
Whatever the tasks,
do them slowly with ease,
In mindfulness.

Don't do any tasks in order to get them over
with.

Resolve to do each job in a relaxed way,
with all your attention.

-Thich Nhat Hanh

TYPES OF MEMORY

There are many types of memory. The type of memory you use, and therefore the location where it is stored, depends upon the type of information you are presented with. It is important that you have a basic understanding of the types of memory because if you are conscious of the type of memory you are using when you first encounter information, the memory will be encoded in your brain much more effectively. There are 6 types of memory that we will address.

1. **Semantic memory:** involves data related to who, what and why. (i.e. seeing an old friend on the street and knowing who they are and why they are close to you or being able to remember paintings, song lyrics)
 - **Verbal:** ability to process verbal information into your memory (i.e. reading directions and remembering them or listening to someone tell you directions and remembering them)
 - **Visual:** ability to effectively process visual information (i.e. remembering directions by looking at a map)
2. **Episodic memory:** involves data related to where and how (i.e. seeing an old friend on the street and recalling the first time you ever met him/her)
3. **Procedural memory:** stores information on how to do something such as skills that you're learned. Procedural memory can be complicated (i.e. rebuilding an engine) or simple (i.e. riding a bike)
4. **Incidental memory:** a form of indirect, unplanned or unintentional learning (i.e. learning how to do an exercise just by seeing someone else do it)
5. **Working memory:** temporarily storing and manipulating information in your short-term memory (i.e. looking up a phone number and dialing it)
6. **Prospective memory:** remembering to carry out intentions (i.e. remembering an appointment)

PROCESS OF MEMORY

Memory is a process by which information is taken in through your senses then processed by many different systems in your brain and stored for later use. It's the way your mind keeps a record of your experiences and the value of memory is that you can call on this stored information for use later and in other parts of your life. In some ways your memory is like a vast and complicated filing system in which certain pieces of data are stored in certain places in your mind. The process by which you actually remember things is complex. Memory actually happens in three stages:

1. **Encoding:** process by which your brain develops a "code" to store information once you are exposed to it. It's the point in your memory function that your brain starts to create neural connections and networks that will eventually become memories.
2. **Storage:** ability to effectively accumulate memory.
 - **Short-term memory:** when information is first stored it goes into short-term or working memory. This is a storage facility for all of the information that you are using *right now*.
 - **Long-term memory:** all of the information that is stored in your brain for later use.
3. **Retrieval:** ability to recall information. This is the part of the memory process where you actually "remember."

TYPES OF ATTENTION

Attention is best described as the sustained focus of cognitive resources on information while filtering or ignoring extraneous information. Attention is a very basic function that often is a precursor to all other neurological/cognitive functions. There are five different types of attention:

- **Focused attention:** This is the ability to respond discretely to specific visual, auditory or tactile stimuli (i.e. turning your head when you hear something or responding to touch)
- **Sustained attention:** This refers to the ability to maintain a consistent behavioral response during continuous and repetitive activity (i.e. reading a book). It is divided into two subcomponents:
 - **Vigilance:** This is the ability to maintain attention over time during continuous activity when there is only occasionally occurring stimuli to pay attention to (i.e. watching for falling stars)
 - **Working Memory:** actively holding and manipulating information
- **Selective attention:** This level of attention refers to the capacity to maintain a behavioral or cognitive set in the face of distracting or competing stimuli. Therefore it incorporates the notion of "freedom from distractibility" (i.e. reading a book while sitting in a crowded waiting room)
- **Alternating attention:** It refers to the capacity for mental flexibility that allows individuals to shift their focus of attention and move between tasks having different cognitive requirements (i.e. completing a task while also keeping track of time)
- **Divided attention:** This is the highest level of attention and it refers to the ability to respond simultaneously to multiple tasks or multiple task demands (i.e. listening to two people talk at the same time or driving while reading a map)

IMPROVING YOUR ATTENTION

Up to this point you have been given some assessment tools and some explanations of what attention is. Now it is time for you to actually improve your attention and, by doing this, improve your overall cognitive functioning. There are four basic principles that you can employ in order to improve your attention. These are:

