

# St. Jude's Brain Injury 101: Cognitive Training

[www.tbioc.org/hicares](http://www.tbioc.org/hicares)

**WEEK 7**

Ohio Valley Center for Brain Injury Prevention  
 Acceptance & Commitment Therapy  
 Rehabilitation Psychology (Div 22)  
 Clinical Neuropsychology (Div 40)  
 Amen Clinics: Concussion Rescue  
 CogSMART [www.cogsmart.com](http://www.cogsmart.com)  
 Brainwave-R (CCT)



ST. JUDE'S BRAIN INJURY NETWORK   @TBIOC   @TBIOC  
 WWW.TBIOC.ORG WWW.OMIDINSTITUTE.ORG

1

Check-in's: How was your week?  
 Difficulties using these? Brainstorm solutions.

**Strategy 1: Home for your stuff**



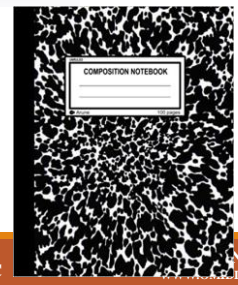
**Strategy 2: Automatic Places**



**Strategy 3: Calendar**

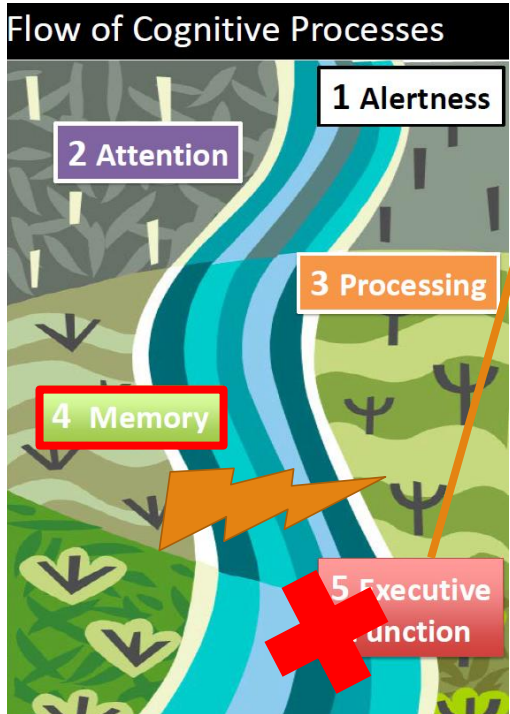


