



























































































# 5: Prospective Memory & Assistive Technology

## Session 1: Prospective Memory—What is it?

<b>Topic: Remembering to Remember</b>			
<b>Prospective Memory and Assistive Technology</b>			
<b>Session 1 Objectives (50 minutes)</b>			
<input checked="" type="checkbox"/>	<b>Lecture Topic</b>	<b>Notes</b>	<b>Time Allotted</b>
	<b>Homework:</b> Check APT-3 homework status.	Refer to <i>Homework APT -3 Generalization Form.</i>	5 Min
	Completed from previous week		
	Pending assignments for the week		
	<b>Define:</b> The types of memory	Refer to <i>The Memory System.</i>	10 Min
	Sensory		
	Short-term		
	Long-term		
	<b>Define:</b> The stages of memory	Refer to <i>Prospective Memory.</i>	
	Attention		
	Encoding		
	Consolidation		
	Retrieval		
	<b>Define:</b> Prospective memory		
	<b>Identify:</b> Common memory difficulties and factors that affect memory	Refer to <i>Daily Effects of Memory and Attention Difficulties.</i>	10 Min
	Discuss normalization of memory difficulties.		
	Discuss effects on daily function.		
	Review memory goals.		
	<b>Review:</b> Assistive technology questionnaire	Refer to <i>External Memory Strategies.</i> Refer to <i>Tips for Technology and Selecting a System.</i>	20 Min
	<b>Introduce:</b> Multiple uses of high and low tech devices		
	Determine efficiency of current compensatory system.		
	Make suggestions for modifications.		
	<b>Homework:</b> Present homework and discuss expectations.	Refer to <i>Secret</i> file (not included).	5 Min
	Client is to deliver <i>Secret</i> file to clinic this same day at time designated by clinician, and mutually agreed upon by client.		

## **Secret File**

The purpose of the secret file is to serve as a prospective memory task for the client. The secret file should be a tangible item the client will be required to turn in or deliver to a designated person at a designated time. The clinician may say, for example, “You will need to take this form to your case manager this afternoon between 1400 and 1500 hours when she is available” or “Fill out this form and turn it in to the front desk when you come to your next appointment.” The secret file may be:

- A sealed envelope
- A form to be filled out
- An informational document

## Session 2: APT-3 and Generalization Activity

Topic: Remembering to Remember			
Prospective Memory and Assistive Technology			
Session 2 Objectives (50 minutes)			
<input checked="" type="checkbox"/>	Lecture topic	Notes	Time Allotted
	<p><b>Homework:</b> Assign prospective memory task. (Clinician tells client to say when there are 4 minutes left in the session. When client tells clinician that there are 4 minutes left, the client will be asked to do the <i>Homework</i> sheet. <i>Homework</i> can be completed very quickly. If client does not remember to tell clinician at 4 minutes left in session, he/she will do <i>Homework</i> outside of session.)</p> <p><b>Note:</b> Encourage client to use external cues and strategies (either visual or auditory)</p>	Refer to <i>Homework</i> .	2 Min
	<b>APT-3</b>	Refer to <i>APT-3 Software</i> .	30 Min
	<p><b>Complete:</b> APT-3 metacognitive and generalization activities</p>	View performance on APT-3 Computer Program through <i>View Data on Performance</i> , then select the task to view or edit <i>Current APT-3 Program&gt;History (View)&gt;Task Data Over Time or Detailed Task Data</i> .	15 Min
	Review performance on APT- 3 software.	For generalization activity, refer client to <i>APT-3 Generalization Form</i> and refer to the <i>APT-3 Generalization Form examples</i> in Appendix B. Clinician will refer to <i>Clinician Score Sheet</i> in Appendix C to enter data	
	Discuss how various strategies can improve performance and discuss generalization to everyday activities.	For information on APT-3 sections, refer to <i>APT-3 Manual</i> (available on APT-3 drive). <sup>7</sup>	
	Clinician fills out clinician score sheet for current APT-3 session		
	<p><b>Complete</b> <i>Homework</i> in session <b>or</b> discuss <i>Homework</i> that needs to be completed</p>	Refer to <i>Secret File</i> in Session 1.	3 Min
	Have client identify successful strategy if he completed activity and suggest alternate strategy if he did not complete activity successfully		

### Session 3: How Will You Remember?

<b>Topic: Remembering to Remember</b>			
<b>Prospective Memory and Assistive Technology</b>			
<b>Session 3 Objectives (50 minutes)</b>			
<input checked="" type="checkbox"/>	<b>Lecture topic</b>	<b>Notes</b>	<b>Time Allotted</b>
	<b>Homework:</b> Review status of group homework.		10 Min
	Address any questions regarding homework.		
	<p><b>Activity:</b> Use role play to practice using various compensatory devices during session. Train and practice implementing client's compensatory device to manage schedule, medications, budgeting, family birthdays, anniversaries, household responsibilities and other tasks.</p> <p><b>Note:</b> If client moves through this exercise quickly, move to <i>Where are my car keys?</i> Exercise.</p>	Refer to <i>How Will You Remember...?</i>	40 Min
	<b>Activity:</b> Review <i>Where Are My Car Keys?</i>	Refer to <i>Where Are My Car Keys? (Part 1)</i>	
	Direct client to look at model of Specialist Smith's home (model form) to complete the activity.		

