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Current Capacity Building Needs of Occupational Therapists Related to Older Driver Screening, Assessment, and Intervention

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This is to certify that the doctoral dissertation by

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has been found to be complete and satisfactory in all respects,
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Walden University
2015

Abstract

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Ranyouri Hines Senia

MHS, Medical College of Georgia, 2008

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

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Abstract

Older adult safe driving is a growing public health issue; however, the skill set of occupational therapists that provide services to these older clients is unclear. The extent to which occupational therapists possess the skills to evaluate an elderly person's ability to operate safely an automobile is unclear. Therefore, the purpose of this quantitative, cross-sectional survey was to determine the current capacity building needs of occupational therapists (OT) related to older driver screening, assessment, and intervention. The ecology of human performance framework was the theoretical base of the study. The independent variables were the OTs' training related to older drivers, the OTs' current driving-related professional activities, and the OTs' continuing education interests. The dependent variable was the reported levels of competence in screening, assessment, and intervention, and the covariates were years of experience, level of education, practice setting, gender, and regional location. The survey was disseminated through technological channels of social media and e-mail. The responses from 61 participants were used for analysis. In a descriptive analysis, OTs felt that addressing driving through screening, assessment, and intervention is somewhat important, that currently OTs seldom address driving, and OTs are not very likely to take continuing education courses related to driving in the next 2 to 3 years. In addition, a linear regression analysis determined a relationship between an OT's actual practice and perceived competence. A positive social change of this study emphasized a better understanding of OT's ability to provide driver rehabilitation services to a growing aging population, which in turn promotes safety on the roads.

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Dedication

I dedicate my dissertation work to my loving husband and beautiful family- RH5+1. To my husband Justin S. Senia who has been very understanding and supportive throughout this process which also included the planning of our wedding. Thank you for your unconditional love especially when I had to cancel various outings. And thank you for the late night pep talks to help get my thinking wheels turning again. I am truly grateful for my loving and caring parents Randolph and Rhonda Hines Jr. whose words of encouragement, wisdom, and optimistic views of life helped me to understand that the sky truly is the limit with a dream, dedication, and hard work. My little sister Rangell for always inspiring me to be the best and especially my big brother whose actions this last year has encouraged me to reach for the moon and reminded me that with God any and everything is possible. And to my niece Amarianna, my little cheerleader, I know you will be a beautiful and successful young lady.

To Shunta Williams, my best friend since the third grade, thank you for helping me to stay focus with your spiritual words. To all the ladies of Delta Sigma Theta Sorority, Inc. for showing me that we can transform our communities with unity and service.

Finally, I dedicate my dissertation to all the Occupational Therapists and Occupational Therapy Assistants (especially my mom Rhonda who is also an OTA). You have given me the gift that keeps giving and you have encouraged me to take a stand by helping older drivers.

To all that may read this, if I can do it, you can too.

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Thank you to my committee chair Dr. Jeff Snodgrass and my committee member Dr. Cheryl Anderson for all your time and dedication. To Dr. Snodgrass, thank you for always presenting and explaining things in a way that I understood. You have truly encouraged me to engage in future research.

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Chapter 1: Introduction to the Study

Background

Driving plays an integral role in everyday life as driving is used as a means for community mobility. In the United States, driving is the main mode of transportation among older adults (Hunt & Arbesman, 2008; Stav, 2008). Older drivers without transportation have reported a decrease in life satisfaction, depression, isolation, as well as a feeling of being dependent (Choi, Adams, & Kahana, 2012; Ng & Lovell, 2012). Reasons for driving include personal independence, employment, maintaining a connection with others, and aging successfully (Pendleton & Schultz-Krohn, 2001; Stav, Hunt, & Arbesman, 2006).

Occupational therapists (OTs) help people throughout the lifespan engage and participate in meaningful and purposeful things through the therapeutic use of everyday activities (occupations; American Occupational Therapy Association [AOTA], 2013). OTs provide services which include individualized evaluation, customized intervention, and an outcome evaluation to help their clients achieve their desired goal (AOTA, 2013). As the Baby Boomers continue to age, OTs can provide services to older drivers that may improve safety and independence, especially when it is estimated that there will be 88.5 million older adults by 2050 (National Highway Traffic Safety Administration, 2012; Justiss, 2013; Strategic Highway Safety Plan, 2004).

