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Kimberly Pine
Providence College

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The Elderly: A Descriptive study of the perceptions of the elderly and their driving abilities

A project based upon an independent investigation, submitted in partial fulfillment of the requirement for the degree of Bachelor of Arts in Social Work.

Kimberly Pine

Providence College
Providence Rhode Island

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Introduction

During the next 30 years, those born between 1946 and 1964 (also known as the “Baby Boomers”) will increase the elderly population. “Research indicates there are numerous age-related changes in cognitive, physical, and sensory functioning that may have implications for older drivers” (Lindstrom-Forneri, Tuokko & Rhodes, 2007). For the safety of others, the stages of development regarding the aged must be understood. It is important to recognize that aging is a part of life and will place limitations on individuals. Furthermore, it is necessary to understand the different factors that affect driving patterns in older adults. This brings up several concerns regarding public safety. An automobile has many functions, especially to provide freedom for the older driver. However, it can be dangerous if used improperly. This places concern for those growing older, (because they have less response time). An elderly person who is no longer capable to drive could jeopardize the lives of others who are also on the road. In addition to being a threat to others in society based on driving with impairments, it is important to note that the elderly could also be a harm to themselves. With the increase in number of older drivers, it is important to recognize this issue and start taking immediate action to provide safety for those elderly drivers who are currently on the road and should not be as well as those that soon will be.

There are several medical issues that need to be considered with respect to driving impairment, with one of them being difficulty seeing (Ragland, 2004). Other issues include reaction time, cognitive ability, and muscle dexterity, which when deteriorating, can make the tasks associated with driving more difficult (Lindstrom-Forneri et al. 2007). In addition to individuals’ health status affecting older adults from

driving, it is also necessary to be aware of the social cognitive factors such as attitudes and beliefs toward driving (Lindstrom-Forneri et al. 2007). Family, friends and doctors have helped influence older drivers' decisions regarding cessation of driving (Lindstrom-Forneri et al. 2007). This study will evaluate how older drivers view themselves regarding driving and measure if they believe there is an appropriate age that driving should be terminated.

Driving plays an important role in one's daily life as it is a vehicle that allows one to make connections with others, obtain goods, and services, and live in a community. If restrictions on driving were determined, it would limit the access of older people to goods and services and may increase social isolation (Ragland, 2004). Being able to drive provides individual freedom. The majority of older adults believe that a car is a source of independence. Giving up that freedom is extremely difficult, which is why people continue to drive even if they are inept to do so (Lindstrom-Forneri et al. 2007). If there are no set restrictions, then people will continue to drive even if it is not recommended. Those who live alone may be more likely to drive than those who live with others, regardless of their health and physical difficulties (Ragland, 2004). This is why it is extremely pertinent to start the planning process for the aging population. The Baby Boomers are an upcoming generation who experienced a life of autonomy. In order to support individuals' future health and well-being into and beyond retirement, the preparation needs to begin immediately. In order to be successful, the state department of motor vehicles needs to make the renewal process more challenging for an older person when they are trying to renew a license. In addition, more alternative services need to be provided so older people do not feel that they have completely lost their independence.

The aim of this study is to develop a deeper and more detailed understanding of how social workers can interact with the elderly and assist them in receiving services if they are incapable of driving, as well as talk with them if they are struggling with letting go of their license and its resulting independence.

Social work is a profession that is geared towards helping people. Those committed to this profession help the elderly come to terms with the fact that their lives are slowly coming to an end. It is the social worker's obligation to help those who are aging and who are having problems accepting the restrictions that are being put on them. Functional declines associated with aging appear to prompt some drivers to voluntarily change their driving habits (Lindstrom-Forneri et al. 2007). However, if that is not the case, a social worker may have to intervene. Research points to evidence that women are more likely than men to stop driving (Johnson, 1995). Gender differences also have been noted, with men more likely than women to report medical reasons, and women more likely to cite feelings of stress and avoidance for difficult driving situations (Ragland, 2004). In this instance, a social worker could help male individuals who are having trouble letting go of driving and their independence. This study will assess male and female drivers, ages 65 and older in order to get a better understanding of their beliefs of driving limitations and at what age.

Literature Review

Elderly drivers are categorized into two groups: those who are no longer capable of handling a car and recognize this, and those who do not recognize their inadequacies and continue to drive. It is difficult to measure who can and cannot still drive safely.

Although experts agree that driving ability generally begins to deteriorate at age 55, drivers have widely differing skills. Some people can continue to drive safely well into old age, while others cannot (AAA, 2002). That is why it is important to look at each individual case as opposed to having one standard that is supposed to fit each person. Those who do recognize that they no longer are capable of maintaining a drivers license usually start feeling uncomfortable in traffic and react by driving less and less until they simply do not drive at all (McKnight, 2003). Other older drivers who fit under this category will voluntarily restrict themselves to driving only during daylight and good weather, on well known routes, and at off-peak times. They prefer such self-imposed restrictions to giving up the keys completely (AAA, 2002).

