

“A Randomized Trial to Measure the Impact of a Community-Based Cognitive Training Intervention on Balance and Gait in Cognitively Intact Black Older Adults”

Supplemental Table 1. Description of Cognitive Training Games

<b>Posit Science Game</b>	<b>Description</b>	<b>Targeted Cognitive Domains</b>
<b>Road Tour</b>	<ul style="list-style-type: none"> <li>User views an animated car or truck in the center of the screen, while a road sign appears on the outside of the screen in the user's periphery</li> <li>After very brief exposure (~1 second) image fades away</li> <li>Selection screenshot appears, prompting the user to correctly select the vehicle type displayed on previous screen (car or truck)</li> <li>After the selection is made a circle of cars appears around the periphery with a single road sign among them</li> <li>User must correctly identify the location in which the road sign initially appeared around the periphery</li> <li>Game focuses the user's attention on a task in the middle of the screen while simultaneously requiring attention on the Route 66 road sign that appears in the periphery of the screen, calling on field of view</li> <li>Task becomes more difficult as the user's performance improves</li> </ul>	Dual-task processing; speed of processing; inhibition; attention
<b>Jewel Diver</b>	<ul style="list-style-type: none"> <li>Taking perspective of a scuba diver, user views a variety of jewels scattered across an underwater scene</li> <li>User is instructed to simultaneously track a variety of jewels at one time</li> <li>Stimulus jewel(s) appears very briefly on screen (~1 second) then fades away</li> <li>After this initial viewing, each jewel is encapsulated by an opaque bubble and begins to float erratically around the screen alongside distractor bubbles</li> <li>Once bubbles stop moving, participant must select the bubble that he/she believes contains the stimulus jewel(s)</li> <li>Exercise increases in difficulty as user performance progresses: jewels travel more quickly, for longer amounts of time, and over larger areas</li> <li>Exercise adapts to the user's performance by changing the number of distracter stimuli/bubbles.</li> </ul>	Divided attention; visuospatial working memory; inhibition
<b>Sweep Seeker</b>	<ul style="list-style-type: none"> <li>Game's objective is to accumulate points by collapsing a pyramid of seashells</li> <li>Seashells are collapsed by lining up three similar shells in a row</li> <li>In order to achieve three in a row, participants must strategically make dissimilar shells disappear</li> <li>User selects shell that they want to disappear</li> <li>Immediately following this selection a pattern of sweeps appears</li> <li>User views two rapid visual "sweeps" (&lt;1-second movements of bars) and is instructed to indicate whether each one swept inward or outward</li> <li>When the sequence of sweeps is correctly identified the user is rewarded with the disappearance of the selected seashell</li> </ul>	Visual processing speed; working memory