

The Power of “I Can”: A Survivor and Therapist’s Guide to Neuroplasticity in Chronic ABI Recovery

2026 BIAK Brain Injury Summit

Allison Ferguson, MS, SLP
Christine Szesny, PT, DPT
Karl Mingus, ABI survivor

About Us...

Allison Ferguson

- Speech Pathologist, Owner at Blossom Neuro Speech & Wellness
- UK alum SLP for ~9 years
- Pure Barre teacher
- Love Your Brain Yoga for healthcare professionals
- Book lover
- Never met a dog she didn't like

Disclosures

Financial: Co-owner of Blossom Neuro Speech & Wellness

Non-financial: None

Christine Szesny

- Physical therapist
- UK alum PT for 11 years
- Neuro Nerd
- Bleed Blue
- I have a goal to run the NYC Marathon before I turn 40
- #1 fan for SLPs (and OTs too!)

Disclosures

Financial: None

Non-financial: None

Objectives

I

Define neuroplasticity as it relates to ABI (acquired brain injury)

2

Identify timeline variations in chronic condition recovery

3

Identify person-centered outcome measures & treatments

4

Identify how terminology used to discuss progress impacts survivor wellbeing

5

Understand emotional challenges of living with a chronic condition

Quotes from actual clients/care partners:

- “They told me after a year I couldn’t get any better”
- “The speech therapist said my aphasia won’t get better...I just have to live with it”
- “He’s just lazy”
- “I was in therapy for months and never learned neuroplasticity”
- “Therapy was a waste of time”
- “Is this ever going to get better?”
- “I just want to be normal again.”
- “It [*previous therapy*] made me feel stupid”
- “They told me I would never be able to drive again” (also insert “walk again” “use this hand again” “go back to work”, etc)

MYTH



After 1-2 years, a client with ABI has reached maximum potential and ‘won't’ get better”

FACT



Clients can continue to improve years after their injury, there is no ‘magic number’

A note on progressive diagnoses...

- “Disorders of downward progression”
 - PPA, dementia processes, ALS, etc.
- Encourage physical activity & social engagement
- Care partner support is key
- Modify their physical environment
- Communication is still possible-support it
 - AAC is still feasible
- Value the skills that remain
- Balance honesty and hope

1

What is neuroplasticity?

“The brain has an extraordinary capacity to adapt and reorganize following injury, a process driven by neural plasticity. This plasticity is central not only to learning new behaviours but also to recovering lost functions after brain damage.”

“Even in the absence of formal rehabilitation, brain damage prompts individuals to develop compensatory behaviours—self-taught strategies to navigate daily activities despite lost function”

“When new learning occurs, it leads to changes in the brain's structure and function, promoting neural growth and reorganisation”

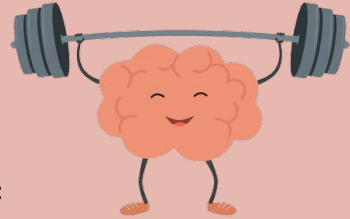
Ten Principles of Neuroplasticity

1. Use it or lose it
2. Use it and improve it
3. Specificity (evidence-based exercises)
4. Salience (task should be meaningful)
5. Transference (skills may generalize to other areas)
6. Interference
7. Time
8. Age
9. Repetition (practice makes permanence)
10. Intensity

In other words...



Time +
Repeated practice +
Personally meaningful activities =
Brain change and progress



It is our job to educate clients & families on neuroplasticity, using words and examples everyone understands

Do what matters to you



Tasks should be important and motivating for you.

Generalize



Practice skills in a variety of situations and settings.

Support System



Attending a support group regularly, with individuals facing similar challenges, can promote new ideas and motivation for recovery.

Use it to Improve it



If you want a specific skill to improve you need to practice using it.

Repetition = Change



The brain requires thousands of repetitions for change to occur. Practicing outside of the treatment room is necessary for neuroplasticity to happen.



Free resource alert!



10 principles of neuroplasticity
How to harness the ability of the brain to heal itself after injury

NEUROPLASTICITY is the amazing ability of our brains to change throughout our lives. It's how we re-learn lost skills after a brain injury like TBI or stroke. These 10 principles are incorporated into your brain rehabilitation therapy. When doing your therapy homework, apply these principles to take a more active role in your recovery.

- 1 USE IT OR LOSE IT**
Your brain is a network of neural connections. Every thought or action or skill you practice has a specific set of connections that fire in the brain – but these connections only stay strong if they're used. If you don't use them, they fade and weaken over time.
- 2 USE IT AND IMPROVE IT**
The flip side of "use it or lose it" tells us to practice a skill often (which means you're firing those brain connections more often) to strengthen neural connections over time.
- 3 SPECIFICITY**
The cells in our brains are called neurons and each is responsible for actions or skills. In order to protect neuroplastic changes, your therapy exercises need to target parts of your brain in a specific way you can't just do any old exercise. In other words, your evidence-based exercises are rooted in research and will improve a specific skill or area of the brain.
- 4 SALIENCE**
A fancy way of saying that your exercises should be meaningful to you. Research shows that motivation helps facilitate neuroplastic changes. Because what's meaningful varies from person to person, and your therapy program isn't set in stone, if you're not inspired by an exercise, try something different.
- 5 TRANSFERENCE**
Learning a skill in one situation can transfer to another situation – and this is a good thing. Clinicians may talk about "generalizing" (or using the skills you practice in therapy to apply to activities outside therapy). This is transference.
- 6 INTERFERENCE**
When you practice and improve skills in one area, it can interfere with your ability to improve skills in another area. Don't worry; your clinician knows how to work around this.
- 7 TIME**
As your brain re-learns skills after an injury, there are times during recovery when you'll see a faster rate of improvement and times when it will seem slower. This is normal neuroplastic healing.
- 8 AGE**
Our brains are more plastic when we are young, which is why kids pick up skills so quickly. However, neuroplasticity absolutely occurs in adulthood too! In fact, at any age, we have the potential to learn new skills or re-learn lost skills.
- 9 REPETITION**
Practicing what therapy frequently and consistently is key. Just like if you're strength-training by lifting weights and you go to the gym once a month, you won't see much improvement. If you go more frequently, you will. Our brains work the same way.
- 10 INTENSITY**
Exercises usually need to be paired with repetition. In the gym example, if you use light weights that don't challenge you, you won't see the same results as if you push yourself with heavier weights. Intensity can be the number of times you do an exercise, how long you do it, or how difficult the exercise is. Play around with different intensity parameters to keep your homework interesting!