1. **Active Effort:** The more effort you put into really trying to absorb the details of something, the more likely you are to recall them later. *Bottom Line: Practice, Practice, Practice being actively attentive at all times.*
2. **Energy Conservation:** You only have so much energy to give, managing it is important to improving your attention and memory. *Bottom Line: Minimize the amount of effort required to complete any task by eliminating distractions and rest/taking a break if you need it.*
3. **Organization:** By getting yourself organized and using some system that will help you remember what you have to do, you will be saving your attention for other things. *Bottom Line: getting organized can conserve energy, decrease confusion and decrease the overwhelmed feeling.*
4. **Preparation:** If you are about to engage in a task that you know will require some attention, preparing yourself for that task allows you to use your attention to its fullest capacity. *Bottom Line: Breakdown the task into steps and after the task is complete, review how these steps helped for future use.*

The more you use these principles responsibly in your *daily life*, the more your memory and other aspects of your cognitive function will improve. Remember that your mind is like a muscle, if you train it, it will improve. Think of these principles of attention as weights or your training tools. It is *your* job to use them effectively and *consistently* in order to improve your "cognitive muscles."

Cognitive Communication Effects

Slowed Speed of Processing

What you might see:

- Taking longer to answer questions
- Taking longer to understand things that were easily understood before
- Taking a long time to react and respond

How you can help:

- Slow down and simplify information.
- Break complex tasks and activities down into smaller steps.
- Allow extra time to respond to questions and to comprehend and learn new information.
- Encourage your service member/veteran to ask others to slow down and repeat information.

Difficulties with Memory

What you might see:

- Can't remember information from day to day about people, conversations, places, events, appointments, dates, and telephone numbers
- Keys, wallet, etc. are frequently lost or misplaced
- Repeating questions or the same story over and over again
- Can't learn new information and use it in everyday life

How you can help:

- Get the person's attention when you are trying to teach, do, or discuss something.
- Break new information down into categories or "chunks". List and review them in order.
- Set up a routine of daily tasks and follow it.
- Help your family member use memory aids on a regular basis. Write down tasks on a calendar or notebook. Check tasks off when done.
- Buy a pill box and label each compartment with the time and day that medication should be taken. Write the names of medications and when to take them into the calendar/memory notebook.
- Keep personal and household items in the same place.
- Try to pair new information with things the person is able to recall.
- Provide verbal cues for recall and help fill in memory gaps.
- Talk to your service member/veteran about the activities and events of the day to help build memory.
- Have your service member/veteran review plans for the following day.
- Present information in more than one way, including hearing, seeing, and doing. Each person has a different learning style.

Attention Problems

What you might see:

- Short attention span, sometimes only minutes in duration
- Easily distracted
- Difficulty in attending to one or more things at a time
- Inability to shift attention from one task or person to the next
- Difficulty completing tasks

How you can help:

- Focus on one task at a time.
- Be sure you have your service member/veteran's attention before beginning a discussion or task.
- Reduce clutter at home and in the work environment.
- Perform tasks in a quiet environment.
- Remove distractions and noises that you don't need.
- Use timers (watches, PDAs, or other devices) and checklists in a calendar/memory notebook to help with completion of tasks.
- Refocus attention to the task at hand.
- Expect a short attention span. Schedule rest breaks and/or stop an activity when you notice drifting attention.
- When signs of distraction arise, insert a rest break ("Let's do this for another 5 minutes and then take a 15 minute break.").
- Present verbal or visual information in limited amounts.

Planning and Organization Problems

What you might see:

- Problems organizing time to get things done
- Problems understanding which tools are needed to complete a task and getting them together
- Problems breaking down complex tasks into smaller steps
- Having a hard time getting ready for work, school, and appointments
- Being late for appointments and work or school
- Having a hard time starting a task
- Problems making plans and completing them
- Problems setting goals
- Trouble prioritizing
- Looking disorganized

How you can help:

- Begin with small, realistic tasks.
- Work with your family member to get organized at home. Keep a family calendar posted on a wall. Use reminder notes and cue cards.
- Have a place for everything and keep everything in its place.
- Turn off the radio/TV or other distractions when tasks need to be done.
- Use memory aids such as calendars and notebooks to plan, write down, and check off tasks when done.
- Use a tote bag or backpack to organize needed items for the day.
- Work with your service member/veteran to decide which information or activity has the highest priority.