Relinquishing a person's driving privileges or right to drive is a sensitive subject for many older clients. OTs are able to identify potential driving risks through the use of screenings and assessments (Baird et al., 2010; Dickerson, Reistetter, Davis, & Monahan,

2011). However, it is unclear as to the readiness and skill set that OTs have related to older driver screening, assessment, and intervention. Therefore, this study was needed to determine the current capacity building needs of OTs related to older driver screening, assessment, and intervention. By determining the capacity building needs of OTs, this study served as a guide for state associations and the national association of OTs to develop and implement programs for older drivers. Currently, the AOTA has a relationship with the American Association of Retired Persons (AARP) and the CarFit program in an effort to promote safety on the roads (Advance Healthcare for Occupational Therapy Practitioners, 2014). Therefore, this study can facilitate the development of new partnerships between the national and state OT associations and the Department of Highway Safety and Motor Vehicles (DHSMV), the Department of Motor Vehicles (DMV), and various associations and organizations for the geriatric population to promote safe drivers.

The gap in the literature related to the limited research of OTs providing older driver screening, assessment, and intervention. This may be due to not knowing the readiness and skill set that OTs have related to older drivers. In addition, it is unclear as to how many OTs are addressing older drivers and for those who are not addressing older drivers why not and what can be done to start addressing this pressing public health issue.

All OTs have the basic skill set needed to help older clients in various instrumental activities of daily living (IADLs), such as driving by identifying their community mobility needs (Davis, 2003). However, how much and to what capacity the

individual therapist addresses the driving issues depends on the therapist's level of experience and specialized training (Pendleton & Schultz-Krohn, 2001).

The activity demands (readiness, skill, ability, and competence) that are addressed across OT practice areas are also required in driving (Davis, 2003). OTs have played a part in driving for many years. In 1977, OTs were a part of the founding driving movement of the Association of Driver Rehabilitation Specialists and accounted for 62% of all driver educators in 1992 (Fenton, Kraft, & Marks, 2003; Pendleton & Schultz-Krohn, 2001). In addition to being driver educators, OTs have the ability to identify issues that may prevent safe driving (Pendleton & Schultz-Krohn, 2001). This is important given that motor vehicle crashes are the second highest cause of injury-related deaths among individuals 65 years of age, and older and an estimated 500 older adults are injured in crashes every day (Centers for Disease Control, 2011; National Center for Health Statistics, 2004). The high number of deaths and injuries could be due to the inadequate self-regulation of driving behavior among older adults, their risk perception, or a lower accuracy during the performance of lane positioning, approaching hazards, brake and accelerator use, observation, and gap selection (Baldock, Mathias, McLean, & Berndt, 2006a; Harre, Foster ,& O'Neill, 2005; Wood, Anstey, Kerr, Mallon, & Lord, 2009). Many older adults lack insight of their deficits and continue to drive even when it is dangerous for them (Kua, Korner-Bitensky, & Desrosiers, 2007; Pachana & Petriwsky, 2006).

With driving being a part of the *Occupational Therapy Practice Framework: Domain and Process*, OTs are able to accurately determine which clients are at a high

risk for unsafe driving and which clients need further evaluation by a specialist (Dickerson, Reistetter, Davis, & Monahan, 2011). Although OTs have the skills to "assess all areas of occupation and provide interventions to improve a client's functional performance," the current capacity building needs of OTs working with older drivers is unclear (Dickerson et al., 2011, p. 70). Because the current capacity building needs have been identified, the OT profession now have a better understanding of the skill set possessed by therapists and have identified potential areas for driving-related professional training.

A driving deficit is any skill that impacts the ability of a person to safely drive. This includes their vision, cognition, physical abilities, reaction time, as well as the consumption of certain medication. Driving deficits can impact the number and length of trips that an older driver can make (Stav, Hunt, & Arbesman, 2006). These driving deficits can also affect the time of day the older driver drives, the places they go, as well as the routes they take (Stav et al., 2006). When driving deficits are present, it increases the likelihood of a crash.