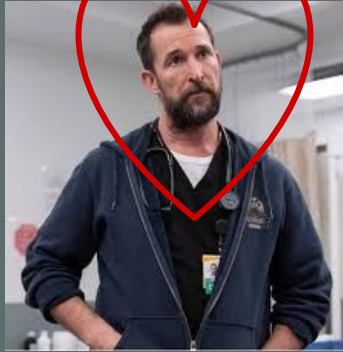
Source: Khan, JJ, June 15. Principles of evidence-based neuroplasticity: mechanisms for rehabilitation after brain damage. <https://www.frontiersin.org/articles/10.3389/fnbeh.2018.00018/full>

Constant Therapy
10, 1000000000

<https://constanttherapyhealth.com/wp-content/uploads/2020/03/10-Principles-of-Neuroplasticity.pdf>

2

Stereotypical recovery timeline



ER/trauma center



Acute care



Inpatient rehab



Home health



Outpatient/school therapy



Discharge: “as good as you’re gonna get”

*Many mild injuries aren't addressed until the outpatient level

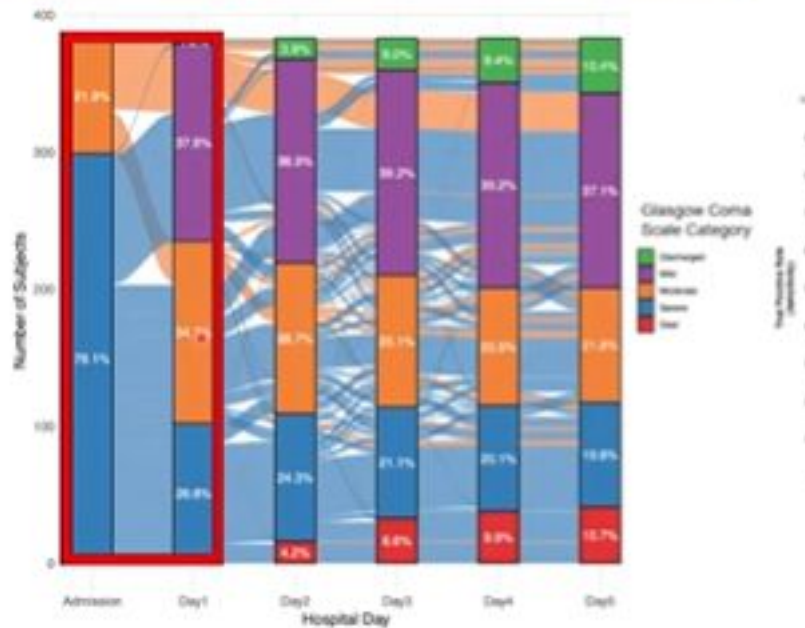
Actual recovery timeline

“There is also a common myth that recovery from brain injury plateaus at 2 years after the initial injury. However, it was been well-documented that long-term functional gains can be acquired if the patient receives intensive neurorehabilitation, even multiple years after the onset of ABI, especially with an emphasis on compensation training”

Johnson et. al, 2022

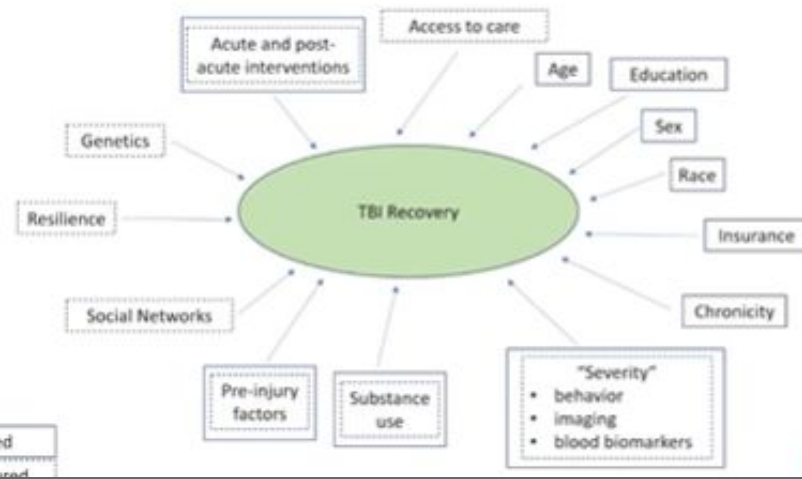
*A note on therapy plateau and necessary therapy breaks/episodic care