There is a risk associated with older people driving. Older drivers become more crash-prone with age, even though they supposedly drive less. A genuine concern exists for the elderly and aging drivers, not only for them to be content and happy, but also for their safety. Statistics indicate that in the year 1995, there were 16.5 million licensed drivers over 70 years old. This is a 47 percent increase from 1985. It is predicted that by the year 2020, the U.S. will have 54 million Americans over 65 years of age, and many of them will be driving (AAA, 2002). This significant increase indicates that more elderly drivers 65 years and older will remain on the road. This is a concern because during the next 30 years, those born between 1946 and 1964 (also known as the Baby Boomers) will increase the elderly population.

Accidents and fatalities are a major concern when older people drive. For every mile that drivers age 75 and older travel, they face a rapidly rising risk of being killed or injured. The risk for those 75 to 79 years of age doubles that of younger adults and

increasing to a sixfold difference for drivers over age 85 (McKnight, 2003). It is apparent that stopping older drivers from being on the road at the proper time could eliminate the number of accidents and fatalities. The crash rate per mile driven rises steadily for drivers 65 and older, and those drivers are involved in more crashes per mile driven than any other age group except teenagers (AAA, 2002). This information supports a concern for the elderly continuing to drive when increased risk of traffic accidents, injury and even death rise.

Additionally, older drivers are more physically fragile. In fact, their fatality rates are seventeen times higher than those of individuals 25-to 64 years old. They are more likely to injure themselves in a crash because of their greater physical frailty and typical crash patterns (Hakamines-Blomqvist, 2004). The National Center for Statistics and Analysis have reported that in two-vehicle fatal crashes with an older and a younger driver, the older driver's vehicle was nearly twice as likely to be the one that was struck (NHTSA, 2007). In 2007, 196,000 older individuals were injured in traffic crashes, accounting for 8 percent of all the people injured in traffic crashes during that year. These older individuals made up 14 percent of all traffic fatalities, and 19 percent of all pedestrian fatalities (NHTSA, 2007). The high percentage of fatalities involving older drivers indicates that their driving abilities have declined. Most traffic fatalities involving older drivers in 2007 occurred during the daytime (79 percent), occurred on weekdays (72 percent), and involved other vehicles 71 percent (NHTSA, 2007). Therefore, the blame cannot be put on heavy traffic, trouble seeing in the dark, or other circumstances.

Limitations on older drivers cause drivers to change their routine, to include having to change routes to avoid intersections. In a typical situation, the older driver turns left against the oncoming traffic of the main road and is hit by a vehicle with the right-of-way (Hakamines-Blomqvist, 2004). Many older drivers' collisions occur at intersections. During an intersection crash situation, older drivers apparently do not see the other vehicle in time and fail to yield the right-of-way (Hakamines-Blomqvist, 2004). This further demonstrates that elderly drivers are starting to lose their ability to remain behind the wheel, as they have trouble following the rules of the road. This is proven by their declining abilities, increase in medication use, and various medical conditions (Shope, 2003). Older drivers might make modifications in order for them to be able to continue to drive. For example, this may consist of buying bigger mirrors, having their eyes or ears checked, or making three right-turns to avoid a left turn. People who need such adjustments point evidence that driving may no longer be safe, just like those young drivers' who fail their license examination due to going over the speed limit by two miles per hour.

As individuals age, there is a high risk of being impacted by different health factors. As experienced drivers grow older, changes in their vision, attention, hearing and other physical abilities may cause them to drive less safely than they used to (McKnight, 2003). Although these health issues seem to be minor, it can have a huge impact on older drivers. A typical driver makes 20 decisions per mile, with less than half a second to act to avoid a collision (AAA, 2002). The biological basis of loss of function in later life is usually rooted in disease. Drivers' with chronic medical conditions require more medications to treat them, both of which can adversely affect our ability to drive

safely (Stutts, 2003). It is necessary to focus on those older drivers who no longer have the ability to drive because of medical conditions. The aging process affects the visual, auditory, and information-processing abilities, all of which in turn affect driving.

Driving outcomes are associated with one or more vision problems or with medical conditions affecting vision (Ragland, Satariano, & MacLeod, 2004). Vision is necessary when driving an automobile, as 85 percent of information necessary to drive is through our eyes (AAA, 2007). Decreased vision is a major factor in driving safety in older adults. Approximately 90 percent of the information needed for driving is visual (Hill, 1980). When driving a car, vision is important in order to safely get to your destination. For the elderly, vision is further impaired during these five situations: driving below or above the speed limit, unexpected vehicles due to blind spots, dim lighting, difficulty reading signs, and windshield problems (Johnson, 1995). Due to these factors, it indicates that the older driver may have difficulties maintaining a license. Older individuals experience some decline in their ability to differentiate stimuli clearly under normal conditions, under low illumination (night) and in low-contrast situations, for objects in motion, and in presence of glare and after removal of glare (McKnight, 2003). This limitation in elderly eyesight is dangerous to not only themselves but to other drivers on the road. It is noted that typically our eyes begin to grow worse at age 40 or 50 and decline progressively in later years, even with corrective lenses, leading older drivers to be more susceptible to medical conditions such as glaucoma and cataracts (O'Neill, 2004). Older drivers with cataracts experience a restriction in their driving mobility and a decrease in their safety on the road. Driving a vehicle is more difficult if your eyesight is impaired.