In 2010, there were 34 million licensed older drivers; however, this number will only increase as Baby Boomers are getting older (National Highway Traffic Safety Administration, 2012; TRIP, 2012). According to the National Highway Traffic Safety Administration (2012), 2010 yielded 17% of all traffic fatalities in the United States to be among people age 65 and older (5,484 deaths and 189,000 injures). This is a 3% increase in fatalities and a 1% increase in injuries when compared to 2009 (Meyer, 2009; National

Highway Traffic Safety Administration, 2012). The number of fatalities and injuries among this population will only increase if this public health issue is not addressed.

The Accreditation Council for Occupational Therapy Education (ACOTE; 2012) stated that the accreditation standard for a person receiving a doctoral degree or a master's degree in OT is to "provide recommendations and training in techniques to enhance mobility, including physical transfers, wheelchair management, and community mobility, and address issues related to driver rehabilitation" (para. B.5.13). Although driver rehabilitation requires specialized evaluation and training, AOTA (2012) and Pendleton and Schultz-Krohn (2001) both agreed that OTs are able to identify driving deficits through the use of screening and assessment. However, many therapists may not address a client's driving abilities due to the lack of confidence, limited knowledge, not being aware of the issue, reimbursement concerns, time and productivity issues, and the training and awareness of experienced OTs (Yanochko, 2005). To ensure safety and that the appropriate techniques are being applied, OTs should receive specialized training for behind the wheel evaluations (Hegberg, 2007).

Statement of the Problem

Age alone does not determine a person's driving abilities (Insurance Institute for Highway Safety, 2013). Other factors, such as cognition, vision, physical abilities, and reaction time are important factors because they decline as a person ages, which contributes to safe driving (Johnson, Crabb, Opfer, & Thiel, 2000). Higher levels of impairments increase the risk of crash involvement for older drivers (Insurance Institute for Highway Safety, 2013). In addition, the medication that older drivers take can also

impair their driving abilities by affecting their physical, cognitive, and visual systems. Therefore, the safety of older drivers is a growing public health issue especially when almost 90% of older drivers rely on a private automobile for their transportation needs (Curry, 2010, Peck 2010).

OTs usually provide skilled therapeutic services to these older drivers when illnesses, accidents, significant decline in functional status, or a disability is present (Clark et al., 1997). It is at this time that the OT should address driving and community mobility (Stav, 2008). For the older population, this includes driving as it allows independence when needing to maintain community connections, attend various social events, obtain medical care, and shop (Stav, 2008). Therefore, OTs can use screens and comprehensive assessments to determine the safety of older drivers (Korner-Bitensky, Bitensky, Sofer, Man-Son-Hing, & Gélinas, 2006; McGwin, Sims, Pulley, & Roseman, 2000).

Research was conducted to determine OTs' efficacy with the older population (Steultjens et al., 2004) and the skill set and readiness of OTs in Canada when dealing with older drivers (Korner-Bitensky, Menon, von Zweck, & Van Benthem, 2010). However, no research had been conducted in the United States to address the OTs' skill set and readiness related to assessing older drivers. In addition, it was unclear as to why OTs may not address driving and what can be done to address these issues. Therefore, I intended to fill this gap in the current research literature by examining the current capacity building needs of OTs related to older driver screening, assessment, and intervention.

Purpose of the Study

The purpose of this quantitative, cross-sectional, survey study was to determine the current capacity building need of OTs related to older driver screening, assessment, and intervention. For the purpose of this study, the OTs' training related to older drivers, OTs' current driving-related professional activities, and the OTs' continuing education interests were the independent variables, while the reported levels of competence in screening, assessment, and intervention was the dependent variable. In addition, covariate variables included demographic information including years of experience, level of education, practice setting, gender, and regional location. The capacity building questionnaire previously developed by Korner-Bitensky, von Zweck, and Van Benthem (2010) was used with slight modifications.