### Specialist Smith's home

The purpose of the Specialist Smith's Home activity is to provide visual examples of compensatory strategies for everyday memory tasks such as remembering where you put your phone, or remembering daily tasks. Organization and routines are key strategies in this activity. For this activity, a model home was used; however, alternatives may be the following:

- Pictures of rooms in a house accessed on the internet (entry way, kitchen or place frequented in the house)
- Pictures of the client's house
- The therapy room where sessions are conducted

## Session 4: APT-3 and Generalization Activity

<b>Topic: Remembering to Remember</b>			
<b>Prospective Memory and Assistive Technology</b>			
<b>Session 4 Objectives (50 minutes)</b>			
<input checked="" type="checkbox"/>	<b>Lecture topic</b>	<b>Notes</b>	<b>Time Allotted</b>
	<b>APT-3</b>	Refer to <i>APT-3 Software</i> .	30 Min
	<b>Complete:</b> APT-3 metacognitive and generalization activities	View performance on APT-3 Computer Program through <i>View Data on Performance</i> , then select the task to view or edit <i>Current APT-3 Program&gt;History (View)&gt;Task Data Over Time or Detailed Task Data</i> .	15 Min
	Review performance on APT- 3 software.	For generalization activity, refer client to <i>APT -3 Generalization Form</i> and refer to the <i>APT -3 Generalization Form Examples</i> in Appendix B.	
	Discuss how various strategies can improve performance and discuss generalization to everyday activities.	Refer to <i>Clinician Score Sheet</i> in Appendix C to enter data.  For information on APT-3 sections, refer to <i>APT-3 Manual</i> (available on APT-3 drive). <sup>7</sup>	
	<b>Homework:</b> Check on homework status		5 Min
	Make sure client continues to use compensatory strategies and/or equipment to keep track of pertinent information		

## Session 5: Prospective Memory—Where Are My Car Keys?

<b>Topic: Remembering to Remember</b>			
<b>Prospective Memory and Assistive Technology</b>			
<b>Session 5 Objectives (50 minutes)</b>			
<input checked="" type="checkbox"/>	<b>Lecture topic</b>	<b>Notes</b>	<b>Time Allotted</b>
	Review the ways that the client can modify his/her home environment to make remembering things easier.	Refer to <i>Where are my car keys (Part 2)</i> sheet.	25 Min
	<b>Goal Review/Modification</b>	Refer to <i>Clinician's Helper: Goal Attainment Scaling</i> .	
	Match learned skills to goals.	Refer to client's <i>Goal Attainment Scaling Forms</i> (located in the Goal Setting section in the front of the manual).	25 Min

## Clinician's helper: goal attainment scaling

See Appendix D for examples.

- I. Purpose= Measures goal achievement/progress.  
Rated on a continuum:


---

+2	+1	0	-1	-2
much more than expected	somewhat more than expected	expected outcome	somewhat less than expected	much less than expected
			<b>This is baseline for constructing GAS goals</b>	

- II. How to construct or revise GAS goals:
- A. Construct goals using **SMART**
    1. **S**pecific
    2. **M**easurable
    3. **A**ttainable *in the amount of time that client has in SCORE*
    4. **R**ealistic *for completion during engagement in SCORE*
    5. **T**imely
  - B. Prioritize goals from most important to least important (goal number one is most important)
  - C. For each goal, first define where client is currently performing (-1 on GAS scale)
  - D. After current performance spelled out, define expected level of outcome (0 on scale)
  - E. After expected level of outcome spelled out, define +1 and +2 goals
  - F. After +1 and +2 goals spelled out, define -2 goals
  - G. Follow-up/review at the end of each week


## 6: Alternating Attention

### Session 1: Attention

Topic: Juggling Duties				
Alternating and Divided Attention				
Session 1 Objectives (50 minutes)				
☑	Lecture topic		Notes	Time Allotted
			 <p>You will use a set of individually cut address cards (included): <i>Names &amp; Address Sorting List.</i></p>	
	<b>Homework:</b> Check APT-3 homework.		Check <i>Homework APT-3 Generalization Form.</i>	5 Min
	Completed from previous week			
	Pending assignment for the week			
	<b>Review</b> the components of information processing.		Refer to <i>The Memory System.</i> Focus on short-term/working memory and refer to the following: <i>Working Memory – process responsible for holding information in short term memory</i> <i>Responsible for holding on to and manipulating information – known as “temporary scratch pad”</i>	5 Min
	Sensory			
	Short-term (working) memory			
	Long-term memory			
	<b>Review</b> concept of alternating and divided attention.		Refer to <i>What is Attention.</i>	10 Min
	The idea of multitasking—is it really more efficient?			
	<b>Activity:</b> Complete alternating and divided attention task with address cards.		Refer to <i>Yes/No Trivia &amp; Address Cards.</i> Complete <i>Metacognitive Rating Scale</i> for this activity.	20 Min
	Refer to <i>Metacognitive Rating Scale.</i>			
	Discuss tradeoff between accuracy of performance & speed.			
	<b>Homework:</b> Assign <i>Juggling Duties Challenges</i> and discuss expectations.		Refer to <i>Juggling Duties Challenges.</i>	10 Min
	Direct clients to identify situations where they alternate and multi task/alternate attention in their daily routine environment.			