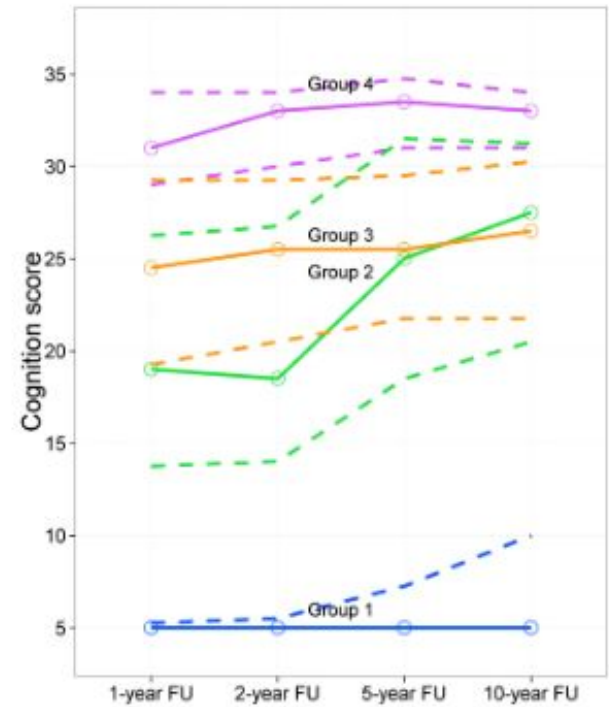
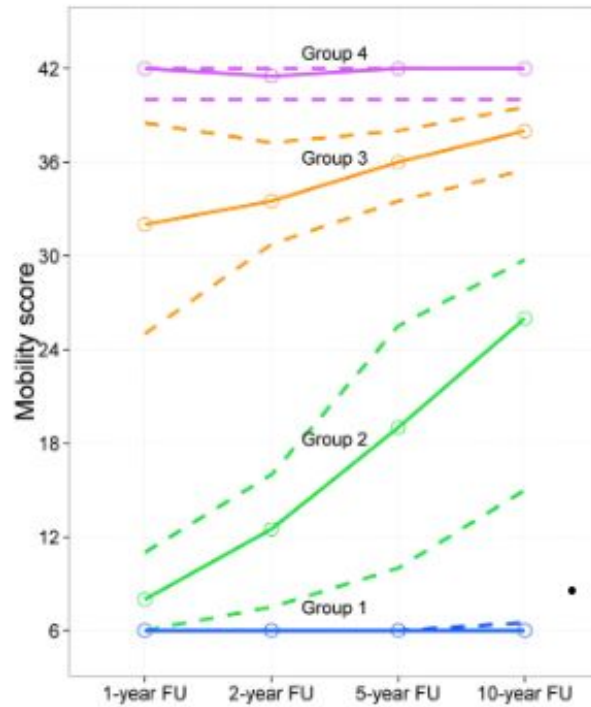
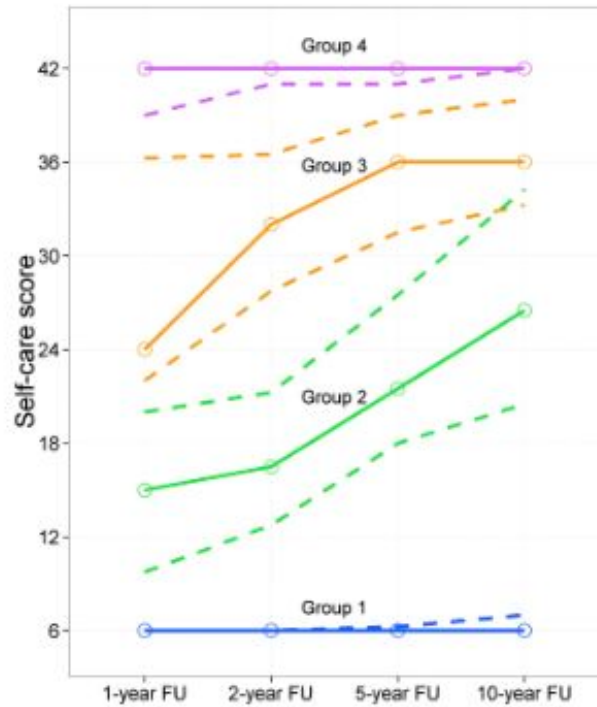
TBI Admission Characteristics Fluctuate



- Presentation to ER or trauma center may or may not be indicative of long term progress...many factors are involved

