Older Adults’ Motivations for Participating in a “Tune-Up” of Their Driving Skills: A Multi-Stakeholder Analysis

Ruheena Sangrar1, Kyung Joon Mun1, Lauren E. Griffith1, Lori Letts1, and Brenda Vrkljan1

Abstract
Driver training has the potential to keep older adults safe behind-the-wheel for longer, yet there is limited evidence describing factors that influence their willingness to participate in training. Focus groups with community-dwelling older drivers (n = 23; 70–90 years) and semi-structured interviews with driving instructors (n = 6) and occupational therapists (n = 5) were conducted to identify these factors. Qualitative descriptive analyses highlighted how self-awareness of behind-the-wheel abilities in later life can influence an older adult’s motivation to participate in driver training, as well as their willingness to discuss their behaviors. Collision-involvement and near-misses prompted participants to reflect on their driving abilities and their openness to feedback. Participants’ preferences for learning contexts that use a strengths-based approach and validate the driving experience of older drivers, while providing feedback on behind-the-wheel performance, were raised. Older driver training initiatives that consider the needs of the aging population in their design can promote road safety and community mobility.

Keywords
Driving, education, focus groups, mobility, transportation

Introduction
For many individuals aged 65 years and older, the ability to drive is both valued and necessary for mobility and social engagement (Miller, 2017; Nordbakke & Schwanen, 2015). While access to one’s community in later life is often viewed as integral to health and functioning (Metz, 2000; Rantakokko et al., 2016), multiple factors, including financial, psychosocial, environmental, medical, physical, and demographic considerations (e.g., gender and socioeconomic status) can impact out-of-home mobility (Webber et al., 2010). Given the numerous factors involved, developing evidence-based approaches that can maintain or promote driving and community mobility in older adulthood remains a challenge due, in part, to the heterogeneity of the aging population (Marin-Lamellet & Haustein, 2015; Musselwhite & Haddad, 2010). In fact, Laliberte Rudman et al. (2006), alongside other researchers (e.g., Dickerson et al., 2019; Stutts & Wilkins, 2003), proposed driver training as a potential preventive intervention. Training that targets older adults prior to a major medical change could open an important conversation about planning for driving retirement.

Results from a recent systematic review suggest driver training programs tailored to the individualized needs of an older driver can improve road safety knowledge, self-perceptions of driving ability, and behind-the-wheel performance (Sangrar et al., 2019). For example, feedback from a driving instructor has been shown to be particularly effective for this age group (e.g., Anstey et al., 2018; Sawula et al., 2018). While some older drivers are inclined to voluntarily seek out training (Hassan et al., 2015), their motivations for enrolling in these programs remain unclear. If such programs are to be effective, Keskinen (2014), in the model “Goals for Driver Education in the Social Perspective,” highlights how paying attention to certain behind-the-wheel skills, motivations,
and interests is paramount when training older drivers. Hence, this study explored the perspectives of older drivers alongside those who are likely to be involved in the delivery of driver training to identify factors that can inform the design and delivery of such training.

Previous studies suggest some older adults seek out driving-related resources, including behind-the-wheel training, in an effort to retain licensure (Hassan et al., 2015; Hawley et al., 2017; Laliberte Rudman et al., 2006; Musselwhite & Haddad, 2010). For example, Hawley et al. (2017) asked older adults about their motivations for engaging in classroom-based driver education delivered by a local transportation authority. Participants expressed interest in updating their knowledge of traffic laws, improving behind-the-wheel skills, and determining if they were still fit to drive. Interestingly, their findings also highlighted a paradox regarding who participates in such programs where those older drivers who were found to be competent behind-the-wheel were more likely to attend training than those needing to improve their skills or those who should consider giving up their license.

Raising the topic of driving can lead to emotionally charged exchanges between older drivers and their loved ones and/or health care professionals (Betz et al., 2013; Caragata et al., 2019; Söllner & Florack, 2019). If older drivers believe that an error in their driving might lead to loss of licensure (Allen et al., 2019; Hassan et al., 2015; Stutts & Wilkins, 2003), they may be less willing to participate in training where their performance is closely observed. Moreover, older adults might benefit from early conversations about driving in later life where their respective driving history, behind-the-wheel behaviors, medical fitness-to-drive, and jurisdictional licensing regulations are considered.