**Answer key: YES/NO trivia**

 <b>YES/NO Trivia Answer Key</b> <b>Alternating and Divided Attention Task</b>			
<p><i>Please answer each of the following questions you hear with a <u>Yes</u> or <u>No</u>.</i></p> <p><i>At the same time, I will give you instructions on how to separate this set of address cards. The order in which you must sort the cards will change. I will tell you when to change.</i></p> <p>Give client set of address cards.</p> <p>Instruct client to sort cards in alphabetical order as follows every 3-4 minutes:</p> <ol style="list-style-type: none"> <li>a. Begin sorting by the name of business</li> <li>b. Now sort by contact person</li> <li>c. Now sort by city</li> </ol> <p>Continue activity until client has completed at least 10 minutes. You may repeat the sorting order instructions.</p>			
	Questions	Answer	Response
1	Is today <u>Monday</u> (fill in day of the week)?	Y	
2	Is the year 2011?	N	
3	Is it night time?	N	
4	Are we in Houston?	N	
5	Are there 256 days in a year? <i>365</i>	N	
6	Is this an Air Force base?	N	
7	Did you have breakfast?	Y/N	
8	Do you like playing sports?	Y/N	
9	Are the Spurs your favorite sports team?	Y/N	
10	Have you been to the dining facility today?	Y/N	
11	Is it rainy outside?	Y/N	
12	Did you drive here today?	Y/N	
13	Is the Fourth of July Holiday coming up?	Y/N	

14	Do you enjoy meals-ready-to-eat (MREs)?	Y/N	
15	Is today your birthday?	Y/N	
16	Are there 5,280 feet in a mile?	Y	
17	Are there 3 quarts in a gallon?	N	
18	Does mixing the colors yellow and blue make purple?	N	
19	Is a group of fish called a pod?	N	
20	Does $14 + 17$ equal 31?	Y	
21	Is Mercury the closest planet to Earth? <i>Venus or Mars</i>	N	
22	Are there 12 ounces in a pound? <i>16</i>	N	
23	Was Buzz Aldrin the first man to walk on the moon?	N	
24	Do you have your ID card with you?	Y/N	
25	Are there 3 feet in a yard?	Y	
26	Including the end zone, are there 120 yards on a football field?	Y	
27	Are there 30 miles in a marathon? <i>26.2</i>	N	
28	Is a baker's dozen twelve? <i>13</i>	N	
29	Are opossums part of the marsupial family?	Y	
30	Is a group of lions called a pack? <i>pride</i>	N	
31	Does an average baby weigh 8 pounds? <i>7.5</i>	N	
32	Is Camaro made by Chrysler? <i>Chevy</i>	N	
33	Is Benjamin Franklin on the 100 dollar bill?	Y	
34	Was China recently afflicted with a tsunami?	N	
35	Is salt removed from water in the process of desalination?	Y	
36	Is a president's term in office 5 years? <i>4</i>	N	
37	If you can run 2 miles in 13 minutes, will it take you 36 minutes to run 4? <i>26</i>	N	

38	A brief you will be attending lasts 1 ¼ hours. Will it end at 1145 if it starts at 0930? <i>1045</i>	N	
39	Is the voting age 21? <i>18</i>	N	
40	Is New York City in the West Coast time zone?	N	
41	Is New Orleans at sea level? <i>Below sea level</i>	N	
42	Are Congressional representatives elected to 2-year terms?	Y	
43	Are there 100 members of the U.S. Senate?	Y	
44	Do state governors control the National Guard in times of peace?	Y	
45	Does the U.S. Coast Guard operate as part of the Army during war time? <i>Navy</i>	N	
46	“Semper Fi” means always faithful. <i>Marines</i>	Y	
47	Was the Army the first branch of the U.S. Armed forces to be created? <i>June 14, 1775</i>	Y	
48	Are there 6 fighting branches in the U.S. Military? <i>5</i>	N	
49	Does the Army have the motto “This We’ll Defend”?	Y	
50	Are the Blue Angels part of the Air Force? <i>Navy</i>	N	

**Address cards: name & address sorting list**

<p>Two Barrel Gun Range  ATTN: Lance Lott  6103 Chester Road  Boise, Idaho</p>	<p>Allstar Appliance Mart  ATTN: Sara Tillman  7199 Stave Road  Queens, New York</p>
<p>Modern Manufacturing  ATTN: Ethan Wolfe  6907 Caracol Drive  Bridgewater, Massachusetts</p>	<p>Silver and More Jewelry  ATTN: Anna Smithe  2730 Wilson Ave  Seattle, Washington</p>
<p>Loose Cannon Gun Range  ATTN: Victor Dowdy  805 Pinon Circle  Sandusky, Ohio</p>	<p>Integrated Computer Consultants  ATTN: Becky Ellsworth  37920 Orion Blvd  Birmingham, Alabama</p>
<p>United Plumbing Service  ATTN: David Hammoc  27492 Rittaman Road  White Plains, New York</p>	<p>Merritt Excavation  ATTN: Paul Merritt  5000 N Loop 289  Allen Park, Georgia</p>