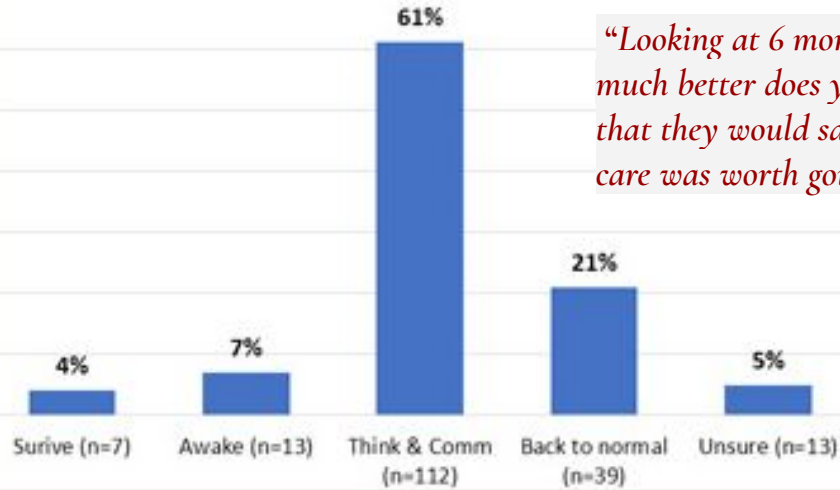
Factors Associated with TBI Outcome





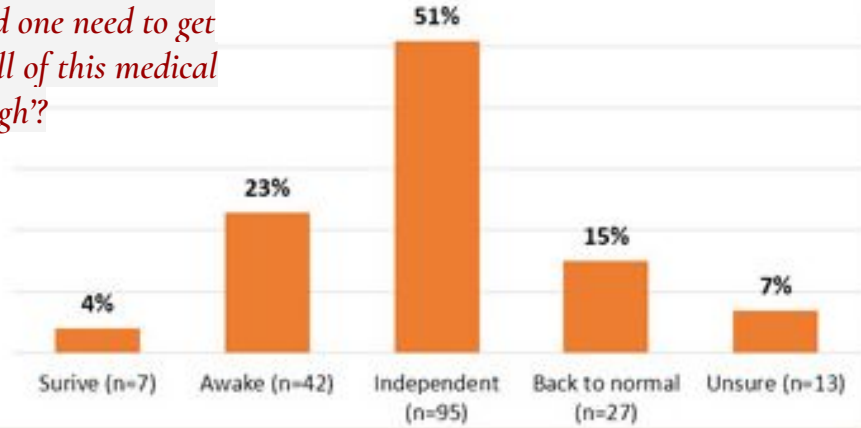
“Recovery can continue up to at least 10 years post TBI...recovery of independence after severe TBI is not just possible, but likely”

In terms of cognitive abilities



“Looking at 6 months or so from now, how much better does your loved one need to get that they would say that ‘all of this medical care was worth going through?’”

In terms of physical abilities



“As long as he/she can think and communicate, even if it is not the way he/she used to be”

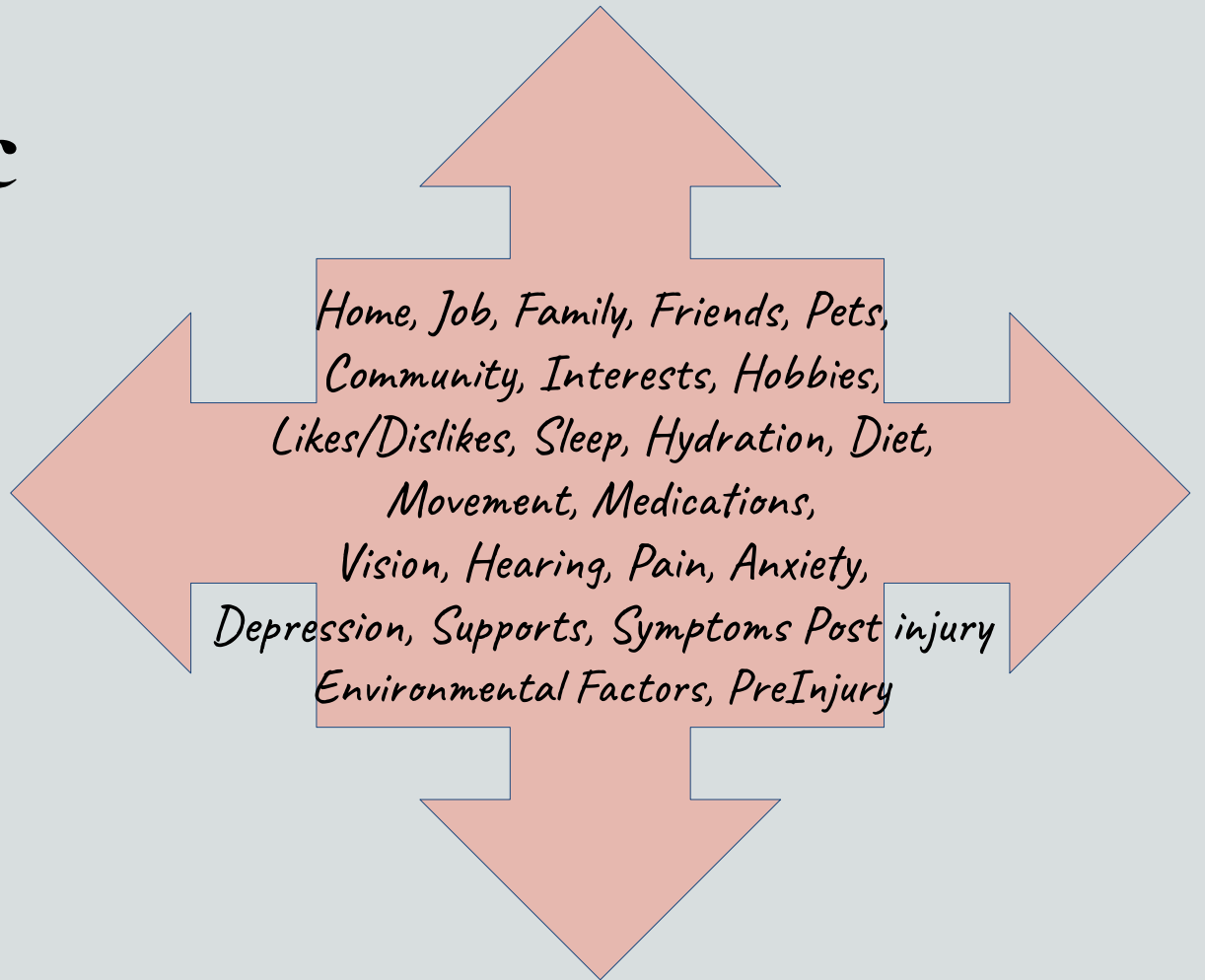
“As long as he/she can walk, toilet and feed him/herself independently - without needing help”

3

Assessment/treatment

- Impact on life participation and meaningful independence should be considered more than a standardized test score
- SLPs need to talk about improvements in terms of everyday life. This matters more than any test score improvement (Smith, et al., 2018)
- SLPs need to focus intervention on relevant participation situations for the individual (Yorkston, Baylor, & Britton, 2017)
- Treatments provided in real-life context have more beneficial outcome (Bogner, et al., 2019)
- Incorporate goals from the interdisciplinary team into your treatment (as long as appropriate and you feel comfortable doing so)
- Be thoughtful and planful with your interventions—every day of treatment matters to support return to improved independent function

A Holistic Case History



All
free!

