

# CBID



## Cognitive Behavioral Intervention for Driving

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**Collaborating Institutions and Agencies:** RCHSD, National Foundation for Autism Research (NFAR), Dept of Rehabilitation (DOR), San Diego Regional Center (SDRC), San Diego Unified School District (SDUSD), Intricate Mind Institute

**Community Identified Need:** Our research-community collaborative group, ACHIEVE (Active Collaborative Hub for Individuals with Autism to Enhance Vocational and Educational outcomes), identified a significant need related to positive outcomes in adulthood for youth with ASD which was the ability to Drive! **Only 24% of able individuals with ASD are driving.**

- Executive functioning and Emotion regulation skills were noted as particularly difficult and research indicates that these skills are related to poor driving skills AND driving avoidance
- NO evidence-based interventions exist to enhance driving in ASD teens/adults
- Research shows that Cognitive Behavioral Therapy (CBT) is effective in addressing cognitive and psychological barriers and helping to reduce fears related to driving in non-ASD populations
- Driving simulators have been found to increase driving skills in non-ASD populations
- Large increases in population of individuals with ASD; **1 in 59 students have autism**

**Development of CBID:** TAY SUCCESS was developed with the research-community collaborative group by adapting and integrating concepts from various cognitive enhancement therapies and cognitive-behavioral therapies and designing it specifically for AS teens/adults specific to application in driving. (Baker-Ericzén 2017).

### Target Skills:

- \* Executive Functioning skills (Contextual Awareness, Sustaining and Shifting Attention, Cognitive Flexibility, Problem Solving, Goal Oriented Thinking)
- \* Emotional Regulation skills (Emotional Awareness and Regulation, Thought awareness and Restructuring, Sensory Input Monitoring)

**Intervention Delivered:** In group settings with individual driving simulator practice sessions

- \* 3 months in length
- \* 1.5 hr group plus 3-8 40 min driving simulator sessions
- \* 15.5 + yrs (driving age)
- \* Small group/class 7-12 teens/adults
- \* Psychoeducational group with hands on experiences, graded exposures through videos and driving simulator, goal setting and management and weekly practice assignments "Act the Facts"

**Research Study:** One open trial study was complete

- Doug Flutie Foundation funded: Study 1: Open Trial n=21 15-29 yrs , Community location: CASRC

**Outcomes:** Data was collected on effectiveness in addressing emotions, attitudes and driving behaviors

- 100% reported an attitude change towards driving to be more positive and less anxious
- 94% improved driving skills as recorded on the driving simulator
- 100% increased motivation by participating in 1 or more driving related activity
- 100% of families reported usefulness of the CBID intervention