Research Questions and Hypotheses

The following research questions and hypotheses were derived from the review of existing literature in the area of OTs addressing older drivers. A more detailed discussion of the nature of the study is in Chapter 3.

Research Question #1. What is the current capacity-building needs of occupational therapists related to older driver screening, assessment, and intervention?

The possible choices are training, professional activities, and or continuing education.

Research Question #2. What is the relationship between an OT's actual practices and perceived competence in older driver screening, assessment, and interventions?

$H_0$2. There is no relationship between an OT's actual practices and perceived competence in screening, assessment, and interventions, as measured by the Capacity Building Needs Questionnaire, specific to older drivers.

Research Question #3. What is the influence of demographic variables (years of experience, level of education, practice setting, gender, and regional location) on actual practices related to older driving screening, assessment, and intervention and perceived competence?

$H_0$3**.** There will be no influence of demographic variables, as measured by the Self-Designed Demographic Questionnaire, on actual practices related to older driving screening, assessment, and intervention, and perceived competence, as measured by the Capacity Building Needs Questionnaire, specific to older drivers.

Research Question #4. What is the relationship between the need for continuing education and perceived competence of OT's in older driver screening, assessment, and intervention?

$H_0$4. There is no relationship between the need for continuing education and perceived competence in the areas of older driver screening, assessment, and intervention as measured by the Capacity Building Needs Questionnaire, specific to older drivers.

Theoretical Framework

The theoretical base of the study was the ecology of human performance framework (EHP; Walker & Ludwig, 2004). EHP was used as it is a client-centered model that views each person individually and takes into account the person's past experiences, skills, needs, and attributes (Pendleton & Schultz-Krohn, 2001). The model

consists of four elements: person, context, task, performance, and therapeutic intervention (Dunn, Brown, & McGuigan, 1994; Stav, 2004). For the purpose of this study, the person was OTS, the context was the environments where the therapists provided therapeutic services, the task was determining an older driver's driving abilities, and performance and therapeutic intervention related to the therapists' use of or lack of use of screenings, assessments, and interventions. In this study, the EHP framework assisted in determining the capacity-building needs of OTs in the United States. The EHP will be more fully explained in Chapter 2.

Nature of the Study

A quantitative, cross-sectional survey of OTs in the United States was employed to determine the current capacity building needs of OTs related to older driver screening, assessment, and intervention. The capacity building questionnaire previously developed by Korner-Bitensky et al. (2010) was used. The questionnaire consists of demographic information, Likert-type questions, and open-ended questions. For the purpose of this study, the OTs' training related to older drivers, OTs' current driving-related professional activities, and the OTs' continuing education interests were the independent variables, while the reported levels of competence in screening, assessment, and intervention was the dependent variable. The covariate variables of demographical information such as years of experience, level of education, practice setting, gender, and regional location were also included. To determine the relationship between the need for continuing education and perceived competence of OT's, the relationship between an OT's actual practices and perceived competence, and the influence of demographic variables on

actual practices related to older driver screening, assessment, and intervention and perceived competence, the Pearson correlation statistical test was used. Based on the results of the statistical analyses, the current capacity building needs of OTs related to older driver screening, assessment, and intervention was determined.

Definitions

Assessment: An assessment was an extensive and comprehensive evaluation of the driver's driving specific skills in which data were obtained and interpreted for intervention (Korner-Bitensky et al., 2010; Pendleton & Schultz-Krohn, 2001).

Intervention: Intervention was the process and methods used by OTs to help older drivers achieve their desired driving goal (Boyt Schell, Crepeau, & Cohn, 2003)

Older drivers: For the purpose of this study, older drivers were individuals ages 55 and older who have a driving history.

Screening: Screening was a procedure used to identify those who "require further evaluation regarding their driving safety from those who are most likely safe drivers, on the basis of a quick examination of their driving-specific skills" (Korner-Bitensky et al., 2010, p. 30).

Assumptions

I assumed that all participants who completed the survey were licensed and or registered as an OT in the United States and worked with the older population. I also assumed that all participants would complete the survey in its entirety and answer all questions as truthfully as possible to the best of their ability.