Neuro QOL scales

- Cognition, communication, social participation
- Adult and pediatric
- Multiple languages
- T-scores for some scales

Patient Specific Functional Scale

- Client ranks performance on scale of 1-10
- MDC/MCID scores
- Can be used to set goals during first session

Communicative Participation Item Bank

- 10 items-measures communication across meaningful activities
- Adult
- T-scores

Multifactorial Memory Questionnaire

- Memory performance across daily tasks
- Also scales for feelings about memory & use of strategies
- T-scores
- Multiple languages

Carer COAST

- Caregiver report
- Measures QOL, communicative participation, and multi-modal communication of clients and caregivers post stroke

Communication Confidence Rating Scale (CCRSA)

- 10 items
- Adults with aphasia
- Measures confidence across meaningful communication domains

All
free!

Executive Function Inventories

- Child, teen, & adult scales (CHEXI, TEXTI, & ADEXI)
- A parent or care partner can fill out
- No normed data yet

Communication Matrix

- Pediatric or very involved diagnoses
- Measures early stages of communication
- Can be used to educate families and set goals

Mental Fatigue Scale

- “Brain fog” populations
- Adult focused-several areas of fatigue
- Cutoff scores

Dysarthria Impact Profile

- Measures feeling, acceptance, communication with others
- Can rank speech among “other worries”
- Request access from the library (research article)

Eating Assessment Tool (EAT-10)

- Dysphagia; adult focused
- Cutoff scores
- Can be used across multiple settings

Activities-specific Balance Confidence (ABC) Scale

- Measures fear of falling and confidence with performing daily activities
- Can be self administered or administered by an interviewer
- A score of less than or equal 49% indicates a falls risk in individuals with stroke

Patient Specific Functional Scale

- Client ranks performance on scale of 1-10
- MDC/MCID scores
- Can be used to set goals during first session

Mayo-Portland Adaptability Inventory (MPAI)

- Assists in the clinical evaluation of individuals during the postacute period following ABI
- Can be completed by individual, the caregiver or the clinician

Zarit Caregiver Burden

- Caregiver report
- Short and long forms

Participation Objective, Participation Subjective (POPS)

- Helps to identify what is or is not important to an individual in their daily living
- Can assist with identifying personalized, patient specific goals

Evaluation

Patient-Specific Functional Scale

Client example

at least three important activities that you are unable to do or have difficulty doing your current problem. Write these down. Then rate your ability to do the activities in the last week by circling the appropriate number.

Activity 1: Reading a Bible verse/passage
unable to perform 0 1 2 3 **4** 5 6 7 8 9 10 able to perform at pre-injury level

Activity 2: Self monitoring in conversation
unable to perform 0 1 **2** 3 4 5 6 7 8 9 10 able to perform at pre-injury level

Activity 3: Typing a paragraph (ex: email)
unable to perform 0 1 2 **3** 4 5 6 7 8 9 10 able to perform at pre-injury level

Activity 4: Talking in a larger group/noisier environment
unable to perform 0 1 2 3 **4** 5 6 7 8 9 10 able to perform at pre-injury level

Activity 5: _____
unable to perform 0 1 2 3 4 5 6 7 8 9 10 able to perform at pre-injury level

SCORE: Sum of individual #s divided by the total # of activities:

3.25

Minimum detectable change (90%CI) for average score = 2 points

Minimum detectable change (90%CI) for single activity score = 3 points

Progress note

Patient-Specific Functional Scale

Client example

at least three important activities that you are unable to do or have difficulty doing your current problem. Write these down. Then rate your ability to do the activities in the last week by circling the appropriate number.

Activity 1: Reading a Bible verse/passage
unable to perform 0 1 2 3 4 5 6 7 **8** 9 10 able to perform at pre-injury level

Activity 2: Self monitoring in conversation
unable to perform 0 1 2 3 **4** 5 6 7 8 9 10 able to perform at pre-injury level

Activity 3: Typing a paragraph (ex: email)
unable to perform 0 1 2 3 4 5 **6** 7 8 9 10 able to perform at pre-injury level

Activity 4: Talking in a larger group/noisier environment
unable to perform 0 1 2 3 4 5 **6** 7 8 9 10 able to perform at pre-injury level

Activity 5: _____
unable to perform 0 1 2 3 4 5 6 7 8 9 10 able to perform at pre-injury level

SCORE: Sum of individual #s divided by the total # of activities:

6

Minimum detectable change (90%CI) for average score = 2 points

Minimum detectable change (90%CI) for single activity score = 3 points

Treatments & Strategies



Person-centered

Meaningful

Evidence-based

Instead of this....

Try this!