To date, the clinical perspectives of those who broach the topic of driving with older adults have also not been fully considered. For example, the scope of occupational therapy practice has evolved to include this topic (American Occupational Therapy Association, 2017) alongside partnering with driving instructors who are often responsible for delivering behind-the-wheel training. As potential service delivery providers, occupational therapists and driving instructors have unique insights when it comes to understanding driving in later life, including the behind-the-wheel skills that should be targeted and how to best tailor such training. Exploring divergent stakeholder perspectives can inform the development of new approaches to older driver training and/or improve existing programs aimed at those who are motivated to maintain their behind-the-wheel abilities.

This study sought input from a range of stakeholders (i.e., older drivers, driving instructors [DIs], occupational therapists [OTs]) with the goal of informing the design of driver training aimed at maintaining behind-the-wheel abilities in later life. The research question guiding this exploratory qualitative study was: What factors influence older adults’ participation in driver training? Participants were also asked to share their recommendations for the design and delivery of such training.

Method

Participant Recruitment

Purposive and snowball sampling strategies were used to recruit stakeholders (i.e., older drivers, DIs, and OTs) in this descriptive qualitative study (Sandelowski, 2000). These strategies were selected to meet recruitment targets necessary to elicit the unique perspectives of both the older drivers who are the focus for such training as well as those involved in the delivery (i.e., OTs and DIs). Older drivers were initially recruited through a database of research volunteers that was set up for aging and mobility studies within the university. Some also volunteered after hearing about the study from a peer. Eligibility criteria for older adults included: age 65+ years, valid driver’s license, drove at least once per week, and spoke English. Sample size estimates of men and women were attained to ensure maximum variation of demographic characteristics (e.g., gender and age) in focus groups whereby a minimum of 15 participants were needed to conduct a minimum of three groups comprised of at least five participants per group. Participants were excluded if they had been informed by a medical professional they were no longer fit-to-drive, given the focus on maintaining driving ability.

To recruit DIs and OTs, an invitation that included a brief overview of the study was emailed to colleagues within the authors’ professional networks. DIs were eligible to participate if they had experience training older drivers and spoke English. OTs were eligible to participate if they spoke English and had experience providing health-related education to older adults in primary care settings (e.g., educational programs on driving retirement, fall prevention, or healthy aging). OTs were excluded if they specialized in driving evaluations for medically at-risk drivers, because those drivers do not represent the target population for older driver training who are generally healthy older adults (Sangrar et al., 2019). Recruitment efforts continued until data saturation was achieved. Older drivers were reimbursed for parking expenses when attending focus group sessions and a letter of gratitude was sent to professionals after their interview. The Hamilton integrated Research Ethics Board approved this study (HiREB Project # 3005).

Data Collection

Four focus groups of five to eight older drivers (n = 23) were conducted in a classroom setting in the School of Rehabilitation Science at McMaster University (Hamilton, Ontario), lasting between 90 and 120 min. The first session was co-facilitated by two investigators (R.S. and B.V.). This session also served
Factors That Motivate Older Drivers to "Sign-Up" for Driver Training

“I've always been a careful driver”: Level of insight or awareness of one’s current driving ability. When older drivers in the focus groups were asked about their current driving ability, many
pointed out their “clean” driving records. They attributed staying safe behind-the-wheel to their novice driver training. Tom (age 85) shared that: “. . . when I started driving at 15, I was trained that if I had to hit the brakes, the first thing I did was look in the rear-view mirror.” In fact, some older drivers described how their behind-the-wheel performance was superior to that of others on the road:

I’ve always been a careful driver. I always stop at stop signs. I don’t do right hand turns on red. Maybe I’m a pain in the butt, I don’t know, because . . . I seem to be the exception. (Robert, age 71)

Another participant, Ned (age 90) shared how he responded to being tailgated: “. . . irritate them by leaving bigger and bigger spaces ahead, so they get closer and closer, so that space gets bigger and bigger, because I don’t want to be rear-ended.” Ivy (age 80) ignored others on the road by not “looking [in the rear-view mirror] because I’m figuring, no, I’m not going to worry about him [the other driver]. He [the driver] can see me and if I slow down, he’s going to have to slow down.”

