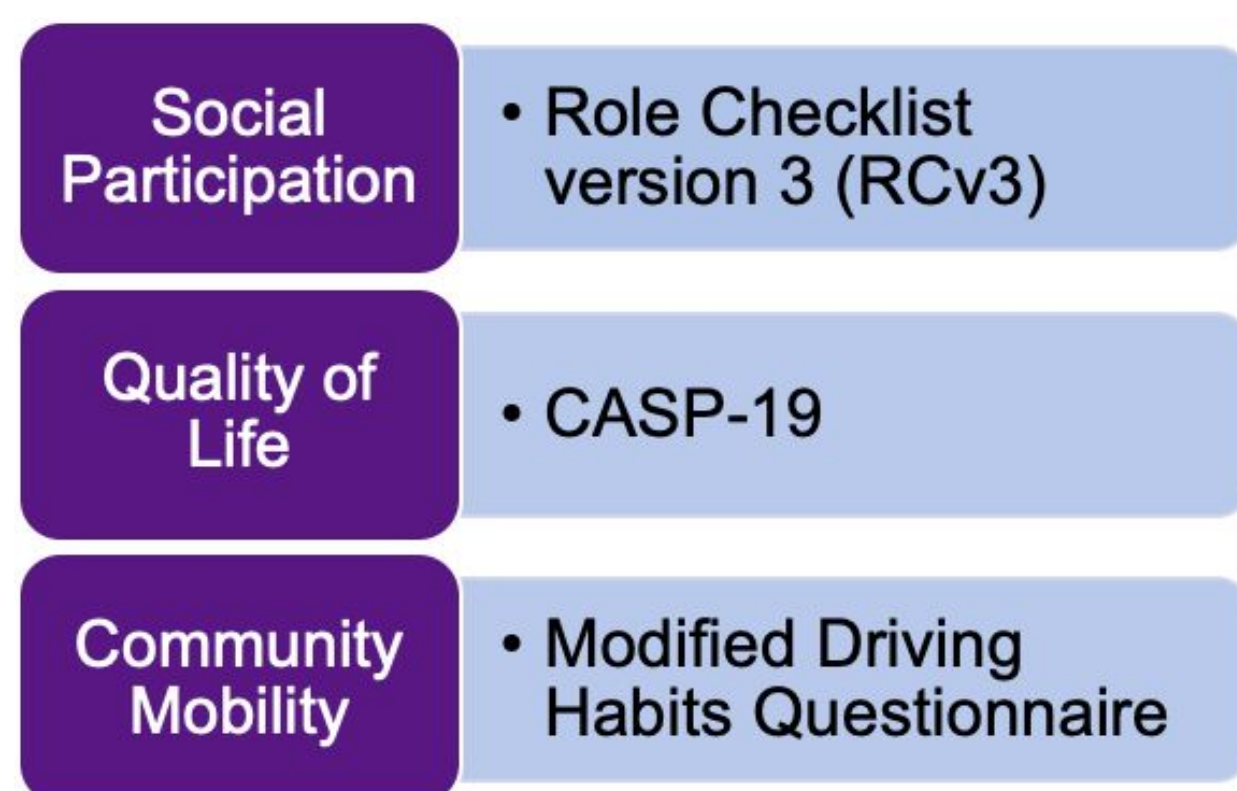


## PURPOSE of the STUDY

Many older adults outlive their ability to drive due to changes in visual, motor, or cognitive functions (Foley et al., 2002). When they must stop driving, social participation and quality of life (QOL) decline (Liddle et al., 2012; Donoghue et al., 2019). The purpose of this research study was to explore the influence of individualized transportation planning services on social participation and quality of life for older adults who cease or significantly restrict driving. Through the lens of occupational therapy, we examined how to effectively provide support for the transition to alternate forms of community mobility after driving cessation with the hope of preventing the typical declines in social participation and QOL.

## DESIGN and METHODS

This multiple case study design describes the results of collaborative transportation planning for individuals recently recommended to cease or restrict driving. Driving habits, social participation, and quality of life were measured when the recommendations were made, prior to driving cessation, and then again after the transportation planning process. Three participants completed the pre-tests, at least two transportation planning meetings, and post-tests, approximately 5 weeks later. Two participants declined to take part in transportation planning but completed both pre-test and post-test measures.



## TRANSPORTATION PLANNING

Transportation planning is a collaborative process in which occupational therapy practitioners and clients who must restrict or cease driving develop strategies to facilitate continued access to desired occupations and activities in the community. This process relies on identification of available resources in the client's community and active problem-solving to determine the best means of access to desired activities.

The following steps are frequently used in transportation plan development:

- Identify driving habits and locations of meaningful places that the client wants to continue to access
- Identify friends, family members, or other people participating in events at those meaningful locations who may provide rides, with a plan for discussion with them
- Identify existing services provided by county or town agencies for older adults, including methods of access (i.e. van services to medical appointments provided by council on aging)
- Explore other public transportation systems that are provided by county or town government, such as buses or trains
- Explain and set up ride sharing services such as Uber, Lyft, or GoGo Grandparent, which provides access to ridesharing through phone calls rather than apps, and which can be monitored by family.
- Once recommended services are customized to an individual needs, contact is made several weeks later to measure success and adapt plan as needed.



## RESULTS and CASE STUDY ANALYSIS

- Participants were retired males, 60-80 years old, residing in rural Eastern North Carolina
- All participants had familial supports or caretakers able to assist with transportation needs living in their home or very close by. This included living with a spouse, living with an adult child and grandchildren, and living independently with siblings and neighbors nearby.
- Overcoming emotional and attitudinal barriers to driving cessation was a critical part of transportation planning. Participants voiced concerns over transitioning to using alternative transportation, including those associated with cost, logistics with organizing, feeling like a burden to others, and resistance to losing independence.
- Transportation support from friends and family was the most common strategy used to maintain community mobility. Rural areas presented challenges with access to public transportation and ride sharing.
- Consistent with the literature, participants struggled to maintain social participation and quality of life when they stopped driving. However, there was greater decline for the individuals who did not participate in transportation planning.

## CONCLUSIONS

Although inferential analysis of results was not appropriate due to small sample size, the cases show promise for the effectiveness of transportation planning in combating declines in QOL and social participation. Future data collection is required to draw supported conclusions about the effectiveness of transportation planning. Additional qualitative measures could increase understanding of outcomes, to combat emotional and attitudinal barriers, and to support continued social participation and quality of life. Expanding participants to those not immediately recommended to reduce or cease driving may also allow for increased motivation to engage in the transportation planning process.