“Client will recall 5 unrelated words”

“Client will recall sequence for activating hospital call button” or “Jill will recall first 6 steps of teaching a sun salutation” or “Client will independently navigate calendar app on phone”

Memorizing word lists so client can remember a grocery/errands list

Teach metacognitive strategy of writing items down as soon as they think of them, or practice using internal rehearsal until they can write it down

Using box picture cards for naming

Name photos from their smartphone, items in their room, Google map places, team logos

Workbook auditory comp passages or y/n questions

TED talks, podcasts, news clips, conversation supports

Generic workbooks for adolescent language

Use their homework/schoolwork or have them read & teach you the rules to an age-appropriate game

“Client will name X number of items in a concrete category”

“Using word finding strategies as indicated, client will name X number of family members/preferred activities/desired restaurant items” etc.

Instead of this....	Try this!
Dysarthria worksheets and workbook pages or pre-made pediatric articulation pages	Create a list most meaningful words/phrases and practice with high repetitions (remember-neuroplasticity!)
Reading comprehension passages from workbooks	TalkPath News, Chat GPT, or client's favorite reading material from home
Sudoku puzzle for problem solving	Problem solving for any meaningful task determined in case history/interview
Playing games for adult cognitive therapy (unless they have a personal goal of games)	Organize email inbox, develop system for checking & sorting mail, wheelchair transfer sequence, cooking tasks, sending cards to friends, accessing phone apps
Sequencing worksheets	Goal Plan Do Review for a meaningful task
"Client will perform 10 effortful swallow exercises"	Review neuroplasticity principles to determine # of reps needed to actually tax the system

Evidenced-based!

Response Elaboration Training

- Use candid family photos instead of generic action photos

Multiple Oral Re-reading

- Use song lyrics, favorite story, Bible passage instead of workbooks or tongue twisters

Spaced Retrieval

- Truly anything they want to recall
- Great for sequencing technology

Semantic Features Analysis

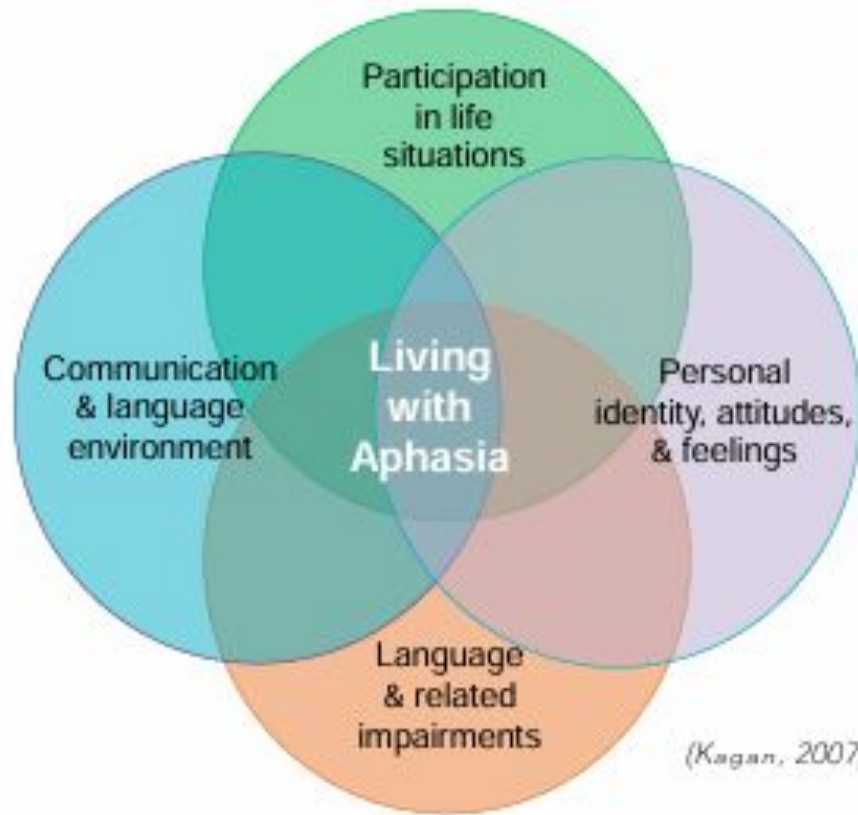
- Use items in their room
- Family members

Copy and Recall Treatment (CART)

- Use family names, team names, address
- Texting option!

Action Observation Treatment

- Use a video clip database (ie:: Pixabay Videos, Pexel Videos) to find relevant actions



A-FROM model and the Life Participation Approach to Aphasia

PTs: Whats in your tool kit?

First and foremost—always respect the autonomy of any and every patient.

Utilize a Multidisciplinary Approach

Integrated care is paramount for optimal recovery

Patient Centered Adaptations

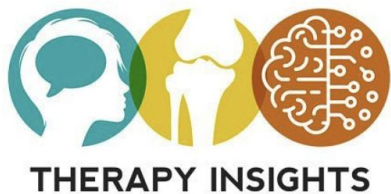
Focus on functional tasks that are relevant to the patient's daily life—ie if they are performing seated reaching to address trunk control have them reaching for something meaningful (a coffee cup if they're a coffee fanatic, a baseball if all they do is talk about the Yankees, etc)

Task Oriented Training

Emphasize repetition of real world activities to improve motor control and function

Family/Caregiver Training

Engaging loved ones in a person's brain injury recovery including goal setting and preparing them for the recovery journey will allow the caregiver to best support the patient optimizing outcomes



7 alternatives to the word "refused"

Declined... the recommendation of nectar thick liquids.

Chose instead to... prioritize rest over therapy.

Opted to... remove the brace.

Requested that... the therapist come back later.

Preferred to... not use the AFO.