Along with the positive aspects of aging, there is an age-related increase in the prevalence of disability. Age-related changes and declines in health caused by disease may alter the performance level of critical skills, making older adults less able to meet task demands and thus subject to an increased risk of injury (Sterns et al., 2003). Upon the elderly reaching a certain age, it is quite obvious their health caused by disease will result in being incapable to drive an automobile. Doctors have found that certain medical conditions affect driving in older adults by producing functional problems and through the side-effects of the medications used in treatment (Owsley, 2004). It is suggested that several other medical conditions such as epilepsy, diabetes, Alzheimer's disease, dementia etc. will also play a large part increasing a driver's crash risk.

Studies indicated that Alzheimer's disease is one of the best predictors of crash involvement in a simulator and poor on-road performance in a driving test when compared to other cognitive tests (Owsley, 2004). Within the last ten years, physicians have found more information to help explain how diseases effect driving. However, the challenge of functional evaluation approach is difficult to implement because there are no accepted standard protocols for evaluating skills important for safe driving. In addition to Alzheimer's, mild dementia may be characterized by some memory loss for recent events, activities, the names of familiar people or objects; by difficulty performing simple tasks like cooking, balancing a check book, or adhering to a medication schedule, and by a variety of impaired thought processes and language problems (Hunt, 2003). At this age, not being able to follow these uncomplicated tasks indicates that the individual's skills are impaired. An inability to remember how to do something as simple as cook proves that people with this disability would be incapable of driving a car. It is noted that

those demonstrating they have dementia frequently get lost while driving in familiar areas, and others honk in order to avoid crashes with these older drivers (Hunt, 2003). This is a prime display that these types of drivers with such diseases and disabilities cannot correctly respond to traffic and slow down or stop inappropriately.

For older people, personal physical mobility is influenced to a considerable extent by age-related changes that in combination affect muscle strength, posture, balance, and joints (Sterns et al., 2003). Aging is a part of life, and is recognized in part, when physical capabilities start to diminish. Controlling a vehicle safely depends on the successful execution and continuous monitoring of physical behaviors. Several important aspects of motor ability for the task of driving are strength, coordination, and range of motion through the head, neck, arms, and legs (Owsley, 2004). Older people have greater difficulty getting in and out of vehicles as well as being able to stably sit behind the wheel. Being mobile is another contributing factor in determining if an elderly driver should give up his or her license.

Currently, people are keeping their cars and continuing to drive much longer. This is due to people having a greater life expectancy, leading to more people outliving their driving skills. In 1971, approximately 46 percent of heads of household age 65 and older had no car. (Sterns et al., 2003). This information depicts that over the decades, elderly driving has become more popular. However, the challenge exists with the evaluation process regarding if driving at this age should be acceptable. Regardless of the elderly feeling alone, abandoned, confused and in fear, an elderly driver hitting another person is more of a risk than the emotional effects one may feel. Today, the elderly are far more at risk for suffering significant declines in their quality of life when

they can no longer drive than those in the 1970s or 1980s, because so many of the places they want to go and things they want to do are only possible with a car (Johnson, 1995). These individuals are more likely to resist driving cessation because their personal independence would be in question.

Older adults may begin to limit or alter their driving because of fear. These individuals may avoid high-traffic areas, travel to unfamiliar destinations, or avoid left turns (Scott, 2003). Elderly drivers demonstrate uneasiness when behind the wheel. Older drivers' expressing such apprehension about driving is an indicator that they may no longer maintain a license.

The freedom that once resulted from having a license may come to a halt when older drivers have to relinquish their license, often leading individuals to become depressed (Hunt, 2003). Other research to include, Stutts (2003) has linked driving to overall life satisfaction and to feelings of autonomy, usefulness, and self esteem. Without the opportunity to have a license, older adults who stop driving have been shown to lead less active lives and to be more likely to suffer from depression (Stutts, 2003). Driving cessation has been shown to be related to an increase in depressive symptoms. (Marottoli et. al., 1997). No matter how difficult the loss of a license is for the elder, it is essential that elderly drivers who are incapable of driving, understand why they can no longer maintain a license. If social withdrawal or decrease in functional performance is observed, caregivers should request a consultation with an occupational therapist (Scott, 2003).

In a national telephone survey of 2,510 current and former drivers age 65 years and older, Stutts (2003) asked those who had stopped driving whether, in retrospect, they

believed they had stopped driving at the right time or had stopped earlier or later than they should have. Only 60 percent of the 171 former drivers said that they had stopped driving at the right time, 9 percent said they had stopped too late, and nearly a third (32 percent) said they had stopped too soon (Stutts, 2003). Elderly drivers who refuse to accept that they are no longer qualified to drive are a potential risk to themselves and others, and are a growing concern. It is difficult to put a label on which declines contribute directly to an elderly persons' increased risk of becoming involved in a serious accident, but evidence and research indicate many factors including the health of the aging population.