Communication Effects

Does Not Speak Clearly

What you might see:

- Slurred speech
- Speaking too loudly or softly
- Speaking too rapidly

How you can help:

- Tell your family member that you did not understand what he or she said. Ask him or her to say it again more slowly
- Use a consistent cue or gesture to let him or her know you did not understand. For example, cup your hand over your ear as a reminder to speak louder
- Allow time for your service member/veteran to express him or herself.

Word Finding Problems

What you might see:

- Problems finding the right word to describe what he or she is trying to say

How you can help:

- Give your family member time to locate the word he or she is looking for.
- If he or she still cannot locate the word after some time, guess at what he or she might mean. Or ask him or her to write it down.
- Try to be patient. It can be very frustrating for your service member/veteran when he or she knows what he or she wants to say but cannot locate the right word or phrase.
- Encourage him or her to use another word that is close in meaning.
- Suggest that he or she use many words (or a description) instead of using a single word.

Nonverbal Communication Issues

What you might see:

- Having a hard time understanding common nonverbal cues (e.g., facial expressions, hand gestures)
- Standing too close or too far from those he or she is speaking to
- Body language that doesn't "match" what is said
- Facial expressions that don't "match" what is said
- Poor eye contact
- Staring at others during conversation

How you can help:

- Politely ask your service member/veteran to stand closer or further away.
- Explain the behavior is making you feel uncomfortable.
- Tell your service member/veteran you are confused by the difference in body language and spoken message. Briefly explain what you saw and heard.
- Role play the right way to behave in a particular setting.
- Give feedback on the right amount of eye contact to keep with another person. Praise all improvements.

Problems Starting a Conversation

What you might see:

- Unable to start or is slow to start conversations
- Long pauses
- Problems explaining what he or she means
- Does not respond to another's questions or comments

How you can help:

- Help your service member/veteran start a conversation by asking a leading question such as, "What do you think about ...?"
- Encourage your service member/veteran to talk about topics of interest or familiar topics.
- Ask open-ended questions (e.g., questions that cannot be answered with a "yes" or "no"), such as, "Tell me more about your day."
- Give your service member/veteran your full attention.
- Give your service member/veteran time to organize his or her thoughts.
- Use redirection, if necessary (e.g., "So what do you think about....?")
- Reinforce all efforts to start a conversation. Show that you value what your service member/veteran has to contribute to conversations.

Problems Following a Conversation

What you might see:

- Difficulty paying attention to what is said.
- Misinterpreting what is said
- Being "off topic" compared to the rest of the people in the conversation

How you can help:

- Get your service member/veteran's attention before speaking.
- Be clear and to the point. Keep it simple.
- Reduce distractions.
- Every so often, stop and ask your family member to restate what he or she heard to ensure understanding.
- Reduce your rate of speech and pause frequently to allow the person time to process and respond.
- Avoid abrupt topic changes.
- In group conversations, help set a slower pace of conversation.

Writing Problems

What you might see:

- Problems expressing thoughts in writing
- Problems getting started writing
- Writing the same words or phrase over and over (perseveration)

How you can help:

- Practice writing with your service member/veteran. For example, write letters to friends or relatives.
- Suggest saying words out loud before writing them.
- Suggest reading what is written to make sure it makes sense.

Remembering Names

Remembering names is a challenge for many people; most of us need to work a bit harder to be more proficient. Most people tend to forget names because, typically, we are thinking about what we are going to say, rather than listening and concentrating.

1. Repetition: As soon as someone makes an introduction, use the person's name immediately and say, "David, It is a pleasure meeting you, David". Then frequently use the name again during conversation as people like to hear the sound of their own names.
2. Association: Look closely at the individual. Make an association, perhaps with another person you may know with the same name. Then, make a visual association; visualize him/her as the person with the white teeth or who wears pearls.
3. Ask "What is your full name", "How do you spell your name", or "How is your name pronounced": The person will respond saying his/her first and last name, now you have both.
4. In a business situation, ask for a business card: Look at the card, then back at the individual and make another visual association with the individual and his/her name.
5. Memory Aid: Ask to input the person's contact information into your Smartphone or calendar; which you can also reference later on.
6. Go to a respected third party: Ask, "What is the name of the woman in the blue dress?" You may then approach her and greet her by name. Or send over a trusted friend, colleague or spouse to introduce themselves to the individual in question before you approach them.
7. Introduce yourself: Approach the other person and say your name, first and last. We are typically conditioned so that when we hear another person introduce themselves, we respond by saying our name.
8. Confess: It's ok to say, "I am so sorry, I have completely blanked on your name." This said, with sincerity, is appropriate and speaks volumes about you while also demonstrating your genuine interest in knowing who he/she is. Remember, it is not what you say, but how you say it!