Scope and Delimitations

The scope of this quantitative, cross-sectional survey of OTs in the United States was to determine the current capacity building needs of OTs related to older driver screening, assessment, and intervention. The research design allowed me to broaden the limited knowledge regarding the skill set for OTs working with older drivers. The design allowed OTs working with geriatrics across the United States to participate in order to achieve a sufficient sample size to answer the research question of what is the current capacity building need of OTs related to older driver screening, assessment, and intervention.

Limitation

Although the field of OT consists of both OTs and OT assistants, only responses from OTs were included in the study. The OT scope of practice states that "an occupational therapist is responsible for all aspects of the screening, evaluation, and re evaluation process" (ACOT, 2010, p. 3). Therefore, OT assistants were not included as the OT scope of practice does not allow OTAs to provide full assessments or to develop intervention plans without an OT. In addition, I limited this research to OTs working with older adults (individuals ages 55 and up).

Significance and Positive Social Change

As a person ages, the skills that are necessary for safe driving such as vision, cognition, motor skills, and reaction time decline (Davis & DeBarros, 2007). This is a concern especially when the number of older licensed drivers is expected to increase from 13 million to 30 million by 2020 (Carr, Duchek, Meuser, & Morris, 2006). In an

attempt to help older drivers stay safe on the roads, several driver rehabilitation programs have been developed (Association for Driver Rehabilitation Specialist, 2013). Although certification is not needed, OTs can perform screenings and clinical assessments to determine if a client has any deficits that may affect his or her driving. However, additional training is needed for an OT to perform a behind the wheel assessment (Association for Driver Rehabilitation Specialist, 2013). The behind the wheel training allows the OT to become a driver rehab specialists (DRS) or a certified driver rehabilitation specialists (CDRS) if they choose to become certified (Korner-Bitensky, Gélinas, Man-Son-Hing, & Marshall, 2005). Regardless of whether the therapist is a generalist or a specialist, older drivers are a safety concern and OTs can help determine their functional abilities and deficits through the use of screenings and assessments.

This study was a significant endeavor in promoting older driver safety in the OT profession. By understanding the current practices, perceived competences, and need for continuing education, OTs are able to better address their client's driving needs throughout the continuum of care. This includes the OT understanding how his or her skill set play a role in assessing his or her client's driving abilities and identifying his or her areas for improvement related to the screening, assessment, and or intervention process of older drivers. In addition to encouraging OTs to develop and implement programs focused towards awareness of older driver's driving abilities, this study also leads to the enhancement of current curricula to more fully address driving screening, assessment, and intervention.

Health care professionals must be aware of the functional areas- which often decline as a person ages- that are needed for older drivers to be safe. This study facilitates communication between older drivers, their families, and health care professionals by allowing all parties involved to be proactive in developing a plan for when the time comes that the older driver needs to retire from driving. This study is beneficial to the communities in which older drivers live by facilitating changes at the local, state, and national levels as an average of 500 older drivers are injured every day in crashes (Centers for Disease Control and Prevention, 2011). Changes could relate to driving laws and policies as well as the development of older driver educational courses. By determining the capacity building needs of OTs, this study serves as a guide for state associations and the national association of OTs to develop and implement programs for older drivers. In addition, this study facilitates partnerships between OTs and the Department of Highway Safety and Motor Vehicles (DHSMV), the Department of Motor Vehicles (DMV), and various associations for the geriatric population to promote safe drivers. Regardless of the results, OTs are able to facilitate and promote safety for older drivers.

Summary

Driving is a complex activity that requires a person's cognition, vision, physical abilities, and reaction time (American Medical Association, 2012). As a person ages, the skills that are needed to safely drive declines (Davis & DeBarros, 2007). OTs have the skills to assess and provide appropriate interventions to their older drivers; however, the current capacity building needs of OTs working with older drivers was unclear as it

relates to screening, assessment, and intervention. Therefore, this quantitative, cross-sectional survey of OTs in the United States was employed to determine the current capacity building needs of OTs related to older driver screening, assessment, and intervention.

