

## **“The experiences of older drivers in adopting new technologies in cars” – sharing new knowledge from a doctoral study to promote Safe Driving for Longer for Senior Drivers.**

**Keywords:** Senior drivers or older drivers, Inequality, Functional decline, Intelligent Transport System (ITS), Vienna Convention 1968, Senior Technology Adoption Model (STAM), Diffusion of Innovation Theory. Pre-retirement driver licence (PRDL)

**Author:** Dr Anuraj Varshney, Consultant Practitioner, South East DriveAbility, DProf, MA, OTR (USA), PgCLT,

Driverless cars are an eventual inevitable, however in the interim novel technology is available for use in modern cars by drivers. Such technologies have the potential to assist senior drivers, however outstanding challenges with their use remain. This study aimed to explore which factors influenced older drivers' decisions to regulate their driving, their knowledge and awareness in relation to new technologies in cars, their attitude on technology adoption and potential barriers preventing them from adopting and accepting said technologies.

This practitioner based, small-scale qualitative study involved participants aged 60-89 years between September 2017 and January 2018. Semi- structured interviews were used with thematic analysis performed to generate results.

The findings emphasise the need to create a supportive driving environment where senior drivers are able to trial new technologies to address apprehensions associated with their use and to facilitate their adoption. This can include training, education and support, all offered pre and post-delivery of technology innovation. It should be considered that senior drivers are less likely to afford the latest vehicle with new technologies, therefore alternative ways for car ownership should be developed to allow senior drivers access.

Secondary findings generated from this study include willingness of senior drivers to accept new technologies that may have the potential in helping senior drivers self-regulate their driving through the use of ITS (telematics device) but participants wished to see further research in this area to provide reassurance regarding privacy and data sharing. The use of ITS has the potential to assist driving licencing authorities by providing objective data about their self-regulatory driving behaviour and contribute to the development of an alternative driving licence the “*Pre-retirement driver licence*” (PRDL), similar to the “*Graduated driving licence*” (GDL) for younger drivers. These findings can contribute to a novel strategy to improve services for older drivers.