Elected to... use the commode.

Verbalized that... they want to go home and are done with therapy.

Instead of:

Due to non-compliance, therapy has been d/c'd.

Try:

Pt and therapist discussed therapy goals related to TBI. Pt provided with written and verbal education regarding the role of the (SLP/OT/PT) and pt verbalized understanding. Pt is choosing not to participate in therapy at this time.

4

Your words matter

- Clients will remember the words we say long after discharge
- Avoid “good job”...be specific
 - Specific feedback promotes neuroplasticity
- “I know you know”
- Unconditional positive regard
 - Non-judgmental stance
 - Not “good or bad”
- Presume competence but also consider most patients are not practitioners—provide explanations at an appropriate level
- REMEMBER:

THE IMPORTANCE AND POWER OF LISTENING

5

Psychosocial Impacts

- An ABI does change identity and one's sense of self
- An ABI happens to the whole family
- Care partner training for aphasia (aphasia.ca)
 - Empower the loved ones to empower clients!
- Caregiver training sessions
 - Skilled, billable, little prep time

Mental Health & Aphasia

- Clients with aphasia are more than 7x likely to experience post-stroke depression
- Depression diagnosis for persons with aphasia (PWA)
 - 3 months post stroke: 70%
 - 1 year post stroke: 62%
- National Aphasia Association Survey:
 - 90% felt socially isolated
 - 70% felt others avoided contact with them
- Aphasia severity is the stroke-related factor that predicts how much a person's social network will decline (6 months post stroke)

Those statistics combined what we know but maybe aren't sharing about neuroplasticity...imagine the impact of hearing "only a year or two to get better"

Versus...

Figuring out what a client's meaningful goals are and promoting neuroplasticity to make progress, not perfection

Aphasia Support Group

Individuals with aphasia have lots to communicate!

Come join the group in a space to smile, laugh, grieve, plan, and share

There is NO cost or reservation required to attend the group.

the 2nd Tuesday of each month from 6pm-7pm in Blosson's space in the

Group Name	Virtual Option	City	State	Zip Code
Aphasia Support Group-Louisville		Louisville	KY	40217
UofL Health-Stroke Virtual Stroke Support Group		Louisville	KY	40202
Friendly Folks Stroke Support Group		Louisville	KY	40215
UofL Health Stroke Survivor/Caregiver Support Group		Louisville	KY	40206
Norton Neuroscience Institute Stroke Survivor Group - In Person		Louisville	KY	40207
Norton Neuroscience Institute Stroke Survivor Group - Virtual		Louisville	KY	40207
BH-Floyd Stroke Support Group		New Albany	IN	47150
Southern Indiana Rehabilitation hospital Support Group		New Albany	IN	47150

Psychology Today

Find a Therapist Get Help

Find a Therapist

Therapists City or Zip

Therapists: Login | Sign Up



Group Name	Virtual Option	City	State	Zip Code
Brain Matters -Lexington	Yes	Lexington	KY	40536

PPA Care Partner Support Group



Virtual!

Join us for an evening support group for communication and care partners of people with primary progressive aphasia and primary progressive apraxia of speech (PPA/PPAOS). This is a space for care partners, family, and friends of people with PPA/PPAOS to find community with one another. Hosted virtually via Zoom by the National Aphasia Association.

Program: Support Community For Communication and Care Partners of people with PPA and PPAOS

Advisor: Kiiya Shibata and Zoe Ezzes

When: Every 2nd and 4th Monday at 7:30pm ET

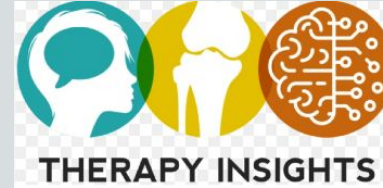
National Aphasia Association website



Favorite Education Resources

Books/Articles

- Counseling in Communication Disorders: Nelson & Holland
- Motivational Interviewing in Healthcare: Stephen Rollnick
- Rights Come to Mind: Joseph Fins
- Transforming Cognitive Rehabilitation: Solberg & Turkstra
- Optimizing Cognitive Rehabilitation: Solberg & Turkstra
- INCOG 2.0 articles
- brainandcommunication.ca



@therapyinsights

@neuro.connections

@neurospeechservices

@the.neuro.slp

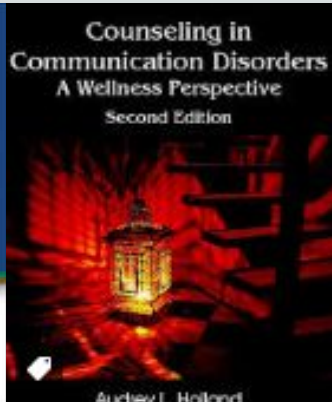
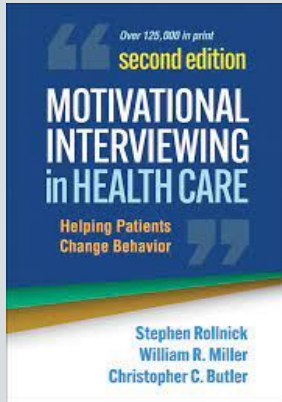
@speechuncensored

@unlearnwithme.theslp

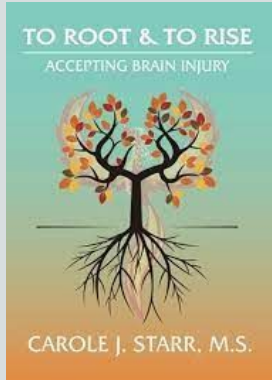
@ptsd.slp

@deseles_phd

What else?!



