where to focus his/her attention or has developed set responses or maladaptive points of focus. This problem can, of course, impair or even preclude adequate aphasia recovery. Clients of LIFE Speech Pathology have successfully replaced this detrimental habit with precise, focused attention in the semantic, environmental, and visual fields.

Lemma: an abstract conceptual form of a mentally selected word in the brain before being spoken aloud. The word in a person's mind before he/she writes or says it.

Lexeme: there are two definitions.

A: the mental representation of a word with its sound and syllable structure. For example, can you mentally rehearse the word PEN before saying it? Can you hear the sounds and syllables in your head? If so, you "lit up" your lexeme. Lexeme knowledge is a critical element in aphasia treatment and practice.

B: the set of word forms that a particular word can take. E.g., jump, jumps, jumped, jumping comprises forms of the same lexeme, and "jump" is the lemma.

Lexical: the words of a language.

Lexicon: the entire collection of all the words a person knows. Aphasia makes it difficult for a person to access and use his/her lexicon.

LIFE Aphasia Academy®: the advocacy division of LIFE Speech Pathology dedicated to empowering, educating, and supporting clients living with chronic aphasia, apraxia, and related disorders and their families.

LIFE Speech Pathology, PLLC: a private practice that serves clients with chronic aphasia and related disorders by providing innovative, neuroplastic evaluation and treatment via telepractice across the USA and internationally.

M

Maladaptive behavior: refers to the inability to adjust healthily to particular situations. In essence, they prevent you from adapting or coping well with the demands and stresses of life.

Meaning: what is meant by a word, text, concept, or action.

Memory: a person's mental capacity to recall or reproduce what he/she has learned and retained. Memory includes facts, events, impressions, words, names, experiences, procedures, etc. Having a client work from his/her memory is crucial in the Brain Compatible Aphasia Treatment Program and the client achieving maximal recovery of spontaneous, propositional conversation.

Mental processes: the cognitive operations involved when a person thinks and remembers. Some thought functions considered mental processes include attention, memory, problem-solving, decision-making, and producing and understanding language. Aphasia treatment should target appropriate cognitive processes to maximize aphasia recovery. Your speech pathologist can explain your mental process targets and why the rationale for selection.

Metaphasia: a person's knowledge of language and insight into the cognitive processes used to communicate using language.

Metapraxia: a person's understanding of and insight into the planning and execution of movement patterns.

Metacognition: defined as "thinking about thinking" or "knowing about knowing." In Brain Compatible Aphasia Treatment, the client taps into knowing when and how to use particular strategies for learning and problem-solving. LIFE Speech Pathology clients recovering from aphasia can explain how they mentally approach talking or typing.

Motor Plan: start with an idea (think mental picture) of what needs to happen to complete the movement.

Motor Speech Disorders: speech disorders caused by neurological impairment, which result in disturbances in the ability to plan, program, control, and execute speech. Motor speech disorders include dysarthrias and apraxia of speech. The staff at LIFE Speech Pathology use the Oral Motor Coordination (OMC) Program to improve motor speech problems.

Myth of Plateau in Aphasia: According to legend, a plateau is a certain point at which a person with aphasia stops improving, and the implication is that he/she cannot improve anymore. As well as other therapists, PRA, and researchers, we have clearly shown that is a myth. Smart, effective treatment and practice will help the PWA become the PRA and continues to travel the recovery pathway.

N

Narrative: the account or story of experiences or events. Telling a story or relating an experience is an integral part of life and, therefore, of aphasia recovery. It requires skill in discourse, cohesiveness, memory, and linking sentences.

Narration: guides the telling of the story by providing information about the setting, character backstories, prior plot events, historical context, etc.

Neural Pathways: bundles of neurons that connect one part of the nervous system with another.

Neuroplasticity: the ability of the brain to heal itself or grow, to make changes, and adapt in reaction to environmental cues, experiences, behavior, injury, and disease. LIFE Speech Pathology provides its members with a full collection of aphasia recovery tools, materials, and software designed to help PWA maximize aphasia recovery and take full advantage of neuroplasticity.