DIs viewed overconfidence in one’s own behind-the-wheel abilities as a reason why many older drivers do not seek out training at this life stage:

they rationalize what they do [when driving] and things they know shouldn’t be done . . . it’s a strange phenomenon in how they point the finger quickly at other people but they are not so quick to point the finger at themselves. (DI04, male)

Another instructor attributed poor self-awareness to a discrepancy between perceived and actual on-road performance:

[Older] people will say to me, “I don’t like when other drivers don’t signal. I’m one of those people who always puts my signal on,” and then they make three turns in a row with no signal. They are not aware—and when you say to them, “You need to signal for your turns,” they say, “I do.” And I don’t want to be the person to say to them, “Well as a matter of fact, you don’t.” (DI01, female)

OTs found that older adults in their practice were not always willing to admit deficiencies in their driving abilities, as one OT explained, “there is a set of the [aging] population, or a group of the population, in terms of their readiness for change, they’re just not there yet” (OT02).

“Sit up and take notice”: Critical events that indicate improvement in driving skills are needed. Some older drivers in the focus groups recognized areas for improvement in their driving. For example, Alicia (age 78) reflected on gradual changes to her behind-the-wheel abilities: “I have bad habits, I drive over the speed limit all the time and I have my hands down at the bottom not up here [places hands at 9 and 3 O’clock] because I’m relaxed.” For other older participants, such changes only became apparent after experiencing an adverse event, such as an at-fault collision or “near miss”:

I think the typical embarrassing situation for me, and I’ll bet for most of us, is merging into traffic when someone was in our blind spot. We turn our heads, we are sure there is nobody there, but there is, and you pull out and you get a real loud honk behind you, and you’re embarrassed as hell. (Peter, age 80)

Other near misses included “bumping a pedestrian” (Robert, age 71), or “drifting out of their lane” (Russell, age 82). For Samantha (age 83), nearly colliding with a motorcyclist in her blind spot made her “sit up and take notice.” Such events were seen as a way to open discussions about driver training: “We think we have all the necessary skills when we don’t, and I think we need a wake-up call from time to time . . . admitting you’re not up to scratch, not as good as you once were” (Robert, age 71).

Older drivers described how changes in their driving ability were reflective of changes in their health and physical functioning. When such changes warranted conversations with a family member, this interaction was viewed as a critical event: “Their children are recommending they do a couple of lessons” (DI03, female). For service delivery providers, making links between an individual’s age and/or health-related issues with potential or observed problems behind-the-wheel prompted conversations about driving. For example, DIs cited the impact of visual problems on the ability to scan the road environment. An OT described how she analyzed health impairments in relation to various elements of the driving task: “. . . so we would look at difficulty getting in and out of the vehicle, difficulty seeing over the dashboard, was it around range of motion to shoulder check, was it around grasping the wheel . . .” (OT04). OTs saw value in having the option of recommending older driver training for some older adults in their practice, but such a recommendation depended on the severity of an older driver’s medical concern.

Time for a “tune up”: Keeping driving skills and road safety knowledge up to date in later life. Participants agreed driver

| Table 2. Data Sources and Participant Characteristics. |
|------------------------------------------------------|
| Characteristic                                      | Total       |
|                                                     | Participants|
| Focus group participants                            |             |
| Older drivers (n = 23)                              | 79.6 (±5.2) |
| Age (M [SD])                                        | 12 (52%)    |
| Female (n [%])                                      |             |
| Semi-structured interview participants              |             |
| Driving instructors (n = 6)                         | 2 (33%)     |
| Female (n [%])                                      |             |
| Occupational therapists (n = 5)                     | 5 (100%)    |
| Female (n [%])                                      |             |

Participants agreed driver
training can be valuable in later life. Some older drivers admitted having knowledge gaps regarding current traffic laws. For example, Hubert (age 72) stated: “there’s probably a lot of little wrinkles in the highway traffic act that older drivers should be aware of and I don’t know what they are.” Some older drivers shared their openness to “know how [their] driving is rated with today’s standards” (Russell, age 82). Participants referred to training as a “check flight,” a “tune up,” or a “confidence builder.” An older driver shared his experience of voluntarily seeking out a formal evaluation of his behind-the-wheel skills by a driving school:

I’d say, I got 67 out of a 100 . . . I passed. [the driving instructor] said, “No you didn’t.” . . . sloppy in lines, sloppy with speeding signs or school signs . . . It’s [for] my personal satisfaction that I was driving as well as I could be. (Ned, age 90)

While DIs described how some older drivers who came to see them were motivated to “make sure they’re doing things the way they’re supposed to” (DI03, female), such individuals were rare. Stakeholders promoted the message that all drivers can benefit from ongoing training, not just older adults. For example, a public health campaign could emphasize such a message: “it [the campaign] could be for everybody. Don’t gear it at seniors because I think that’s singling them out” (OT02).

