Self-Regulation of Driving by Older Adults

Background

• Self-regulation, or the modification of driving activity by driving less or avoiding challenging situations in response to declining abilities, is increasingly studied as a way to help older drivers maintain independence and extend the period over which they can safely drive.

• However, questions remain about:
  o whether older drivers can correctly adjust their driving in response to their age-related declines;
  o the degree to which older drivers engage in self-regulatory behaviors;
  o the factors affecting self-regulation; and
  o the extent to which self-regulation actually improves safety and mobility for older drivers.

Objective

• The overall purpose of this paper is to report findings from an extensive synthesis of the literature on self-regulation of driving among older adults.

Methods

• A systematic literature review of qualitative and quantitative studies was conducted on previously published studies pertinent to self-regulation of driving by older drivers from 2009 onward.

• 100 studies met the inclusion criteria, and 71 additional publications from pre-2009 were included.

Key Findings

Three types of self-regulation were identified:

• Strategic – decisions made by drivers before they actually embark on a driving trip
  o Eg: deciding not to take a trip at all or avoiding challenging driving situations, like night driving

• Tactical – practices that drivers engage in while they are actually on the road
  o Eg: actual maneuvers made in traffic or decisions about avoiding distractions.

• Life-goal – larger decisions in life affecting driving more indirectly
  o Eg: choosing where to live in relation to common destinations or what type of car to buy, with safety being an important consideration in the purchase decision.

***Continued***
Factors Associated with Self-Regulation

- **Sociodemographic factors**
  - **Sex** – Older women tend to self-regulate their driving more than men.
    - Mixed findings point to the role of perceived confidence in driving ability
  - **Age** – Driving self-regulation tends to increase with age.
    - Mixed findings due to study design, and accounting for motivations for avoidance and medical illness
  - **Household composition/living arrangements** – Effects often intermingled with factors related to family and social support for transportation.
    - Mixed findings about effects: one study found that drivers who live alone were more than twice as likely to report limiting their driving, and another found that those drivers were also more likely to avoid driving at night or on the highway.
  - **Other individual factors** – Associated with self-regulatory driving behaviors
    - Negative attitudes towards driving, poor sense of direction, income (inversely related to self-regulation), older drivers feeling more vulnerable to crash risk at night, anxious driving style

- **Health and functioning factors**
  - **Visual impairment** – Generally, visual impairment is associated with increased self-regulation.
    - Ex: cataracts, glaucoma, contrast sensitivity impairment
  - **Cognitive impairment** – Overall, many drivers with cognitive impairment such as dementia do in fact restrict their driving or stop driving altogether within a few years.
    - Family members and caregivers play a role in imposing driving restrictions.

- **Awareness and insight**
  - Awareness and insight into declining functional abilities is a necessary first step in driving self-regulation.
    - Individuals’ awareness of their abilities influence their decisions to drive in challenging situations.

- **Driving confidence and comfort**
  - Perceptions of confidence and comfort in specific driving situations are closely related to self-regulation.

- **Enabling factors and barriers to self-regulation**
  - **Enabling factors**: family and caregivers, others dependent on their driving, transportation support, regulatory self-efficacy
  - **Barriers**: lifestyle, lack of availability for others to provide transportation, unwillingness to ask others for rides

For more information on this study and the AAA Foundation’s other traffic safety research and materials, please visit [AAAFoundation.org](http://AAAFoundation.org).

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