

Table 2 Connections Chart: Between Performance Skills and Driving Performance

OTPF ¹ Client Factors	Assessments	Connection to Critical Driving Behaviors
<p>Attention (sustained, selective, alternating, divided)</p>	<p>AMPS IADL Observation Trails Making A Trails Making B BCAT or MoCA Other standardized occupational therapy performance assessments.</p>	<ul style="list-style-type: none"> • Can only focus on one task or direction at a time. • Can only focus on operational and tactical level tasks that should be easily done while talking or listening. • May forget habitual tasks (i.e., operational level tasks) such as using a turn signal or checking blind spots. • Must slow down to make any required decision or react to any traffic change. • Has difficulty maintaining vehicle in appropriate lane position for extended time. • Distracted by unimportant environmental objects/events such as pets, billboards, construction. • Difficulty differentiated between important and non-important cues on the road (e.g., vehicles in other lanes, pedestrians, turning lanes, etc.) • Slows down so significantly, thus impeding the flow of traffic, to complete any driving maneuver (unprotected turn, lane change, merge). • Allows all others to proceed first at 4-way stop, rather than initiating right of way. • While changing lane, forgets to watch for traffic in current lane. • Drifts out of lane while concentrating to find a gap in traffic for a lane change. • Misses red arrow prohibiting turn because green traffic light is present and adjoining traffic begins to flow. • Fails to observe <i>no turn on red</i> sign. • Delayed braking, failure to anticipate traffic beyond vehicle in immediately in front. • Delayed notice and response to changes in lights, red to green, or green to yellow to red, • Delayed notice and response to brake lights on the car in front. • Difficulty attending to traffic light while waiting for a safe gap to turn.
<p>Memory (working memory, short term,</p>	<p>AMPS IADL observation BCAT/MoCA</p>	<ul style="list-style-type: none"> • Misses or is late for driving appointment. • Forgets stops along a planned route. • Forgets directions recently provided. • Getting lost in familiar area. • Forgets where the car is parked.

recall, long term)		
Decision Making or Judgment	AMPS or IADL observation Other standardized occupational therapy performance assessments.	<ul style="list-style-type: none"> • Difficulty judging timing to initiate a driving maneuver (turn, lane change, merge, moving into turning lane, etc.) • Difficulty judging the “gap” in traffic for making a left-hand turn or changing lanes (i.e., <i>gap acceptance</i>). • Cannot judge who has “right of way” or when to yield to traffic. • Difficulty in judgement when adherence to rules of the road needs an exception (e.g., need to cross over yellow line to pass service truck). • Does not change driving behaviors based on the environment (e.g., slowing for pedestrians in the crosswalk, wet roads, construction). • Unable to appropriately respond to errors by other vehicles
Executive function	AMPS IADL observation BCAT Other standardized occupational therapy performance assessments.	<ul style="list-style-type: none"> • History of getting lost in familiar environments. • Cannot perform strategic maneuver. <p>Becomes easily overwhelmed with complex/congested driving environment as exhibited by:</p> <ul style="list-style-type: none"> • Stopping in the middle of an intersection, • Not attending to the environmental signs (e.g., school zone, speed bump), • Too slow to make decision, causing others to pass or honk, • Executing maneuvers too slowly impedes the flow of traffic, • Failing to notice critical information (e.g., pedestrians, traffic lights, stop signs, vehicles). • Does not respond to instructions or cues appropriately, • Difficulty in planning/initiating upcoming maneuvers (e.g., lane change for turns, merging,). • Driving instructor needs to intervene.
Visual Spatial Skills Impacted by dementia	Maze Test Clock Draw Other standardized occupational therapy performance assessments.	<ul style="list-style-type: none"> • Difficulty recognizing signs, dealing with intersections, or recognizing hazards. • Trouble scanning and identifying critical information (e.g., pedestrians, traffic signals, school zones, opening doors of vehicles). • Poor lane maintenance with turns – too wide on right turns or cutting left turns. • Difficulty finding an exit to complex or congested parking lots.

Processing Speed	Dynavision/ Vision coach AMPS IADL Observation TMT A & B Maze Test Brake Reaction Other standardized occupational therapy performance assessments.	<ul style="list-style-type: none"> • Difficulty finding and moving into turning lanes. • Slow to coordinate the steps of a turn, or slow to accelerate out of a turn. • Slow to initiate right of way at stop signs. • Slow to response to any change that is needed in the environment (e.g., traffic increases, roadway changes, traffic lights, other vehicles) • Missing opportunities due to slowed reaction when merging or turning. • Braking is late or hard due to delayed notice and response to traffic signals/signs, brake lights. • Slowing down to look for street signs or recognize traffic scene. • Driving too slowly in comparison to other traffic and environment (e.g., 20-30 mph below limit) • Significant slowing or even stopping to complete lane changes or turns
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OTPF – Occupational Therapy Practice Framework: Occupational Therapy Practice Framework: Domain and Process—Fourth Edition. *American Journal of Occupational Therapy*, 2020;74(Supplement_2):7412410010. <https://doi.org/10.5014/ajot.2020.74S2001>

Common driving behaviors/errors seen with clients with cognitive impairment

- Driving same speed, no matter the environment – comfortable at 30, only goes 30
- Significant slowing to find a turn or problem solve a challenge, impeding traffic.
- Delays moving into turning lane.
- Slow, wide right turns and short, left turns
- Allowing others to proceed first at stop signs rather than initiating right of way
- Following car in front of them through a stop sign rather than stopping before proceeding.
- Failure to notice important information on the side of the road – pedestrians.
- Delayed notice and response to changes in lights & traffic, often resulting in hard braking
- Becoming lost while driving or unable to find exit to parking lot.