In Chapter 2, the literature on trends in older drivers, the theoretical construct, the research variables including a review of the current literature, and OTs providing skilled services to older drivers is presented. In Chapter 3, detailed information about the methods that were used in addition to the presentation of the research questions and the null and alternative hypotheses is discussed. In Chapter 4, I outline the study's participants, present the results of the statistical analysis, and summarize both the data collection process and the analysis of the results. Finally, in Chapter 5, I summarize the study's findings with their interpretations, discuss limitations found while conducting the study, and conclude with recommendation for possible future researchers.

Chapter 2: Literature Review

Introduction

There is a need for continued research concerning the current capacity building needs of OTs related to older driver screening, assessment, and intervention. Older drivers are faced with health and functional impairments that impact safe driving (Baird et al., 2010; Kua et al., 2007). As a group, older drivers are at a higher risk of motor vehicle accident involvement and are more likely than younger drivers to be involved in fatal accidents (Pachana & Petriwsky, 2006). For older adults, this is a concern as the loss of driving privileges has been linked to other health issues, including overall health decline, depression, regret and isolation, diminished life satisfaction, reduced social activity, and even early death (McPeek, Nichols, Classen, & Breineer, 2011).

In this chapter, the literature on trends in older drivers, the theoretical construct, the research variables including a review of the current literature, and OTs providing skilled services to older drivers are presented. The beginning of this chapter entail a description of strategies used to identify the research literature for this study. This is followed by an overview of the literature of older drivers and finally the skill sets of OTs and the safety concerns of older drivers (Korner-Bitensky et al., 2010; Korner-Bitensky, Bitensky, Sofer, Man-Son-Hing, & Gélinas, 2006; McGwin, Sims, Pulley, & Roseman, 2000; Stav, 2004, 2008; Yanochko, 2005).

Presented next is a detailed review of the ecology of human performance framework and how it was used to determine the skill set of a profession (Dunn, Brown, McGuigan, 1994; Dunn, Gilbert, & Parker, 1997, Pendleton & Schultz-Krohn, 200; Stav,

2004; Walker & Ludwig, 2004). Finally, the primary variables of the study are discussed: the OTs' training related to older drivers (Dickerson, Reistetter, Davis & Monahan, 2011; Korner-Bitensky et al., 2007), the OTs' current driving related professional activities (Stav, 2004; Yanochko, 2004), the OTs' continuing education interests (Korner-Bitensky et al., 2010) as well as the OT's competence in screening, assessment and intervention (Korner-Bitensky et al., 2006; Korner-Bitensky et al., 2010; McGwin, Sims, Pulley, & Roseman, 2000). Due to the limited empirical research about the skill set of OTs related to older drivers, relative data about other, more widely researched groups, such as older adults in general (Scott, 2003; Stav, 2008) and drivers with specific diagnosis, are also reviewed (Jones, McCann, & Lassere, 1991; Justiss, 2013; Korner-Bitensky et al., 1998; Galski, Bruno, & Ehle, 1992; Lloyd et al., 2001; Wood, Worringham, Kerr, Mallon, & Silburn, 2005; see Table 1).Finally, the chapter closes with a summary.

Table 1

Literature Review Related to Variables

Study Reference	Research Question(s)/ Hypotheses/ Purpose	Methodology	Analysis & Results	Conclusions
Classen, Shechtman, Awadzi, Joo & Lanford, (2010) Traffic violations versus driving errors of older adults: Informing clinical practice	Elucidate the practical meaning of driving errors associated with crash-related injuries as it pertains to occupational therapy practice by (1) using Monte Carlo simulations to match violations associated with crashes to driving errors committed during on-road assessments; (2) quantifying the effects of age, sex, and types of violations (expressed as driving errors) on crash-related injury; and	*Monte Carlo simulations to calculated the probability of having a specific score when three raters chose two driving errors at random *Descriptive statistics using Proc Univariate *Used x2 to identify the main predictors of injury (yes–no) after a crash *Performed logistic regression analysis using Proc Gen- mod *Logistic regression analysis presented the odds ratios at the 95% confidence	Lane maintenance, yielding, and gap acceptance errors predicted crash-related injuries with almost 50% probability; speed regulation (34%), vehicle positioning (25%), and adjustment- to-stimuli (21%) errors predicted crash-related injuries to a lesser degree	Identifying the probability with which driving errors contribute to crash-related injuries suggests that occupational therapists can engage in more focused clinical testing of the client factors, performance skills, context demands, and activity demands underlying these errors.