<p>Wilford Shooting Supply ATTN: Darren Day 9123 North Shore Drive Wheaton, Ohio</p>	<p>Appraisals R Us ATTN: Perry Guilde 6371 Howard St South Bend, Indiana</p>
<p>Four Corners Electronics ATTN: Jacob Brown 102 Mountain Ave Manhattan, New York</p>	<p>Investing Your Way ATTN: Rodrick Cantburry 12304 Woodlawn Ave Greenfield, Pennsylvania</p>
<p>Choice Chiropractic ATTN: Beth Jackson 14573 Center Ave Nashville, Tennessee</p>	<p>Rainbird Irrigation ATTN: Gerry Giford 2587 Lester Road San Jose, California</p>
<p>University Book Store ATTN: Sandra Raff 5672 Great South Road East Lansing, Michigan</p>	<p>Ice Cream You Scream ATTN: Susie Landry 4973 Merry Ave Naples, Florida</p>

<p>Fantastic Furniture ATTN: Anthony Jerrod 7001 Stahl Road Northfield, Minnesota</p>	<p>Sandy's Graphics and Tees ATTN: Matthew Bitters 1590 Courage Road Scottsdale, Arizona</p>
<p>Serenity Security Systems ATTN: Janelle Whitlock 30032 Tundra Road Cleveland, Ohio</p>	<p>Everyone's Hero Shooting ATTN: Robert Crona 587 Oats Boulevard Los Angeles, California</p>
<p>Graples Convenient Store ATTN: Seth Goode 17648 Meadowlark Lane Myrtle Beach, South Carolina</p>	<p>Mother's Mattress Gallery ATTN: Alejandro Juarez 9008 Pilsner Road Richfield, Utah</p>
<p>Q-T Tuxedos ATTN: Taryn Johnson 543 Frost Street Fargo, Minnesota</p>	<p>Green Tree Mortgage ATTN: Dora Fiscal 40167 Frozen Street Anchorage, Alaska</p>

<p>Utterly Different Toys ATTN: Karin Wales 999 Punch Lane Blaine, Washington</p>	<p>Freedom Furniture Repair ATTN: Faith Ferrity 37004 Rover Drive Dover, Delaware</p>
<p>Northern Remodeling ATTN: Erin Pipers 222 Vault Road Hibbing, Minnesota</p>	<p>Winner's Circle Guns and Ammo ATTN: Michael Sutton 631 Gang Ave Westland, New York</p>
<p>Gateway Jewelry ATTN: Valerie Luna 397 Ariel Lane Memphis, Tennessee</p>	<p>Aeronautics of the West ATTN: Alton Smith 3017 Ocean Road Carmel, California</p>
<p>Quality Subs ATTN: Melvin Coughlin 55870 Tundra Road Seattle, Washington</p>	<p>Iridescent Salon ATTN: Sally Kross 1349 Red Dye Road Tempe, Arizona</p>

<p>Valley Realty  ATTN: Scott Manheim  7871 Jamestown Blvd  Hershey, Pennsylvania</p>	<p>The Split End Salon  ATTN: Emily Culbertson  9000 Eisenhower Blvd  Hollywood, California</p>
<p>Behavior Help Line  ATTN: Laurence Carol  4370 Green Mountain Road  Chicago, Illinois</p>	<p>Colossal Comedy Club  ATTN: Jeremy Fowl  891 Captain Street  Annapolis, Maryland</p>
<p>Cheery Cleaners  ATTN: Pauline Cotton  11100 Dryer  Toronto, Canada</p>	<p>Charlie's Barber Shop  ATTN: Charlie Stanton  5647 Troll Drive  Roosevelt, Utah</p>
<p>Gold Gloves Gym  ATTN: George Mathis  4872 Valor Circle  Redford, Michigan</p>	<p>Kidz Korral Learning Center  ATTN: Debra Carson  8300 Sage Drive  Springfield, Illinois</p>



<p>Brandon's Bait and Tackle ATTN: Mitch Brandon 2340 Pier Ave Lake Lansing, Michigan</p>	<p>Home Away From Home Hotel ATTN: Gabriel Saenz 92673 Azura Circle Syracuse, New York</p>
<p>Equal Equity ATTN: John Stockton 6372 Durbin Drive Bangor, Maine</p>	<p>Pistol Packin' Donna ATTN: Donna Terry 40879 Cherry Drive Tampa, Florida</p>
<p>Computer Solutions ATTN: Jory Allison 13467 Hathaway Jackson, Wyoming</p>	<p>Nanna's Nail Salon ATTN: Nellie Fry 741 Drowning Drive Madison, Wisconsin</p>
<p>Nuts and Bolts Hardware ATTN: Harry Zimmerman 2014 Mesquite Ave Chicago, Illinois</p>	<p>Dentures Dental ATTN: Dale Young 134 Candy Street Santa Rosa, California</p>