Favorite Resources



Meditation & Mindfulness

- 10% Happier
- Insight Timer
- Headspace
- <https://www.loveyourbrain.com/resources>



APHASIA SUPPORT GROUP

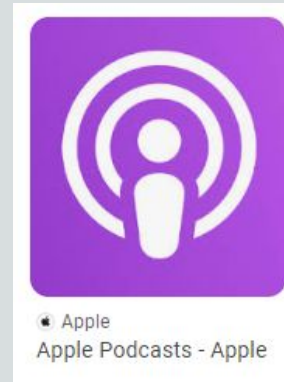
6-7pm, 2nd Tuesday of every month

Where:

Blossom Neuro Speech & Wellness
Medical Arts Building
1169 Eastern Pkwy, Suite 3358



**Coherent
Breathing Classes:**
ask us for more
info!



Christine & Allison aren't the experts,
however. So they brought someone
that is....

References

Holland, A. L. (2007). *Counseling in communication disorders: A wellness perspective*. Plural Publishing Inc..

Kleim, J. & Jones, T. (2008). *Principles of Experience-Dependent Neural Plasticity: Implications for Rehabilitation After Brain Damage*

<https://constanttherapyhealth.com/wp-content/uploads/2020/03/10-Principles-of-Neuroplasticity.pdf>

therapyinsights.com

Johnson SF, Klonoff PS, Perumparaichallai RK. *Long-term neurorehabilitation outcomes of pediatric vs. adult onset acquired brain injury*. *Front Neurol*. 2022 Dec 20;13:981991. doi: 10.3389/fneur.2022.981991. PMID: 36605786; PMCID: PMC9810073.

Hammond FM, Giacino JT, Nakase Richardson R, Sherer M, Zafonte RD, Whyte J, Arciniegas DB, Tang X. *Disorders of Consciousness due to Traumatic Brain Injury: Functional Status Ten Years Post-Injury*. *J Neurotrauma*. 2019 Apr 1;36(7):1136-1146. doi: 10.1089/neu.2018.5954. Epub 2018 Oct 19. PMID: 30226400.

Bodein, Yelena. *Long term outcome after severe traumatic brain injury*. 5th Biannual International Cognitive Communication Disorders Conference. Jan 16, 2026.

Rutz Voumard R, Kiker WA, Dugger KM, Engelberg RA, Borasio GD, Curtis JR, Jox RJ, Creutzfeldt CJ. *Adapting to a New Normal After Severe Acute Brain Injury: An Observational Cohort Using a Sequential Explanatory Design*. *Crit Care Med*. 2021 Aug 1;49(8):1322-1332. doi: 10.1097/CCM.0000000000004947. PMID: 33730742; PMCID: PMC8282680.

Bogner et al., (2019) *Contextualized treatment in traumatic brain injury rehabilitation: effects on outcomes during the 1st year after discharge*. *Archives of Physical Medicine and Rehabilitation*, 100(10), 1810-1817.



References

Yorkston, K., Baylor, C., & Britton, D. (2017) Speech vs speaking: The experiences of people with Parkinson's Disease and implications for intervention. *American Journal of Speech-Language Pathology*, 26, 561-568.

Smith GE, Chandler M, Fields JA, Aakre J, Locke DEC. A Survey of Patient and Partner Outcome and Treatment Preferences in Mild Cognitive Impairment. *J Alzheimers Dis.* 2018;63(4):1459-1468. doi: 10.3233/JAD-171161. PMID: 29843239; PMCID: PMC6027859.

Kagan, A., Simmons-Mackie, N., Rowland, A., Huijbregts, M., Shumway, E., Mcewen, S., Threats, T., & Sharp, S. (2007). *Counting what counts: A framework for capturing real-life outcomes of aphasia intervention.* *Aphasiology*, 22(3), 258-280. <https://doi.org/10.1080/02687030701282595>

Zanella, C., Laures-Gore, J., Dotson, V., & Belagaje, S. (2022). Incidence of post-stroke depression symptoms and potential risk factors in adults with aphasia in a comprehensive stroke center, *Topics in Stroke Rehabilitation*, 30(5):448-458. <https://doi.org/10.1080/10749357.2022.2070363>

Zanella, C. (2020). The incidence of post-stroke depression in adults with aphasia in an acute care setting. Thesis, Georgia State University. 2-45. <https://doi.org/10.57709/20347515>

Carr, C. (2011). Understanding aphasia is the most important part of recovery. *Brain & Life*. <https://www.brainandlife.org/articles/understanding-aphasia-is-crucial-to-recovery-for-patients-and-caregivers/>.

Hilari, K. & Northcott, S. (2016). "Struggling to stay connected": Comparing the social relationships of healthy older people and people with stroke and aphasia. *Aphasiology*, 31(6), 674-687. <https://doi.org/10.1080/02687038.2016.1218436>

Northcott, S., Marshall, J., & Hilari, K. (2016). What factors predict who will have a strong social network following a stroke? *Journal of Speech, Language, and Hearing Research*, 59(4), 772-783. <https://doi.org/10.1044/2016.jslhr-l15-020>



References

Davidson, B., Howe, T., Worrall, L., Hickson, L., & Togher, L., (2008). Social participation for older people with aphasia: the impact of communication disability on friendships. *Topics in stroke rehabilitation*, 15(4) 325-340. <https://doi.org/10.1310/tsr1504-325>

Thompson, Theresa & Reed, Allie. Tackling the Psychosocial Impacts of Aphasia: The SLPs Role. *Lingraphica*. Jan 11, 2024.