Today's generation of elders has taught us that the older years can be both the best and worst of times in an individual's life. Parents, grandparents, older relatives, friends and others who are aging want to socialize, shop, go to the movies, and generally do everything that keeps life interesting. Driving plays an important part in maintaining such an active, rewarding lifestyle. It means independence, freedom, and the pursuit of happiness at any age. It is no wonder, then, that most people want to keep driving as long as possible. Getting behind the wheel of one's own car represents personal freedom. This privilege allows individuals to go places on their own schedule. It permits individuals to stay in control of how and when you move from place to place.

Different focus groups have been conducted regarding elderly reactions to the loss of freedom in giving up their license (AAA, 2002). One focus group in particular at the University of North Carolina Highway Safety Research Center, asked people age 65 or older from various parts of the United States to talk about their "behind-the-wheel" skills, the prospect of giving up the privilege of driving, and their feelings about retiring from

driving. Some examples of comments include: “When I do drive, before I start any place, I map in my mind where I’m going, how I am going, lanes that I’ll use to get me where I’m going safely. I know what I do, can do, and am supposed to do.” Another senior mentioned, “I want to keep driving as long as I can do so safely. My children will tell me when it’s time for me to stop driving” (Shope, 2003). These comments provide a picture of how difficult it is for older drivers to give up their license and how clearly they think about the issue. Additional comments that support those older drivers who desire to maintain their license include, “Driving enables me to live life not driving would be crippling.” Another remark that is quite powerful is “I felt like a bag of laundry-picked up, cleaned, and returned. It’s awful having to depend on others” (Shope, 2003). The overall theme in the above comments that were made captures different thoughts and experiences from older drivers.

Older people today are considerably more mobile than their counterparts of just 10 years ago (Hunt, 2003). However, many individuals are skeptical of older drivers on the road. It is not at all surprising that older people resist driving cessation. In many ways, it is also not surprising that they refuse to think carefully about the alternatives that could meet their needs when they must stop driving, including moving or changing the places they want to go, because they lack realistic options. They seem compelled to avoid facing the issue at all (Madachy, 2003). The emotional attachment that people have to driving makes sense when we think about the strong value that our culture has placed on driving. Getting behind the wheel of one’s own car represents personal independence and adulthood. You go places on your own schedule. This approach puts transportation and aging specialists in line with the most promising strategy to emerge in

years: helping older adults to “age in place”. The central tendency of this approach is to allow older people maximum control over their own decisions and the way they live their lives (Madachy, 2003). Not many other activities can provide the same degree of personal independence as driving an automobile. Therefore, the emphasis must be on helping older drivers maintain their own driving independence for as long as possible while improving the flexibility and attractiveness of alternative modes of transportation.

In almost all states, there is an age at which drivers must begin appearing at a licensing office for a renewal examination. In many states, the interval between tests becomes shorter with advancing years (McKnight, 2000). This helps guide elderly drivers assess their capabilities. The overwhelming majority of the elderly who are no longer capable of handling a car are able to recognize it. Most of them begin to feel uncomfortable in traffic and react by driving less and less until they simply do not drive at all. When their license comes up for renewal, they let it expire (McKnight, 2000).

It may not be necessary to regulate older drivers, because it appears that they often moderate their own driving themselves. There have been numerous studies on how the person over 65 drives. They drive 30-50 percent fewer miles than the average driver. Generally, they are more cautious drivers compensating for deteriorating sensorimotor skills, tend to drive shorter distances, stop more frequently, drive less at night, and avoid rush hour, major highways, and bad weather (Hakamines-Blomqvist, 2004). Older drivers are known to adjust their driving in several ways. First, they drive less. According to the available study, yearly mileage driven decreases with age. This statistic is probably related to both the older drivers’ changing mobility needs, especially following retirement, and a personal choice based on subjective judgment. Second, older

drivers tend to avoid driving in difficult conditions, such as darkness, slippery roads, peak hours, and other stress-inducing situations. Third, their driving style becomes calmer, and their decision making in traffic is more conservative. Older drivers choose lower speeds, prefer longer time gaps for merging at intersections, and avoid simultaneous activities such as smoking or adjusting the radio while driving (Hakamies-Blomqvist, 2004). The adjustments that are made by the elderly demonstrate the older person's mature judgment.

Another concern related to allowing the elderly to continue to drive is the fact they have little options in regards to alternative transportation. It is important to remember that 34 percent of older adults are in areas with no formal transportation services (Sterns, 2003). Even in those areas that have transportation services, the real issue is how the accessibility of the services for older adults. Due to physical limitations, the elderly may have difficulty using public transportation. Assisting older adults with using public transportation is not just a matter of helping the potential user learn how to obtain the schedules. In addition, a long walk to the transit stop, waiting in all weather conditions, lifts that do not work, and bus drivers and others who are unsympathetic to the needs of older adults can make using public transportation a negative experience (Scott, 2003).