<p>Ferngully Florist ATTN: Rosa Medallion 3057 Budding Lane Honolulu, Hawaii</p>	<p>Slick Willie's Tires ATTN: Murphy Stiles 4691 Cross Court San Antonio, Texas</p>
<p>Terrible Tees ATTN: Josia Auburn 23401 Burnt Tree Street Denver, Colorado</p>	<p>Mayberry Range ATTN: Martin Sutton 7395 Pomeranian Court Columbus, Ohio</p>
<p>Conrad's Motor Company ATTN: Saul Merin 13975 Atwater Court Buffalo, New York</p>	<p>Cuticles Spa ATTN: Bethany Boss 69270 Lions Denver, Colorado</p>
<p>Targets Galore ATTN: Jeffrey Goodenough 46931 Sheffield Court Mansfield, Illinois</p>	<p>Killer Security Services ATTN: Kidd Knight 91800 Millers Street Pittsburg, Pennsylvania</p>

<p>Southern Lawns Landscaping ATTN: Miranda Funde 17383 Ironhorse Drive Helotes, Texas</p>	<p>Albuquerque Appliance Mart ATTN: Karol Cruise 9797 Warehouse Road Albuquerque, New Mexico</p>
<p>Advanced Heating and Cooling ATTN: Melvin Winters 7777 Jockey Lane Charleston, Virginia</p>	<p>Tree Trimming Solutions ATTN: Louis McPeters 22933 Pewter Eugene, Oregon</p>

## Session 2: APT-3 and Generalization Activity

<b>Topic: Juggling Duties</b>				
<b>Alternating and Divided Attention</b>				
<b>Session 2 Objectives (50 minutes)</b>				
<input checked="" type="checkbox"/>	<b>Lecture topic</b>		<b>Notes</b>	<b>Time Allotted</b>
	<b>APT-3</b>		Refer to <i>APT-3 Software</i> .	30 Min
	<b>Complete:</b> APT-3 metacognitive and generalization activities		View performance on APT-3 Computer Program through <i>View Data on Performance</i> , then select the task to view or edit <i>Current APT-3 Program&gt;History (View)&gt;Task Data Over Time or Detailed Task Data</i> .	15 Min
		Review performance on APT- 3 Software.	For generalization activity, refer client to <i>APT -3 Generalization Form</i> and <i>APT -3 Generalization Form Examples</i> in Appendix B.	
		Discuss how various strategies can improve performance and discuss generalization to everyday activities.	Refer to <i>Clinician Score Sheet</i> in Appendix C to enter data.	
		Complete score sheet for current APT-3 session.	For information on APT-3 sections, refer to <i>APT-3 Manual</i> (available on APT-3 drive). <sup>7</sup>	
	<b>Homework:</b> Check on homework status.			5 Min
		Due Session 3: Identify areas of breakdown.	Refer to <i>Juggling Duties Challenges</i> in Session 3.	

## Session 3: Juggling Duties Challenges, Aids and Strategies

<b>Topic: Juggling Duties</b>			
<b>Alternating and Divided Attention</b>			
<b>Session 3 Objectives (50 minutes)</b>			
<input checked="" type="checkbox"/>	<b>Lecture topic</b>	<b>Notes</b>	<b>Time Allotted</b>
	<b>Homework:</b> Review status of group homework.		5 Min
	Address any questions regarding homework.		
	<b>Homework:</b> Check on individual homework status.	Refer to <i>Juggling Duties Challenges</i> .	5 Min
	Today, (Session 3) client should have identified areas of breakdown. <i>Continue on Session 5 if not completed.</i>		
	On Session 5, identify solutions to the identified areas of breakdown.		
	<b>Discuss:</b> Internal strategies	Refer to <i>External Memory Strategies</i> and <i>Internal Memory Strategies</i> .	10 Min
	Visual imagery		
	Association		
	Rehearsal		
	Rhymes		
	Chunking		
	<b>Discuss:</b> External strategies		
	Highlighting		
	Recorder		
	<b>Activity:</b> Alternating and divided attention task: Instruct client on <i>Autism Spectrum Disorder &amp; Hamlet</i> procedure.	Refer to <i>Autism Spectrum Disorder &amp; Hamlet</i> .	15 Min
	Client to read a passage and respond to questions at end of allotted time. Give Client <i>Autism Spectrum Disorders</i> text.	Client reviews <i>Autism Spectrum Disorders</i> text.	
	Alternate with memorization task every 3 to 4 minutes, client to try to remember <i>Hamlet Soliloquy</i> .	Client switches to <i>Hamlet Soliloquy</i> . Refer to <i>Autism Spectrum Disorders &amp; Hamlet Soliloquy Quiz Answer Key</i>	
	<b>Metacognition</b>	Complete <i>Metacognitive Rating Scale</i> .	15 Min
	Highlight strategies client used.		

**Answer key: autism spectrum disorders & Hamlet soliloquy quiz**

Client is to engage in this activity after education on strategies to optimize attention. Direct the client to read the *Autism Spectrum Disorder* text. Instruct client that he/she will be asked questions about the text afterward.