**Strategy 4: Notebook (journal)**



ST. JUDE'S BRAIN INJURY NETWORK   @TBIOC   @TBIOC  
 WWW.TBIOC.ORG WWW.OMIDINSTITUTE.ORG

2

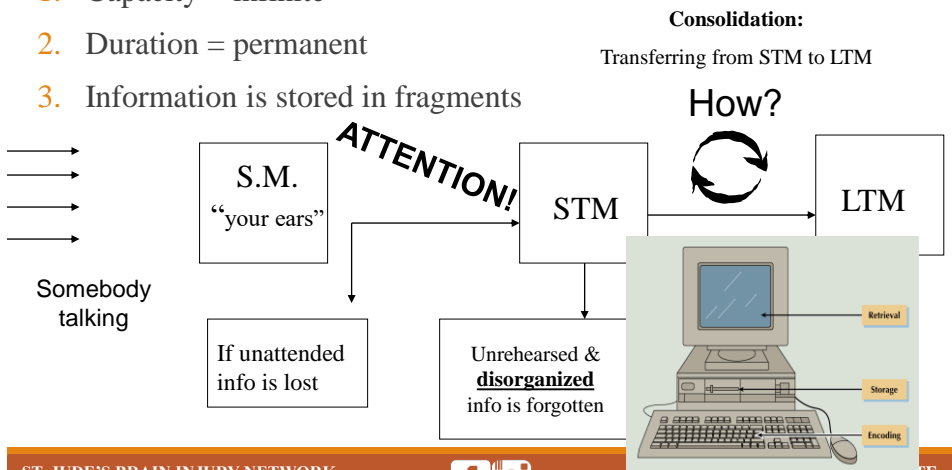


1. Initiation
2. Impulsivity control
3. Planning/Organization
4. Self-Awareness (anosognosia)
5. Mental **Flexibility**

3

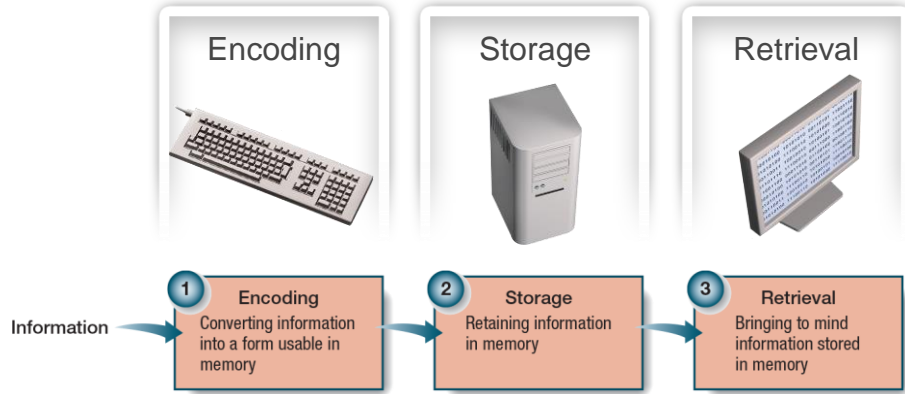
## Memory Storage

1. Capacity = infinite
2. Duration = permanent
3. Information is stored in fragments



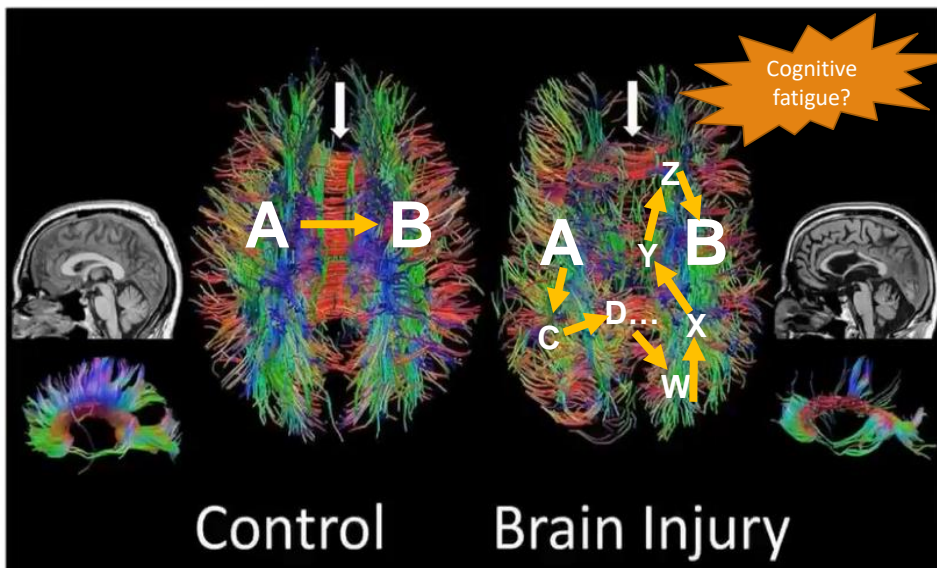
4

## Three Key Processes of Memory



5

TBI is a disorder of disrupted brain connectivity



**WHAT CAN BE DONE??!**

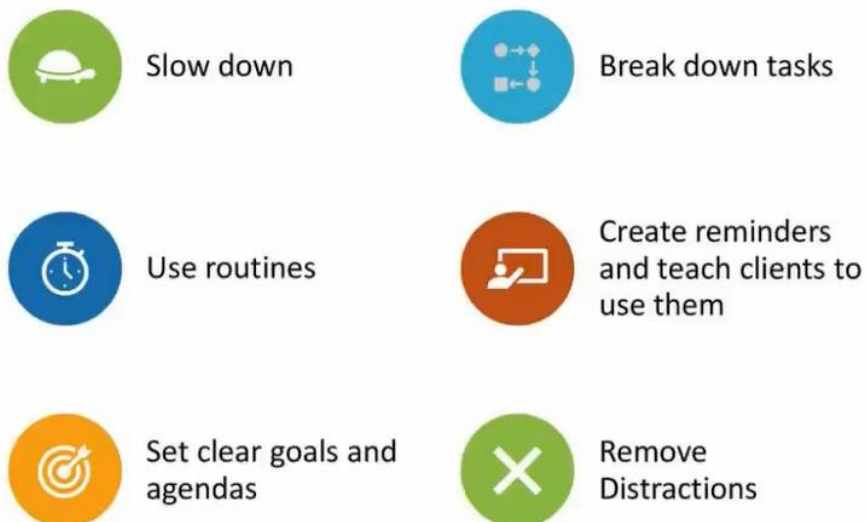
6

## Accommodating cognitive impairment



7

## Reducing cognitive load



8

## Weekly Log:

Should have 2-3 weeks of data, any patterns??  
Keep logging next week too!