According to the Accident Index as cited in Hakamines-Blomqvist (2004), drivers between the ages of 60-69, have fewer motor vehicle accidents than the national average. For those over the age of 70, their accidents equal the national average. This provides empirical support that older drivers are not responsible for more accidents compared to other populations. However, older drivers are the ones who are getting blamed. Society

is disregarding the facts and figures and discriminating based on assumptions. As Hakamies-Blomqvist's (2004) data show, older drivers have fewer crashes than younger drivers in poor weather, at night, and after consuming alcohol evidence of appropriate strategic choices. It is important to come together as a society to help keep older drivers on the road.

As noted as a person ages, there is a higher chance of being affected by different health factors. In addition, it was noted that, as experienced drivers grow older, changes in their vision, attention, hearing and other physical abilities may cause them to drive less safely than they used to. Although it is important to recognize that these health factors occur, it is worthwhile to note that through modern technology and medicine, individuals live longer, increasing the average age of the older individual (McKnight, 2000). It is a weak argument for those who insist that arthritis could jeopardize an elderly person's mobility behind the wheel. Physicians have verified that rehabilitative intervention programs can improve driving ease (O'Neill, 2004). In response to diabetes having an effect on the older driver's performance, evidence also demonstrates that the condition has little or no effect on crash-risk among older drivers with no history of crashes (O'Neill, 2004). The arguments against older drivers on the roads could be due to personal experiences and the use an individual's health as an excuse. Finally, while people with Alzheimer's disease should be encouraged not to drive, the final determination should be made with full involvement of the individual who has the disease and the person's caregivers and physician (Hunt, 2003). Individuals require different needs to be met, making each and every case unique. One standard should not represent a whole group of people. Contributions from various healthcare professionals,

including occupational therapists, may enable older drivers to maintain their driving ability longer and operate their vehicles more confidently and safely (Scott, 2003). It is not suitable to label different people with different capabilities under one grouping.

Driving is a basic activity of daily life for most people once they arrive at the age of 16. Being able to get around in one's community gives a sense of individual freedom. The desire for this independence does not change as we age. Is there a right time and age individuals should give up their license and freedom?

This study aims to analyze two different perspectives: those who believe older drivers should no longer maintain licenses as well as those who believe older drivers are capable of retaining licenses. The literature indicates there are positives and negatives for older people to maintain a driver's license. Specifically, the study aims to gain a deeper and more detailed understanding of the different challenges the elderly are experiencing, in respect to driving and retention of their license. Additionally, it is important for others (such as family, doctors, social workers etc.) to interact with the elderly and assist them in receiving services if they are no longer capable of driving a vehicle, as well as talk with them if they are struggling with giving up their license and consequently their independence. It is hypothesized that it will be more difficult for men to give up their license than it is for women. This is based on the fact that in Western society, men and women stereotypically take on different roles.

Methodology

This study has been designed to determine how older drivers perceive themselves when driving. In addition, this study measures if the older driver believes there is an appropriate age at which driving should be terminated. Also, the research attempts to

discover the elderly perception of which sex is a better driver and why. Lastly, the research will address what steps older drivers have taken to protect their own safety as well as the safety of others on the road. This study collected both qualitative and quantitative data. The data collected came from a convenience sample. The survey was distributed to 30 individuals, ages 65 and older that live in Hamden, Connecticut in an apartment complex. However, 18 people returned the surveys, providing a response rate of 60 percent. Participants signed informed consent (Appendix A) and confidentiality forms for the research; thus, participant consent was accounted for. Data was gathered by a survey as an instrument, which can be found in Appendix B.

Data Analysis

This data will be analyzed by using the program SPSS. The data collected from the survey will be statistically analyzed, focusing on descriptive statistics and charts. The qualitative data also will be analyzed by identifying common themes through participants' open-ended answers.

Findings

The sample population for this study was twelve female (66.7 percent) and six male (33.3 percent). The average age of the participants was 79. The average age for males was 73.3 years old and the average age for females was 79.7 years old. However, this did not include two people (both female) because they did not report their age for unknown reasons. There were an equal number of people who were married (50 percent) and people who were not married (50 percent). When looking at the mean of who has an active driver's license, the average turned out to be 83.3 percent, leaving 16.7 percent of older driver's without a license. This information is useful when looking at benefiting

those individuals who do not have transportation provided for them. It is known that those who no longer actively have a license utilize the bus and family. Other data that was collected shows that not too many people have health and medical setbacks. A small percentage (22.2 percent) have medical problems and 72.2 percent did not report any health problems. The remaining 5.6 percent was missing. An older driver may have skipped this question because he or she could fear to admit medical problems. Furthermore, the small percentage (5.6 percent) really does not affect the collected data.