Client will be 'Interrupted' in his/her reading by another task demand periodically while doing this exercise. Interrupt every 3 to 4 minutes to switch to a memorization task, such as Hamlet. Ask the following questions within the allotted time for activity, and ask the client to recite what he/she remembers of Hamlet.

1	What does ASD stand for? <i>Autism Spectrum Disorder</i>
2	Name three syndromes associated with ASD? <i>Aspergers Syndrome, Rett Syndrome, Autistic Disorder and Pervasive Developmental Disorder</i>
3	Which doctor first documented ASD? <i>Dr. L. Kanner</i>
4	What is the prevalence of ASD worldwide? <i>Two to six children per 1,000</i>
5	Name one symptom that babies with ASD may exhibit. <i>Unresponsive to people; Stare at item for long periods of time</i>
6	If a child doesn't speak a word by a certain age, he/she may have ASD. What is this age? <i>16 months</i>
7	What are some indicators of ASD in a small child? <i>Inappropriate playing with toys; Fixation on one toy. Hearing problems; Not smiling when smiled at</i>
8	TRUE or FALSE: Children with ASD are not emotionally attached to their parents. <i>False</i>
9	If a child with ASD is going to speak, he/she will speak by what age? <i>Nine</i>
10	TRUE or FALSE: One in three children with ASD has a seizure disorder. <i>False</i>
11	Besides difficulties with communication and emotional attachment, what other problem(s) do children with ASD have? <i>Abnormal sensory registry</i>
12	What does IFSP stand for? <i>Individualized Family Service Plan</i>
13	How much of the Hamlet passage do you remember? Recite as much as you can.

## Session 4: APT-3 and Generalization Activity



<b>Topic: Juggling Duties</b>			
<b>Alternating and Divided Attention</b>			
<b>Session 4 Objectives (50 minutes)</b>			
<input checked="" type="checkbox"/>	<b>Lecture topic</b>	<b>Notes</b>	<b>Time Allotted</b>
	<b>APT-3</b>	Refer to <i>APT-3 Software</i> .	30 Min
	<b>Complete:</b> APT-3 metacognitive and generalization activities	View performance on APT-3 Computer Program through <i>View Data on Performance</i> , then select the task to view or edit <i>Current APT-3 Program &gt; History (View) &gt; Task Data Over Time or Detailed Task Data</i> .	15 Min
	Review performance on APT-3 software.	For generalization activity, refer client to <i>APT-3 Generalization Form</i> and refer to <i>APT-3 Generalization Form Examples</i> in Appendix B.	
	Discuss how various strategies can improve performance and discuss generalization to everyday activities.	Clinician will refer to <i>Clinician Score Sheet</i> in Appendix C to enter data.	
	Fill out clinician score sheet for current APT-3 session.	For information on APT-3 sections, refer to <i>APT-3 Manual</i> (available on APT-3 drive). <sup>7</sup>	
	<b>Homework:</b> Check on homework status.	Refer to <i>Juggling Duties Challenges</i> in Session 3.	5 Min

## Session 5: Audio Recording and Zip Code Locations

### Topic: Juggling Duties

### Alternating and Divided Attention

#### Session 5 Objectives (50 minutes)

<input checked="" type="checkbox"/>	Lecture topic	Notes		Time Allotted
			For this session, you will need 3 1-minute <i>audio recordings</i> (not included) with accompanying comprehension questions.	
	<b>Homework:</b> Discuss completed homework assignments. Specifically identify areas where breakdown occurs.	Refer to <i>Juggling Duties Challenges</i> in Session 3.		5 Min
	<b>Activity:</b> Cancellation task with auditory distracter Allow client 1 minute to review questions in <i>audio recording</i> questions. Instruct client to complete location selected with <i>Zip Code Map</i> while radio story plays. Have client identify possible strategies to use during task. Play audio recording.	Refer to <i>Audio Recording Questions</i> . Refer to <i>Zip Code Location and Zip Code Map</i> . Refer to <i>Internal Memory Strategies &amp; External Memory Strategies</i> in Session 3 for ideas. Play <i>audio recording</i> . 		20 Min
	<b>Metacognition</b> Have client complete <i>Metacognitive Rating Scale</i> . Discuss performance on tasks. Highlight effect of completing a timed task. Discuss external and internal strategies. What strategies were used?	Refer to <i>Metacognitive Rating Scale</i> .		15 min
	<b>Program wrap up</b> Review personal goals and the Goal Attainment Scaling process. Discuss the importance of generalization and application of learned skills.	Refer to <i>Clinician's Helper: Goal Attainment Scaling</i> . Refer to client's <i>Goal Attainment Scaling Forms</i> (located in the Goal Setting section in the front of the manual) Refer to <i>Score Summary</i> .		10 Min



### Audio recording questions

Instruct client as follows:

***You will hear a set of audio recordings and then answer the following questions. At the same time, you will complete the Zip Code Location task.***

Refer to *Zip Code Location*.

***Take 1 minute to review the questions before we begin.***



*Play chosen audio recordings*

<i>Questions</i>	<i>Responses</i>
1	
2	
3	
4	
1	
2	
3	
4	
1	
2	
3	
4	

## Clinician's helper: goal attainment scaling

See Appendix D for examples.