O

P

Paraphasia: the production of unintended syllables, words, or phrases by people with aphasia.

Perseveration: the inappropriate repeating of a sound, word, or phrase instead of the intended item. Perseveration is a common problem associated with aphasia. When treated as a problem of focused and alternating attention, perseveration can be quite responsive to change.

Phonological: relates to speech sounds as the fundamental component of language; how speech sounds are organized in the mind and used to convey meaning

Phonological aphasia: refers to the difficulty of creating a syllabary. To talk, we need to activate a concept and a word, and mentally recognize the sounds and syllables (syllabary) before saying that word. Often, phonological encoding problems are not addressed or misdiagnosed as apraxia. The experts at LIFE Speech Pathology have led the efforts to identify these problems and create effective treatment protocols and practice materials.

Phonology: the smallest unit of sound within a word. For example, the word 'dog' consists of three phonemes (d-o-g); 'charm' also consists of three phonemes (ch-ar-m).

Primary Progressive Aphasia (PPA): a neurological syndrome in which speech and language skills become progressively impaired. This progressive loss is typically, but only sometimes, slowly over time. While the deterioration of neural tissue critical for speech and language production initially deteriorates, other problems, such as cognitive skill decline associated with the disease arise.

Problem-solving: the act of defining a problem, determining the cause, identifying, prioritizing, and selecting alternatives for a solution, and implementing a solution

Procedural Memory: a part of long-term memory that is responsible for knowing how to do things, commonly referring to motor skills such as walking, riding a bike, driving a car.

Prosody: speech's rhythm, stress, and intonation that provides information beyond a sentence's literal meaning. Includes blending, rhythm, and phrasing.

Q

R

S

Semantics: the meaning of languages like words, signs, and sentence structure. Semantic categories can include meaning, features, categories, and function.

Sentence structure: the order of words following rules of English that include statements, questions, exclamations, and commands.

Sentence intonation: changing the pitch or loudness to convey an intention, like raising your tone at the end of a sentence for a question, even if the statement is not formed as a question.

Speech-Language Pathologist (SLP): a person with an advanced degree and advanced communication disorders training with a master's degree in communication disorders. The type of degree and training varies among countries.

Syntax: the arrangement of words and phrases to create well-formed sentences based on rules.

T

Taking Charge: the client becomes the pilot of his/her recovery. The client is in control and MUST become the pilot to maximize recovery.

Types of aphasia: Some rehabilitation specialists recognize various types of aphasia. These include Broca's; Wernicke's; Global; Anomic; Conduction; transcortical motor; transcortical sensory; and transcortical mixed. Many specialists and SLPs, including the staff at LIFE Speech Pathology, no longer utilize or plan treatment based on these aphasia types but rather base treatment on the individual client's test results and unique aphasia symptoms. The National Aphasia Association ([NAA](#)) offers a useful description of the aphasia types.

U

V

Verbal Working Memory: the temporary maintenance of verbal information for the immediate processing of information. Working memory is a foundation for all other cognitive functioning and language areas.

Verify: exchanging views or ideas with others, reporting out, or checking in.

Visual acuity: the clearness or sharpness of vision.

Visual figure-ground: the ability to see an object in a busy background and filter out irrelevant visual information.

Visual inattention or neglect: the difficulty detecting or acting upon information on one side or space; if present, the inability to recognize or respond to stimuli on the opposite side of the body to train the brain.

Verb: a part of a sentence that typically presents the action involved in the sentence. It may also describe a state or an occurrence. (E.g., I threw the ball.) Traditional aphasia treatment and practice have routinely failed to address verb creation and usage recovery. A hallmark of the Mindful Aphasia Treatment Program at LIFE Speech Pathology is an early, strong, and persistent focus on a PRA's use of verbs.

W

Word stress: the degree of emphasis given a sound or syllable, also called lexical stress.

Whole Person Recovery: refers to the holistic approach LIFE Speech Pathology clinicians, clients, and families use. This Whole Person Recovery philosophy emphasizes the individual's strengths, needs, and resources, incorporating personal interests, history, faith, music, nutrition, exercise, rest, medication, communication, community resources, and more.

X Y Z