---

### LEARNING OPPORTUNITIES

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

### SUCSESSES

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

What didn't work out well? Where did things begin to go wrong?  
"You can't fix something, if you don't know it's broke!"

## The memory strategies will help you:

---

1. Reduce the amount of information to be remembered.
2. Make information personally meaningful to you in order to remember it more easily.

### 3. **BEGIN THINKING ABOUT:** (hoarder example)

How to decide what is important enough to remember, then simplify that information

## Encoding Strategy: Overlearning

---

1. **REHEARSE/REPEAT information** over & over until committed to memory.
2. **We overlearn lots of different information:**
  1. the names of our siblings and parents (dementia screen)
  2. the alphabet, happy birthday song, riding a bicycle
3. Anything can be overlearned, and overlearned information is less likely to be forgotten.

## Encoding Strategy: Putting in Your Own Words

---

1. **REHEARSE information**  
but first phrase in a familiar way
2. **Journaling (paraphrasing)**
  1. Literally, paraphrasing your life in your own words
  2. Write, read what you write, say out loud, hear you say
    1. Multiple ways of processing

## Storage Strategy: Recreate the Mental Context

---

1. **Remember where you were or what you were doing when you learned the information you want to retrieve**
2. For example, if you remember that you were eating in the kitchen when your spouse told you what groceries were needed: recreate that context
  1. Either imagine the context or actually go there, and it will be easier for you to remember the details.

## Storage Strategy: Organization

---

- ❖ Organization in your environment
- ❖ Daily routines
- ❖ Use “automatic places” for things:

## Storage Strategy: Simplify

---

1. Linking tasks
2. Chunking
3. Getting help (family, support group♥)

## Retrieval Strategy: Mental Retracing

---

1. If you've lost an item and you can't retrieve the memory of where it is
2. Mentally retrace your steps and reconstruct the events leading up to when you last had the item.



## Memory Retrieval

---

- 1. Context dependent memory effect:**
  1. The tendency for info to be better recalled in the same context in which it was originally learned.
  2. Going back to the Mental Context that you created earlier during “Storage”

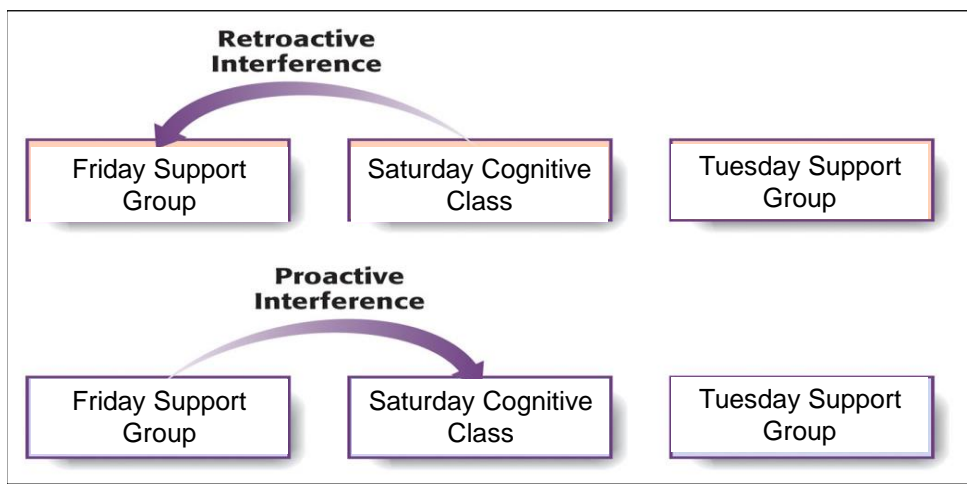
## Memory Retrieval

---

- 1. State dependent memory effect**
  1. The tendency for info to be better recalled when the person is in the same state as when originally learned.
  2. If you drink coffee before class, drink a cup of coffee before test.
  3. Similarly, a happy mood will facilitate other happy memories (me! It's not easy... I understand ♥)