**Recommendations for the Design and Delivery of Older Driver Training**

*I’m a visual learner*: Tailoring training to older adults’ learning styles and driving needs. Ensuring training is tailored to the needs of the older driver in question and that it should consider differences in learning styles was raised across stakeholder groups:

I’m a visual learner. Some people are audio learners, I’m a visual learner and/or tactile, and if I’m doing something wrong, I need someone to drive with me and to say, “You’re crowding the right-hand lane or you’re crowding the left-hand lane.” (Eloise, age 71)

During their interviews, DIs shared how their experience with training older men differed from that of older women: “. . . women tend to be more receptive [to feedback]; the men tend to be more stubborn and obstinate” (DI04, male), and that “women are more inclined to memorize . . . more inclined to take my advice” (DI02, male). They also shared how older driver training should “relate . . . directly to them personally. You can’t be saying, ‘All drivers do this or all drivers do that’. You don’t care; this is what you, as a senior driver, have to do” (DI02, male). An OT described the importance of their role in recognizing when an older adult is ready to integrate feedback to make a change:

. . . looking at how we can empower people to identify when a change is needed in their lives and how do we then motivate them or help to motivate them when they’re ready. So almost assess their ability for change and meet them where they’re at. (OT02)

*I bought a new car*: Changing environments informing older driver training. Older adults emphasized the need for training to be “fairly local,” delivered in familiar community environments (e.g., seniors’ centers), and at a reasonable cost. Some indicated they would only participate if it was mandated by transportation authorities as a condition of maintaining licensure. They were also willing to participate in driver training if it would assist with navigating changes in local roads (e.g., addition of roundabouts) or if they purchased a new vehicle with Advanced Driver Assistance Systems (ADAS). For example, Maria (age 80) shared, “I bought a new car and I think it might be useful to get [ADAS] . . . the dealer will give me an hour’s training, but I might need more than that.”

DIs provided multiple reasons why older drivers accessed their services, including a family member’s concern for their behind-the-wheel performance; spouses or widows taking on the role of “primary driver” after their partner fell ill or passed away; driving in new environments (e.g., highway driving); preparing for a government-mandated road test following an at-fault collision or a traffic citation; preparing for a road trip; and/or winter driving.

*“Positive, and not punitive”: Formative feedback is important to older drivers.* Older adults raised the notion of behind-the-wheel confidence as a potential barrier to their participation in driver training. For example, Adam (age 84) suggested, “I would think if you’re concerned about your driving because you’re losing your confidence and then someone gives you a 65 [a low score], I don’t think you’re going to be any more confident.” DIs discussed how just being involved in an evaluation of one’s driving abilities can impact performance: “[Most] have never had to do a test, so they’re pretty nervous about this. We think that only teenagers are nervous about testing, but boy, seniors have a pretty healthy dose of test anxiety as well” (DI04, male).

Older drivers emphasized the need for training to affirm their behind-the-wheel skills, as Daniel (age 79) stated, “I would want them to tell me . . . [I’m] the greatest driver ever. Then my confidence would be sky high.” Service delivery providers raised the need for feedback to be provided using “different learning modalities” (OT02) and to combine “tactical information . . . with actual practice . . . not just didactic” (OT01). DIs described using multiple strategies to engage older drivers:

Our first meeting is 2 hours and a lot of that is sitting together and talking, going over change of speed, direction, road markings, signage, maneuvers . . . then when they feel
In this study, service delivery providers saw friends and family members as critical conduits for encouraging participation in older driver training. However, a recent survey suggested when older adults were encouraged to take driving lessons by their family, it did not encourage them to modify their driving (Caragata et al., 2019). Consistent with this evidence, and in contrast to perspectives shared by service delivery providers, older drivers did not identify conversations with friends and family as a primary source of motivation to participate in driver training. Rather, their motivations reflected their desire for autonomy when seeking support for their driving skills. In fact, such divergent perspectives highlighted seemingly ageist language used by service delivery providers that implied older adults are not able to recognize and respond to self-identified changes in their driving. Such beliefs continue to generalize all older adults as declining in their capacity to safely operate a motor vehicle (Barber, 2020). These stereotypes were also reflected in the opinions of some of the older drivers in this study who attributed their vigilance behind-the-wheel to their “old age” despite the appropriateness of adjusting their driving behavior. DIs similarly stereotyped older drivers as being overconfident or lacking insight into their own faults. Recognizing each older drivers’ experiences as unique and valuing their self-perceptions of their behind-the-wheel abilities is essential if we are to create more inclusive training programs that support driving and community mobility in later life.