Cognitive Rehabilitation

1. **Combine Modes of Learning:** You will be more likely to remember something if you "See it, Say it, Hear it, Write it, Do it." This uses more areas of your brain.
2. **Repeat & Verify:** Repeat what you hear and verify that it is correct, to help with attention, memory, and accuracy of information exchanged.
3. **Personalize it:** Put it in your own words, to add meaning and help with recall
4. **Reorganize & Consolidate:** Take time to break it down into smaller units. Pay attention to key ideas (5W template "who, what, when, where, why, & how?"). Group long number series into "chunks" (i.e. 36-42-568 vs. 3642568).
5. **Use Spaced Rehearsal:** Repeat and practice at gradually longer time intervals, to improve storage and retrieval (i.e. after 5 then 30 min or 1 then 3 hrs; 3x5 rule).
6. **Build Associations:** Make a habit of creating stories around new information. For example, to remember the name of someone you just met, make an association with a friend or family member of the same name. Be creative and colorful.
7. **Create a Mental Picture:** See it in your mind's eye. Be attentive to details. Describe it thoroughly, even using color and movement.
8. **Organize, Simplify & Centralize:** Use a Day Planner with a "To Do" list, a daily log, and calendar. Create standard place for keys, purse, etc. Also a "Grand Central" information center for mail, bills, phone messages, shopping lists, etc.
9. **Strategic Reminders:** Use checklists, alarm watch, cell phone alarm, or kitchen timers to remind you when to start what you had already planned.
10. **Electronic Aids:** Use electronic organizers (i.e. PDA, cell phone, GPS, voice recorder, various computer programs, or other high-tech options).
11. **Eliminate Distractions:** Turn off the TV, radio, or stereo when speaking with someone in person or on the phone. Background visual and auditory distractions can make learning or remembering more difficult.
12. **Or Remove Yourself from Distractions:** If you can't eliminate the distraction (i.e. people talking at a party) then ask, "Can we talk in a quieter place?"
13. **Take a Break:** If you are having difficulty concentrating and feel overloaded try taking a short break to refresh.
14. **Do One Thing at a Time:** Avoid switching from one topic or task to another whenever possible. Try to either finish or find an appropriate stopping place before switching. Leave a reminder of where to resume when ready.

Cognitive Exercises

Identify at least 3-5 things that you can engage in weekly/monthly.

<ol style="list-style-type: none"> 1. Read a book 2. Order a subscription to a newspaper 3. Do crossword puzzles 4. Take a class at Center 50+ 5. Join a club or other organization 6. Visit with friends 7. Take a class at a community college 8. Go to a sporting event 9. Try to develop a new hobby 10. Take different routes to frequent destinations 11. Go to a different grocery store 12. Take a trip to a new place 13. Go dancing or take a dance class 14. Begin using email/daily email 15. Volunteer 16. Write a letter 17. Join a book club 18. Try learning a foreign language 19. Work at a part-time job 20. Consider becoming a master gardener 21. Read new magazines 22. Listen to the radio 23. Play new or old board games (www.rehabgames.biz) 24. Visit museums 25. ElderHostel 26. Join Facebook 	<ol style="list-style-type: none"> 27. Memorize a new song or piece of music 28. Try using the bus 29. Cook new recipes 30. Sewing 31. Join a choir or local orchestra 32. Buy furniture that needs assembly 33. Get involved in politics 34. Program your TV/DVR 35. Personalize your electronic devices 36. Learn to juggle 37. Begin keeping a journal 38. Complete puzzles 39. Toastmasters 40. Attend a medical or medical lectures at hospitals 41. Begin knitting 42. Do counted cross stitch embroidery 43. Try using the self-scan checkout at the grocery store 44. Participate in a play 45. Jigsaw puzzles 46. Volunteer at a church (e.g. teach Sunday school classed or organize volunteer efforts) 47. Learn American Sign Language 48. Thinking cards, mental fitness cards 49. Sodoku
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Speech Pathology Service – Commonly Ordered Prosthetics Devices