Table 1: Descriptive Statistics of Driving Practices

	N	Minimum	Maximum	Mean	Std. Deviation
Do you tend to drive under the legal speed limit?	16	1.00	5.00	3.0000	1.26491
While you are driving, do you avoid left-hand turns?	16	1.00	5.00	2.1250	1.62788
How often do you drive at night?	16	1.00	5.00	2.3125	1.07819
Do you feel safe driving?	16	1.00	5.00	3.8750	1.02470
Do you drive on the highway?	16	1.00	5.00	3.5000	1.54919
Valid N (listwise)	16				

Table 1 reflects questions that compute data through the Likert scale. It demonstrates that the minimum represents *never*, and the maximum imitates *always*. In addition, this table generates the mean of older drivers driving practices.

Figure 1 depicts that older drivers following the legal speed limit, it is notable that the majority of drivers *sometimes* drive the permitted speed limit. This answer could have come about from disobeying the speed limit around town but obeying it on the highway.

Figure 1: Legal speed limit (N=16)

[-----1-----2-----3-----4-----5]

always never rarely sometimes most of the time

Figure 2 depicts that older drivers do not feel it is necessary to take an alternative route to avoid the left-hand turn. This sample shows that older drivers are not concerned but rather confident in their driving abilities by not taking a different route.

Figure 2: Avoid left-hand turn (N=16)

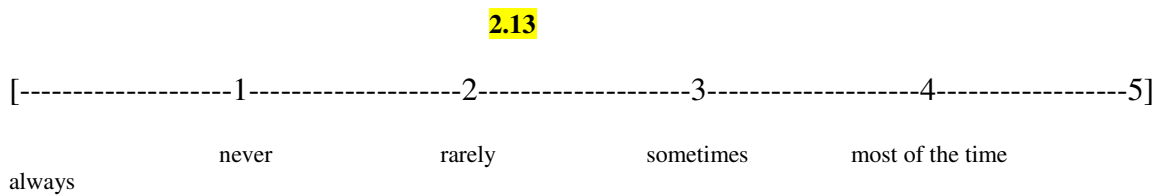


Figure 3 depicts that older drivers do not drive a lot at night time. Although some do on occasion, it is not something that seems to happen on a regular basis.

Figure 3: Driving at night (N=16)

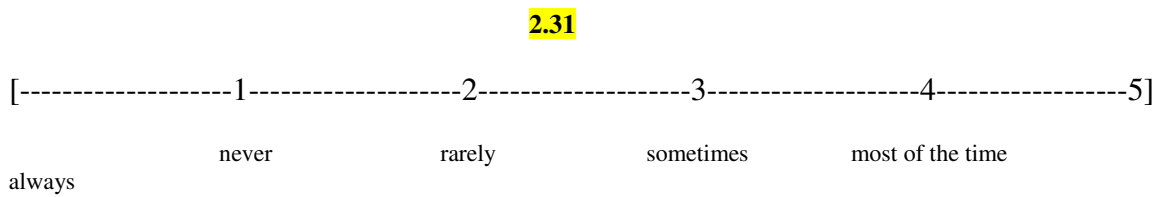


Figure 4 depicts that older drivers generally feel safe. A reason why older drivers could portray that they do not always feel safe could be because of younger drivers. They may feel that although they are old, they have experience, something that new drivers lack.

Figure 4: Feeling safe driving (N=16)

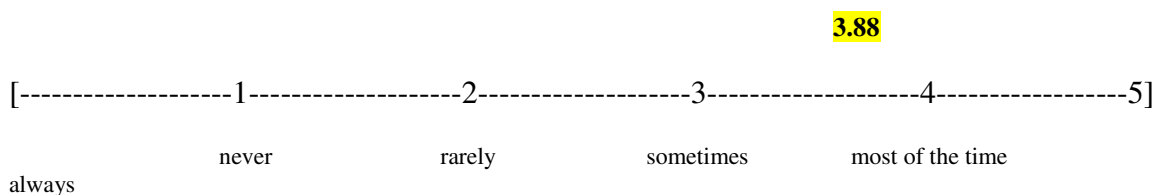
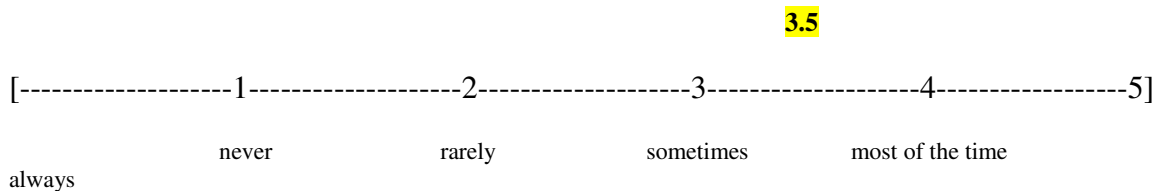


Figure 5 depicts that older drivers occasionally drive on the highway, which points out that older drivers are not *always* on the highway. This information portrays that it is the driver's preference whether or not they choose this route to travel.

Figure 5: Driving on the highway (N=16)



During the research process, it was rewarding to be able to sit down and hear several individual stories, obtaining additional information about the research topic. It was rewarding to make a connection with some participants while gathering data.