According to Musselwhite and Haddad (2010), a critical consideration for any training aimed at older drivers is to acknowledge their own unique driving experience and capacity to alter their driving habits. DIs alluded to gender-based differences in older drivers, where women in this age group are more likely than men to recognize changes in their abilities (D’Ambrosio et al., 2008; Oxley et al., 2005). However, both older men and women described remediable errors they make when behind-the-wheel. Similar to the findings of a focus group study examining how drivers cope with feelings of vulnerability behind the wheel (Gwyther & Holland, 2014), women in this study reported avoidance behaviors. For example, a participant described ignoring an aggressive driver, which is an unsafe action. While a gender-based analysis was not the focus of this study, findings suggest further research is needed to determine if gender-informed driver training approaches might be warranted.

Creating opportunities that encourage older adults to participate in behind-the-wheel training is critical. As older adults vary in their driving-related knowledge and behaviors, the driver training environment should be congruent with their individual preferences and needs (Keskinen, 2014). Study participants expressed their general apprehension about being observed during driving training. For older adults, the notion of having their driving skills evaluated, even for training purposes, can heighten feelings of nervousness and anxiety (Bhalla et al., 2007; Stutts & Wilkins, 2003). However, in comparing perceived levels of anxiety
prior to an on-road evaluation between community-dwelling older drivers with Alzheimer’s and those without this diagnosis, Bhalla et al. (2007) found that this emotional state only impacted the behind-the-wheel performance of those diagnosed with the neurocognitive condition. These findings contradict participants’ perceptions that being observed might detrimentally influence their driving performance. Alternatively, Caragata et al. (2019) highlighted how older adults were, in fact, receptive to hearing concrete and relevant examples of their driving in a training context. Validation of their skills and encouragement to continue driving were appreciated (Caragata et al., 2019). Our findings emphasize the value of a strengths-based approach when providing feedback aimed at improving their behind-the-wheel behaviors. Further research is needed to understand the process by which service delivery providers can build trusting relationships with older adults that promote uptake of recommendations to promote driving performance.

Study findings should be considered in light of certain limitations. Given their interest in volunteering for a study on driver training programs, our participants may be more inclined to engage in such training, and thus, not be representative of all older drivers, particularly those who may be reluctant to discuss their own behind-the-wheel skills. While our analysis reached saturation across all stakeholder groups, only OTs were sampled to provide a clinical perspective. Including the perspectives of other service delivery providers (e.g., physicians and nurse practitioners), as well as friends and family, could enhance our understanding of factors that impact participation in driver training at this life stage.

Strengths of this study included having an older driver co-facilitate the focus groups. We also analyzed the perspectives of OTs and DIIs, whereas previous research has only included older drivers (see Laliberte Rudman et al., 2006). In addition, participants were not provided with detailed examples of actual driver training programs, which may have allowed for more breadth in considering key influencers of their participation in such training. Future research should focus on engaging older adults who would benefit most from such training (Dickerson et al., 2019).

**Conclusion**

By exploring the perspectives of a diverse group of stakeholders, key factors that can influence older adults’ participation in older driver training programs were identified. Older adults’ awareness of their own behind-the-wheel skills is an important precursor for seeking out such programs. Tailored approaches should consider demographic and contextual heterogeneity within this population, where individualized learning styles and feedback preferences should be considered when designing training opportunities for older drivers. Approaches that encourage self-evaluation and uptake of knowledge and skills are also important considerations when designing such training. These considerations are critical to ensure current and future driver training has the potential to engage older adults in programs aimed at optimizing their behind-the-wheel safety and mobility.

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**Ethics Approval**

The Hamilton integrated Research Ethics Board approved this study (HiREB Project # 3005).

**ORCID iDs**

Ruheena Sangrar https://orcid.org/0000-0002-4207-9066

Kyung Joon Mun https://orcid.org/0000-0002-3271-306X

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