COGNITIVE DEVICES

PDA (e.g. HP Ipaq, Apple Itouch)	A personal digital assistant. Lightweight and portable electronic device that looks like a hand-held computer and performs specific tasks.	Assists veterans to independently schedule, organize, plan, and recall appointments, tasks, contacts, notes, etc. Allows Pt's to consolidate several systems (PDA, GPS, internet) into one device. Can also serve as a journal (e.g. MH notes) or alarm clock etc
Smartphone (e.g. Apple Iphone, Blackberry, Droid)	A mobile phone that integrates PDA features. The electronic device also offers advanced capabilities, often with PC-like functionality.	Assists veterans in the same manner as a PDA but allows them to also make voice calls.
Digital Recorder	Records speech.	Assists veterans who have difficulties in attention, memory, processing speed, organization, etc. Pt's are for example able to replay information for confirmation and/or fill in pieces of information they missed during lectures or staff meetings to improve their accuracy, efficiency, and independence in vocational and academic settings.
Livescribe Smartpen	Electronic pen that records while you're writing-linking everything you hear to everything you write. Later, you can tap on your notes to replay the recording, allowing you to find and get what you need instantly. You can also save, search, and play back notes and recordings on your computer.	Assists veterans in the same manner as a digital recorder but allows them to find and get what they need quicker and also sync information on their computer.
GPS	Global Positioning System. An electronic navigational system that shows precise positioning.	Can help veterans who forget addresses, get disoriented or lost easily. Visual and auditory cues can assist Pt's whose cognitive difficulties cause them to miss for example freeway exits frequently.
Laptop	A personal computer designed for mobile use.	Can be used as a PDA by using web-based programs such as Google calendar, outlook, Toodledo, Iping, Dial2do, and Jott). Good option for those with visual or fine motor difficulties but need something to assist their cognitive skills.
Day planner	A small book/binder designed to be portable and usually containing a calendar, address book, notebook, and other sections.	The low tech version of a PDA. For those Veterans who are not technology savvy or would have difficulty typing/navigating an electronic device.
Software (e.g. Text Aloud)/Ipod; Read & Write	Converts text to audio files.	Pt's with cognitive difficulties in school can save their daily reading material to audio files (in MP3 format) and then can play and listen to them on an Ipod (MP3 player). This allows for repetition and multi-modality input; Helps people read both visually and audibly to assist their retention of material. Also assists language skills by highlighting misspelled words, homophones, etc.
Timers/Alarms (e.g. Watches, Talking countdown timer, Cell phone, Ipod, Pill boxes)	Gives an audible or visual warning.	Can help Pt. improve time management skills. Assists vets with remembering when to take medications, perform ADL's, transition from one appt/task to the next, etc.



Visual Imagery

Buy a birthday card for a friend.

Describe what you are going to imagine in order to remember that you need to buy a birthday card - the more exaggerated, the better.

Now, draw a picture of the scene:



Categorization

Siamese Cat	Peach	Leopard
Apple	Tiger	Skunk
Marigold	Angelfish	Poodle
Polar Bear	Bee	Goldfinch
Cow	Raccoon	Robin
Tomato	Brown Bear	Broccoli
Tigercat	Elephant	Cauliflower
Horse	Banana	Carnation
Lettuce	Zucchini	Orange
Daisy	Golden Retriever	Walrus
Giraffe	Mosquito	Dandelion
Lion	Penguin	Shepherd
Lamb	Grapefruit	Cherry
Plum	Rose	Iris
Goldfish	Pear	Orchid
Lily	Monkey	Beets
Potato	Porcupine	Beans
Chicken	Beagle	Parrot
Buttercup	Iris	Camel
Squash	Sparrow	Watermelon
Corn	Daffodil	Grapes



Reading

P - PREVIEW: Skim through the article briefly
What do you think this article is going to be about?

Q - QUESTIONS:
What questions can you think of that could be answered after reading?

R - READ

S - STATE:
What did you read?

T - TEST:
Answer the questions that you asked in part "Q":

Purchase of this workbook entitles the reproduction of worksheets for therapeutic use.



Planning Form

Task:

Steps	Completion Schedule	<input checked="" type="checkbox"/>	Feedback