- I. Purpose= Measures goal achievement/progress.  
Rated on a continuum:

---

+2	+1	0	-1	-2
much more than expected	somewhat more than expected	expected outcome	somewhat less than expected	much less than expected
<b>This is baseline for constructing GAS goals</b>				

- II. How to construct or revise GAS goals:
- A. Construct goals using **SMART**
    1. **S**pecific
    2. **M**easurable
    3. **A**ttainable *in the amount of time that client has in SCORE*
    4. **R**ealistic *for completion during engagement in SCORE*
    5. **T**imely
  - B. Prioritize goals from most important to least important (goal number one is most important)
  - C. For each goal, first define where client is currently performing (-1 on GAS scale)
  - D. After current performance spelled out, define expected level of outcome (0 on scale)
  - E. After expected level of outcome spelled out, define +1 and +2 goals
  - F. After +1 and +2 goals spelled out, define -2 goals
  - G. Follow-up/review at the end of each week

# References

1. Department of Veterans Affairs, Department of Defense. The Management of Concussion/mTBI Working Group. (2009). VA/DoD Clinical Practice Guideline for the Management of Concussion/MTBI. Version 1.0. Washington, DC: The Office of Quality and Performance, VA, & Quality Management Directorate, United States Army MEDCOM.
2. Canadian Association of Occupational Therapists. Canadian Occupational Performance Measure©. CAOT Publications ACE. Retrieve from <https://www.caot.ca/copm/ordering.html>.
3. The Institute for Matching Person & Technology. Technology Utilization Worksheet for the Matching Person and Technology (MPT) Model. New York. Retrieve from <http://www.matchingpersonandtechnology.com/mptdesc.html>.
4. Kiresuk, T.J., Sherman, R.E. (1968). Goal attainment scaling a general method for evaluating comprehensive community mental health programs. *Community Mental Health Journal*, 4; 443-453.
5. Turner-Strokes, L. (2009). Goal attainment scaling (GAS) in rehabilitation: a practical guide. *Clinical Rehabilitation*, 23; 362-370.
6. Malec, James F. (1999). Goal attainment scaling in rehabilitation. *Neuropsychology Rehabilitation*, 9 (3/4); 253-275.
7. Sohlberg, M. M. & Mateer, C. A. (2010). Attention Process Training -3 (APT-3): A Direct Attention Training Program for the Remediation of Attention Deficits: APT-3 Manual. Lash & Associates Publishing/Training Inc., Youngsville, North Carolina.
8. Sohlberg, M.M, Johnson, L., Paule, L., Raskin, S. A., & Mateer, C. A. (2001). APT-II Attention Process Training: A Program to Address Attentional Deficits for Persons with Mild Cognitive Dysfunction. Lash & Associates Publishing/Training Inc., Youngsville, North Carolina.
9. Norton, M., Katzman, D., Escott, P., Chudacoff, H., Paterson, T., Tuttle, W., & Brophy, W. (1999). A People and A Nation. Houghton Mifflin Company, Boston, MA.
10. Thies, C.F. (2002). The American Railroad Network during the Early 19<sup>th</sup> Century: Private versus Public Enterprise. *CATO Journal*, 22-2, 229.
11. Woods, R.O. (2009). The Genesis of the Steamboat. *Mechanical Engineering*, 131-4; 44-47.

## Appendix A: Acronyms

APT	Attention Processing Training
ASD	Autism Spectrum Disorder
CAOT	Canadian Association of Occupational Therapists
COPM	Canadian Occupational Performance Measure
CP	clinician prompted (strategy use)
DoD	Department of Defense
GAS	Goal Attainment Scaling
MPT	Matching Person & Technology
mTBI	mild traumatic brain injury
OEF	Operation Enduring Freedom
OIF	Operation Iraqi Freedom
OND	Operation New Dawn (new name for OIF)
PQRST	preview, question, read, state/summary, test
SCORE	Study of Cognitive Rehabilitation Effectiveness
SI	self-initiated (strategy use)
SMART	specific, measurable, attainable, realistic, timely (goals)
SQ3R	survey, question, read, recall/recite, review
TBI	traumatic brain injury
VA	Department of Veterans Affairs

# Appendix B: APT-3 Generalization Form Examples

Below are examples of how each APT-3 area can be related to everyday tasks that you encounter. You may refer to these examples when completing your APT-3 Generalization Form<sup>7,8</sup>

<p>Basic Sustained</p>	<p><i>The ability to maintain attention during continuous repetitive activities</i></p> <ul style="list-style-type: none"> <li>▪ Listening for your name in roll call</li> <li>▪ Listening to the traffic report for your route home</li> <li>▪ Listening for business closures on the news following an ice storm</li> <li>▪ Reading the paper</li> <li>▪ Sorting emails during your 30 minutes of administration time</li> </ul>
<p>Selective Attention</p>	<p><i>Selectively processing target information while inhibiting responses to non-target information</i></p> <ul style="list-style-type: none"> <li>▪ Listening to your spouse in a busy waiting room</li> <li>▪ Reading emails on your smartphone in a noisy area</li> <li>▪ Filling out paperwork in a busy office</li> <li>▪ Doing tasks in your office with construction next door</li> <li>▪ Making dinner, with your children playing in the background</li> </ul>
<p>Executive Control, Working Memory</p>	<p><i>Process for holding onto and manipulating information in one's head such as during mental calculations</i></p> <ul style="list-style-type: none"> <li>▪ Determining a tip at a restaurant</li> <li>▪ Identifying an alternate route home</li> <li>▪ Determining travel departures and arrival times (especially when changing time zones)</li> <li>▪ Converting measurements while baking or building</li> </ul>

