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| Details of Cognitive Training Exercises | | | |
| Domain | Exercise | Description | Adaptive dimension  (Within level/Between level) |
| Sensory Processing Speed | Visual Sweeps | See two sweep patterns, either inwards or outwards. Indicate the direction of the two sweep-patterns in sequence. | Exposure duration/Color and Direction of visual stimuli |
| Audio Sweeps | Listen to two sweep sounds. The sound can sweep up from a lower to higher frequency or down from the higher to lower frequency. Indicate the direction of the two sweep sounds in sequence. | Exposure duration/ Frequency and Interval of auditory stimuli |
| Fine Tuning | Listen to sound and indicate the heard sound among examples. | Exposure duration/ # of syllable Pairs |
| Hawk Eye | See briefly presented items and locate the item which is slightly different from others. | Exposure duration/ Eccentricity of stimuli |
| Attention | Double Decision | Watch for a vehicle in the center of the screen and road sign in the periphery. Indicate the central vehicle target and the periphery target location. | Exposure duration/ # of distractors and Eccentricity of stimuli |
| Target Tracker | Keep track of objects in motion and indicate the tracked objects. | # of items to be remembered/ # of distractors and Speed of stimuli |
| TAPAT | Remember the target image and withhold a response for the target and commit a response for distractors. | Exposure duration/ Target-Distractor similarity and Target saliency |
| Mixed Signal | Listen to a number, letter, color, or other piece of information while looking at a set of numbers, symbols, letters, words, or other information, and indicate if the auditory information matches to visual information. | Response  duration/ Target-Distractor similarity and Category |
| Divided Attention | Watch two items presented at the screen and respond if they have the same color, shape or pattern. | Exposure duration / Category |
| Memory | To-Do list training | Listen to a series of items presented in auditory format and select the items in the presented order on a visual grid. | # of items to be remembered / Complexity of auditory presentation |
| Memory Grid | Click on a card and remember the sound associated to the card. The goal is to find a pair of cards having the matching sound. | # of items to be matched /Voice and Category |
| Rhythm Recall | Listen to and watch a song, then repeat the timing sequence by pressing keyboard keys. | # of beats to be repeated /Presence of hints and Presentation Speed |
| Scene Crasher | Watch a briefly presented image and indicate the missing item on the current image from memory. | # of objects to be remembered / Exposure duration and Target-Background Similarity |
| *Executive Control* | Card Shark | Match if the previously presented visual item is matching to the current visual item. | N/A / # of visual cards to be remembered and complexity of visual stimuli |
| Juggle Factor | Watch a sequence of numbers that are presented within moving circles and reconstruct the sequence in the right order and in the right locations. | # of objects to be maintained / Presence of distractors and Complexity of placeholder |
| Mind Bender | Respond to stimuli differently depending on changing rules. | Response Duration/ Complexity of Rule and Category |
| Auditory Ace | Match if the previously presented auditory stimuli is matching to the current auditory stimulus. | N/A / # of auditory cards to be remembered and complexity of auditory stimuli |

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| Description of Active Control Training Exercises | |
| Bricks Squasher II | The game starts with a ball placed on top of paddle. The goal of this game is to move the paddle and bounce the ball to destroy the bricks. |
| War Ship | Participants place 5 vessels in the area at the left-hand side and sink enemy’s hidden ships at the right-hand side by guessing enemy’s ship locations. |
| Bricks Breaking Hex | The target in this game is to connect and remove bricks of the same color to clear the board. |
| Chinese Checkers | The target of this game is to move all marbles to the enemy base before opponent (i.e., computer) does so. |
| Lineup Four | The object of this game is to connect 4 of color discs so that they form a line in horizontal, vertical or diagonal direction. |
| Crossword Puzzle | The goal in this game is to find out the words according to the given meanings. |
| Gems Swap | The goal in this game is to form a line of 3 or more identical gems so that they can be removed. |
| Double Klondike Solitaire | Participants are given a deck of 52 standard playing cards, and asked to move all cards to 8 foundations at the top right corner by suit from A to K. |
| A Maze Race | The goal is to reach the exit of the maze before the computer does. |
| Reversi | In this game, an 8x8 grid board and 64 two-sided pieces are used. Each of the pieces has a side in black color and the other in white. The goal is to finish the game with more pieces flipped to the side of participants’ representing color rather than that of the computer. |
| Word Search II | Participants are presented with a large grid which contains numerous letter tiles, and a word list placed on the right of the screen. Participants are asked to click and drag the corresponding letters on the grid. |
| Sudoku | In this game, the goal is to fill in the blanks with numbers 1 to 9 such that the numbers will not be repeated in each row, each column, and each 3x3 square. |
| Tri Peaks Solitaire | The goal is to move all cards from the three peaks to the discard pile. |