	(3) identifying the probability of violations (expressed as driving errors) to predict crash-related injuries.	interval level for demonstrating the probability of each independent variable to predict crash-related injury *Used the ls mean function to calculate the mean probabilities of each error category to predict crash-related injury *Used the p diff function to conduct pairwise comparisons of driving errors by probabilities of sustaining a crash-related injury		
Dickerson, Reistetter, Davis & Monahan (2011) Evaluating Driving as a Valued Instrumental Activity of Daily Living	How general practice occupational therapists have the skills and knowledge to address driving as a valued occupation using an algorithm based on the Occupational Therapy Practice Framework: Domain and Process	A significant relationship was found between the process skills from the performance assessment and whether the driver passed, failed, or needed restrictions as indicated by the behind-the-wheel assessment	Evidence suggests that occupational therapists using observational performance evaluation of IADLs can assist in determining who might be an at-risk driver	Experienced general practice occupational therapy practitioners should be able to make appropriate recommendations about the IADL of driving and community mobility in response to skilled observation of complex IADLs
Korner-Bitensky, Toal-Sullivan, and von Zweck (2007) Driving and older adults: Towards a national occupational therapy strategy for screening	To determine whether the DriveABLE Competence Screen, a computerized test, predicts on-road driving outcome in clients referred for a driving assessment	*Retrospective study that evaluated the predictive validity of pre-road testing using the DriveABLE Screen *Screen results are classified as recommend cessation of driving, indeterminate (requires on-road evaluation), or no evidence of reduced competence *The DriveABLE Road Test classifies subjects as pass, borderline pass, or fail	*Sensitivity, specificity, positive and negative predictive values were generated using the Road Test as the criterion outcome *The positive predictive validity of the Screen in identifying those who would fail the Road Test was 97% (n = 32 of 33) *The negative predictive validity Was 47%. *The sensitivity was 76% with a corresponding specificity of 90%	The DriveABLE Screen, when used as a case finding tool, is highly predictive of clients who will fail an on-road driving evaluation
Shechtman, Awadzi, Classen, Lanford, & Joo (2010) Validity and critical driving errors of on-road assessment for older drivers	*Examined the validity of an on-road driving assessment to quantify its outcomes	*Older drivers completed a driving assessment on a standardized road course *Measurements included demographics, driving errors, and driving test outcomes; a	*There were significant differences in the SMS (F 5 29.9, df 5 1, p £ .001) between drivers who passed the driving test and those who failed *The SMS cutoff value of 230 points was	The SMS differentiated between passing and failing drivers and can be used to inform clinical decision making