<p>Executive Control Suppression</p>	<p><i>Ability to control impulsive responding</i></p> <ul style="list-style-type: none"> <li>▪ Not hitting the gas when a light turns green and there is a car in front of you</li> <li>▪ Speaking before it is your turn, or interrupting in a conversation</li> </ul>
<p>Executive Control Alternating</p>	<p><i>Ability to shift one's focus of attention (between/ among tasks)</i></p> <ul style="list-style-type: none"> <li>▪ Making dinner as your children periodically call on you for help with homework</li> <li>▪ Answering the phone and responding to emails during your 30-minute break</li> </ul>

<p><b>You may use these basic titles when filling out your APT3 Generalization Form</b></p>			
	<p>Sustained Attention Auditory &amp; Visual</p>		<p>Suppression (inhibition) Auditory &amp; Visual</p>
	<p>Selective Attention</p>		<p>Alternating Attention Auditory</p>
	<p>Working Memory</p>		<p>Alternating Attention Visual</p>

# Appendix C: Clinician Score Sheet<sup>7</sup>

Client Name: \_\_\_\_\_

APT – 3 Level: \_\_\_\_\_

SCORE Week \_\_\_\_\_

## *Clinician Score Sheet: Performance Summary Across Trials*

Task Variables							
Speed: SLOW/FAST		Clinician Voice: MALE/FEMALE					
Date	Version	Trial	Error Pattern <b>Start</b> <b>End</b> <b>Delayed</b> <b>Random</b>	Strategies Observed** (See key below) ( <b>SI</b> ) =self-initiated strategy use ( <b>CP</b> )=clinician prompted strategy use	Client Rating		
					Effort (1-10)	Motivation (1-10)	Accuracy (1-100)

\*\*Strategies Observed

Task Completion		Motivation/Self Efficacy	Task Understanding
Re-Auditorizing (Re-Aud)	Breathing (Br)	Working toward a goal (Goal)	Repeating instructions (Rep)
Visualizing (Vis)	Pacing (Pace)	Self-talk (Talk)	Writing a reminder (Wrt)
Verbal self-cueing (Verb)	Body alert (Bod)	Rewards self (Rew)	
Counting on fingers (Fing)	Looking at screen (Scrn)	Breathing/Relaxation (Br)	
Closing eyes (Eyes)		Clinician encouragement (Cl)	

**Notes:**  
 \_\_\_\_\_  
 \_\_\_\_\_

## Appendix D: Goal Attainment Scaling Goal Examples

<b>Goal:</b>	<b>I will improve my attention in order to read my college coursework without getting distracted</b>
+2	I will read my college textbook for 60 minutes before requiring a 10 minute break
+1	I will read my college textbook for 45 minutes before requiring a 10 minute break
0	I will read my college textbook for 30 minutes before requiring a 5-10 minute break
-1	I read my college textbook for 20 minutes before requiring a 5-10 minute break
-2	I will be able to read my college textbook for less than 20 minutes before requiring a 5-10 minute break

<b>Goal:</b>	<b>I will improve efficiency of completing tasks at work with fewer distractions and better time management.</b>
+2	I will be able to work on work assignments (at desk and on the computer) for 60 minutes before requiring a 10 minute break
+1	I will be able to work on work assignments (at desk and on the computer) for 45 minutes before requiring a 5 minute break
0	I will be able to work on work assignments (at desk and on the computer) for 35 minutes before requiring a 5 minute break
-1	I work on work assignments (at desk and on the computer) for 25 minutes before requiring a 5 minute break
-2	I will be able to work on work assignments (at desk and on the computer) for less than 25 minutes before requiring a 5 minute break

<b>Goal:</b>	<b>I will be able to pay attention to what my spouse tells me and remember more of what I'm told.</b>
+2	I will repeat the information told to me in conversations immediately, independently
+1	I will repeat the information told to me in conversations immediately with a minimal cue from my spouse
0	My spouse will have to remind me 1 time, the information provided during conversations
-1	My spouse reminds me 2 or more times, information provided during conversations
-2	My spouse will remind me of information from conversations daily and complete the tasks that I forget

---

<b>Goal:</b>	<b>I will remember to take my medications without cues from my spouse or family.</b>
<b>+2</b>	I will remember my medication with my alarms and no reminders from my spouse
<b>+1</b>	I will remember my medication with my alarms and my spouse will have to remind me less than 4 times a week
<b>0</b>	My spouse will have to remind me 1 time per day of my medications
<b>-1</b>	My spouse reminds me 2 or more times per day of my medications
<b>-2</b>	My spouse will give me my medications each dose, each day

---