Older drivers in this study did not see themselves as being 'at risk' as they are continuing to drive; in particular one female driver, 89 years old, mentioned that she has not had an accident in 70 years. Interesting responses came about from the qualitative data. One question that created appealing responses included "who do you believe drives more safely, men or women"? In addition, the survey asked for each participant to explain their reasoning behind the answer they gave. Several responses from women mentioned that they think females are more capable at driving because men are always in a hurry. Other female responses insisted that men are more careless and that women frequently drive children. Therefore, women drive more cautiously. Overall the women who responded to women being the superior drivers had to do with being less angry than men. Only two women thought the opposed view that men were better drivers. The

reasoning behind this was from personal experience as well as men having more focus and bigger egos. All of the older driver's responses involved interesting views regarding which gender drives more safely.

On the opposite continuum, some men reported that they believe to be safer drivers because they have less on their minds, leading them to be able to focus more on the road. Another perspective regarding men being safer drivers came from a male who believes that men are able to react faster.

Just under half of the participants responded that they did not have an answer to the question which gender drives safer. In replace of checking male or female on the survey, some participants decided to write in 50 percent female and 50 percent male. These results implicated that neither gender has the upper hand on driving and are treated equally. Lastly, this method demonstrates older driver's creativity by filling in 50/50 as well as attempts to explain the thought process that male and female older drivers both make mistakes.

Fourteen responses admitted that they have no medical problems to temporarily report on. It is interesting to note that the average age of these fourteen people is 79, which does not seem young. Four people reported to having medical conditions that limited their ability to drive. Each driver who admitted to this had a different story. One older driver disclosed that he had numerous setbacks, such as several strokes, weak eyes and missing fingers. Another applicant acknowledged he had difficulty because he had a heart bypass. An 84 year old female revealed that she struggled with anxiety, having to deal with trepidation for two years before she had to give up her license. This disorder diminished her physical capacity to drive a vehicle. Lastly, a 72 year old man chose not

to renew his license after it expired because he battled several back problems. In addition to his back hurting, this man also had surgery on his abdomen.

The most unique answers were compiled from the question that asked each driver what steps they take to mitigate the risks of driving. Several responses indicated driving cautiously and following the rules of the road were aspects in their control. This would entail staying away from road rage and being courteous to all drivers. Other older driver's seemed to agree that it was important to keep up with eye exams, bring their cars in for seasonal check-ups, keep the car in good repair, as well as keep up with driving courses. The most unique answer came from a man who mentioned that he got an enlarged sports type brake pedal. This man admitted that he was having difficulty driving because his foot was slipping off the old, smaller brake pedal.

Conclusion

This study focused on the aging process as well as older driver's insights regarding retention of their license. The survey reflected gender differences that had dissimilar standpoints than those mentioned in Ragland's (2004) article. This study is not consistent with the research conducted by Ragland (2004), which included that men are more likely than women to report medical reasons for difficulty driving and that women are more likely to demonstrate feelings of stress and avoidance of difficult driving situations. The study did not focus on women having feelings of stress. The majority of women surveyed actually believe that they are safer drivers than men. This would disprove the study's hypothesis that women are not more willingly to give up their driver's license.

McKnight's (2003) study demonstrated that for every mile that drivers of the age 75 and older travel, they face a rapidly rising risk of being killed or injured. This study goes against what others have found as the average age of participants in this study was 79. The literature would then point out that this population sampled is at a high risk.

Johnson's (1995) research also showed evidence that women are more likely than men to stop driving. This study only had three people out of eighteen who did not currently have an active driver's license. This study correlates with other research as two women have given up their license and only one man. This could be because women are used to being given less power. On the other hand, this study examined a snowball population of eighteen people total.

When examining the response from individuals who have decided on not renewing their license, it was interesting to focus on which alternatives they use, now that they can no longer drive. The literature review reports driving plays an important role in one's daily life as it is a vehicle to make connections with others, obtain goods, services, and to live in a community. If restrictions on driving were determined, it would limit the access of older people to goods and services and may increase social isolation (Ragland, 2004).

Older drivers might make modifications in order for them to be able to continue to drive. A perfect example would be the participant who described getting a larger brake. This study also confirmed what other literature has found, that older drivers reduce their driving at nighttime. Another thing that was quite interesting was the person who admitted he did not have fingers. According to the data, it was unknown how to interpret this, as it was obvious that no one who was interviewed was missing fingers. This made

it difficult to understand why someone responded this way as missing fingers was not recognized while interviewing him. The only logical conclusion is that the person literally has fingers but may lack feeling in them.

From the data gathered, it would have been helpful to have added in a question regarding how participants who no longer have an active driver's license felt about the situation. This is a definite weakness in my study. In addition, this study has shown that limitations on older drivers cause drivers to change their routine. This is shown in the findings with the questions that were on the Likert scale. Although making adjustments is viewed as a positive, some people may say this is obvious evidence that driving for this population may no longer be safe.

This study has supported other literature related to driving and the elderly. Stutts' (2003), McKnight's (2003) and O'Neill (2004) have shown, the survey has proven that several medical issues including difficulty seeing, reaction time, cognitive ability and muscle dexterity may deteriorate, making driving more difficult.