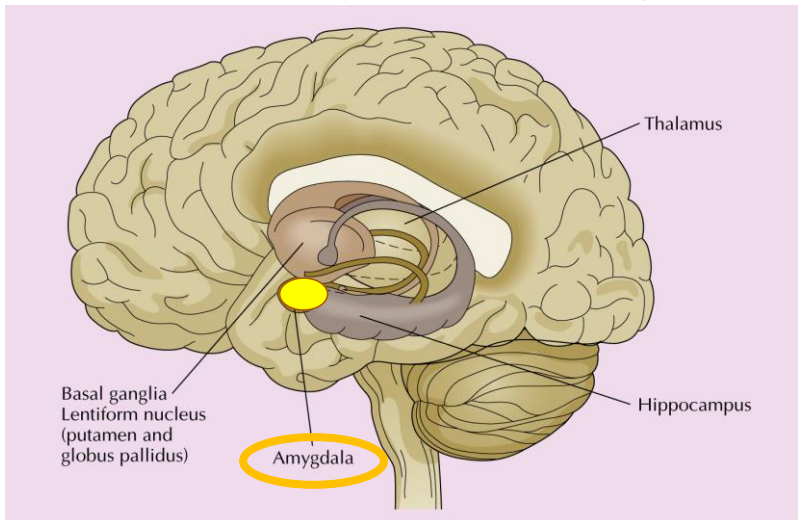
## Interference Theory: Confabulation

Events that are similar may be confused during recall:



19

## Anatomy of Memory



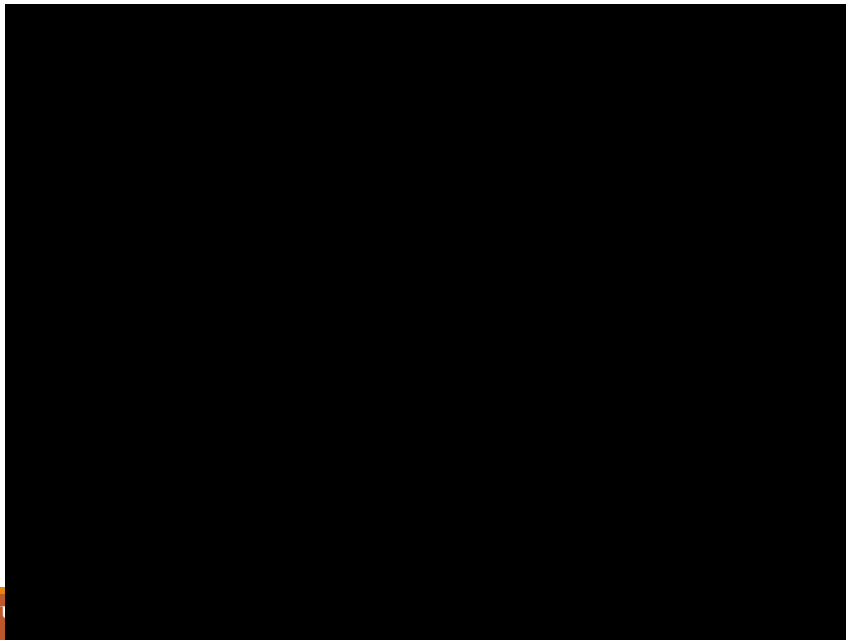
20

# Remembering & Learning Names

STRATEGIES TO TRY

21

## Name Learning



22

## Breakout Activity: Where is YOUR difficulty?

---

1. Cognitive Flow Model:
  1. Alertness
  2. Attention
  3. Information Processing (ENCODING)
  4. Memory (STORAGE)
  5. Memory (RETRIEVAL)
  6. Executive Functions (e.g., social interactions, decision making)
2. Where is your cognitive ability breaking down?
  1. Use your journal to track “Learning Opportunities!”

## Problem-solving:

---

The ability to navigate through problem-space.

**COGNITIVE FLEXIBILITY:**  
 ability to think in new & different ways, than the way you are used

Jodi House Brain Injury Support Center and St. Jude  
Brain Injury Network present

## **Weekly Virtual Support Group for Brain Injury Survivors**

A unique opportunity for brain injury survivors across the state of California to connect with one another virtually, in a show of strength and solidarity. All are welcome as we come together to find out that we are not alone.

**Every Friday**  
**11 AM-12:30 PM** **PST**

To access the group via webcam, use this link:

**<https://zoom.us/j/9956799150>.**

Alternatively, you can call into the meeting at  
**1-669-900-6833.**

The meeting ID is **995 679 9150**.

Email:

[Daniel.Ignacio@stjoe.org](mailto:Daniel.Ignacio@stjoe.org)

For updates/services/information

On Head Injury treatment in

**Orange County**

[www.tbioc.org](http://www.tbioc.org)

25

See you next Saturday  
11-1 pm PST =)  
& Individual during the  
week!

---

ST. JUDE'S BRAIN INJURY 101

26