Overall, additional studies that involve a concern for older people's ability to drive are important for the future. With the Baby Boomer generation getting older, it is significant to focus attention to this group in order to plan accordingly. However, studies show that older people today are considerably more mobile than their counterparts (Hunt, 2003). Generally, this study shows that although older drivers still and will always remain on the road, functional declines associated with aging appear to prompt some drivers to voluntarily change their driving habits.

Implications

Aging adults who keep a driver's licenses remain a concern for society. In order for the roads to remain as safe as possible, a greater amount of alternative transportation could be useful. These different ways that pick you up, bring you to where you need to go, and then drop you back off would attract older people to give up their licenses. If reliable alternative transportations are created and provide older drivers with transportation to the necessary places they need to get to, this could lead to the elimination of older drivers who should no longer be on the road. In addition, this could encourage older drivers to no longer renew their driver's licenses for the wrong reasons. Older drivers often feel threatened with a loss of a license because it feels like they lost their independence. When they lose their independence, it forces them to rely on family, friends, or city transportation. These alternative sources may seem beneficial, but in reality, they do not sufficiently meet all individual's needs. Relying on friends and family may harm individuals' relationships as older drivers become more needy and burdensome. Depending on city transportation could be an unreliable source for some older drivers as well. Factors of weather, selective schedules, and other personal health problems lead to dissatisfaction.

One important policy implication is to encourage congress to pass a bill that tests older drivers more frequently. Currently, each state is different with rules and regulations on how often an older driver must renew his or her license. This includes whether an older driver can mail in a form or if he or she must actually show up at the department of motor vehicles.

On the other side of it, it is important for people to advocate for older drivers. It is very troubling that different states have different policies. Some states allow older driver's to renew their license by mail while others have to be physically present at the department of motor vehicles. Evidently, due to not having a consistent standard, different states have different rules. This is a huge problem as driving ability is based on a person's age. The standard of age is not reliable to determine to retention of one's license. Although a state's standard of age may correspond to some older driver's abilities on the road, it certainly does not correspond to all. For instance, an older driver who is eighty years of age, who does not have any health factors should not have trouble renewing their driver's license just because of the number of years they have lived. A sixty-five year old, who may be younger, should not be able to renew their license at ease. This sixty-five year old could have tons of health problems that may compromise their driving ability and possibly making them unfit to drive a vehicle. It is evident that older drivers need someone to advocate for them.

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Appendix A

I. Demographics

1.) Gender:

 Male Female

2.) Age:

3.) Married

 Yes No

4.) Do you have an active driver's license:

 Yes No

5.) If no, how long have you not held a license and why?

6.) If no, do you utilize any of the following for transportation services?

 Bus Family Friend Senior center services Walk Other (Please briefly

identify):_____

7.) Do you have any medical/health conditions which may interfere with your ability to drive?

 Yes No

8.) If yes, please identify and explain how it may impair your driving:_____

9.) Who do you believe drives more safely, men or women?

 Male Female

Please

explain:_____

-
-
- 10.) To what extent do you take steps on your own to mitigate the risks of driving?

II. Questionnaire

(ONLY ANSWER IF YOU ARE CURRENTLY DRIVING)

Please rank the following statements on the likert scale ranging from:

1=never

2=rarely

3=sometimes

4=most of the time

5=always

- 1.) Do you tend to drive under the legal speed limit?**

[-----1-----2-----3-----4-----
5]

always never rarely sometimes most of the time

- 1.) While you are driving, do you avoid left-hand turns?**

[-----1-----2-----3-----4-----
5]

always never rarely sometimes most of the time

- 2.) How often do you drive at night?**

[-----1-----2-----3-----4-----
5]

always never rarely sometimes most of the time

3.) Do you feel safe driving?

[-----1-----2-----3-----4-----
5]

always never rarely sometimes most of the time

4.) Do you drive on the highway?

[-----1-----2-----3-----4-----
5]

always never rarely sometimes most of the time

Appendix B

Dear Participant:

I am a senior social work student at Providence College, inviting you to participate in a study about older driver's abilities, and retention of their license. Data gathered in this study will be reported in a professional thesis paper for my SWK 489 Theory/Practice Capstone course.

Confidentiality is imperative in this study. The surveys will be stored separately from this consent form. All data linked to an individual will be destroyed following this study. Participation in this study is voluntary and you may withdraw from answering any questions or participating in this study at any time. It is important to know that your participation is greatly appreciated.

YOUR SIGNATURE INDICATES THAT YOU HAVE READ AND UNDERSTOOD THE INFORMATION ABOVE AND THAT YOU HAVE HAD THE OPPORTUNITY TO ASK ANY QUESTIONS ABOUT THE STUDY, YOUR PARTICIPATION, AND YOUR RIGHTS AND THAT YOU AGREE TO PARTICIPATE IN THIS STUDY.

Thank you for your cooperation and participation in this study.

Signature

Date