		categorical global rating score (pass–fail); and the sum of maneuvers (SMS) score (0–273)	established as the criterion because it yielded the most optimal combination of sensitivity (0.91) and specificity (0.87) * The strongest predictors of failure were adjustment to stimuli and lane maintenance errors	
Wild & Cotrell (2003) Identifying driving impairment in Alzheimer disease: a comparison of self and observer reports versus driving evaluation	Discrepancy questionnaire, driving safety questionnaire, road test and driving safety evaluation	*Drivers with AD were rated as significantly worse than healthy elderly drivers *AD patients' self-reports of driving ability were significantly better than the evaluator's ratings *Caregivers underreported specific driving problems when their ratings were compared with those of an independent evaluator	General awareness of deficits and accuracy of driving self-evaluations are modestly related	Demonstrates the ability of HE drivers to predict their driving skills with reasonable accuracy, an encouraging but underreported outcome
Yanochko (2005) Building a Network of Convenient, Affordable and Trustworthy Driving Assessment and Evaluation Programs: Reflections of California Occupational Therapists	Identify barriers to the provision and utilization of OT driving assessment and rehabilitation services in California; *Identify education and training needs *Focus to expand the network of OT driving programs and increase the number of seniors who utilize the programs * Support initiatives that will address barriers to enhancing the system of OT driving programs in California	A survey of California OT driving programs; and focus groups and key informant interviews.	Key themes 1) better education and awareness at the undergraduate level 2) Training and education should be affordable and accessible 3) Stronger collaboration between OTAC and the state government 4) Public education and social norm change	It is vital that California enhance its network of affordable, convenient and trustworthy OT driving programs to help its growing senior population stay safely mobile and age successfully in their homes and communities *The state has many holes in its network of OT driving programs *The OT's who participated in this effort demonstrated a commitment and desire to help eliminate barriers to a successful system of programs AOTA and OTAC have already
Yuen & Burik (2011) Survey of Driving Evaluation and Rehabilitation Curricula in Occupational Therapy Programs	To examine the preclinical curricular content pertaining to driving evaluation and rehabilitation (DE/R) included in professional entry-level occupational therapy programs	An e-mail survey containing questions about the program's structure and extent of course material related to DE/R in the curriculum was sent to directors of all 144 U.S. accredited professional entry-level	Ninety programs responded (62.5% response rate), of which 80 included content related to DE/R in some required courses, and 9 programs offered a required course specifically in DE/R.	Few professional entry level occupational therapy programs offer a required course specifically devoted to DE/R, but almost all programs integrate DE/R content into required coursework

occupational therapy programs	Approximately 18% of the respondent programs offered electives with DE/R content

Literature Search Strategy

A search of literature was conducted digitally through the electronic databases of Google Scholar and Walden University library system of Thoreau to include articles from various disciplines. I conducted a systematic search which included various academic databases such as CINAHL Plus, MEDLINE, and PROQUEST. In addition, the Google and Yahoo search engines were also used to locate relevant articles. The websites of the following associations and agencies were also searched: AOTA, the Association for Driver Rehabilitation Specialists (ADED), the American Medical Association (AMA), the DMV, the National Highway Traffic Safety Administration (NHTSA), and the National Institute on Aging (NIA). The keywords that were used alone or in combination to conduct the literature search included *occupational therapy, older drivers, senior drivers, elderly drivers, driving, community mobility, screening, assessment, intervention, geriatrics, driving skills, driving impairment, driving risks, cognitive impairment, vision impairments, physical impairments, reaction time, medication, occupational therapy scope of practice,* and *the ecology of human performance framework.* The sources of articles reviewed for this study were obtained digitally and traditionally through existing printed versions of professional journals. In addition, relevant articles were identified in the reference list of related studies. Multiple books were also used which provided

overviews of OTs addressing driving and the EHP Framework. Due to the limited number of studies relating to older drivers, the publication date was not a factor.

Trends in Older Drivers

The 2010 Census report indicated that 53,364 people were age 100 and older (U.S. Department of Commerce, 2012). In 2011, there was an estimated 28.5 million people ages 70 and older. and 13.8 million licensed drivers over the age of 75 in the United States (Insurance Institute for Highway Safety, 2013; U.S. Census Bureau, 2012). The year 2011 also marked the first of the Baby Boomer generation to turn 65 (Population Reference Bureau, 2011). People are living longer and wanting to maintain independence through driving (Ash, Kiberstis, Marshall, & Travis, 2012; Gwyther, & Holland, 2012). However, as a person ages, cognition, vision, physical abilities, and reaction time declines (Johnson, Crabb, Opfer, & Thiel, 2000). In addition to the aforementioned factors, different medications can also increase the risk for an accident among older drivers (AMA, 2012).

Cognition.

According to the American Medical Association (2012), driving is a complex activity that requires a variety of high-level cognitive skills. These skills include memory, visual perception, visual processing, visual search, visuospatial skills, attention, and the executive skills of attention, sequencing, planning, judgment and decisions making (American Medical Association, 2012). These cognition skills may affect the driving performance of older drivers (Duley & Adams, 2013). It is unfortunate, but drivers who have cognitive impairments do not recognize their impairments therefore, they increase

their risk of a crash (Carr & Barco, 2009). Duley and Adams (2013) noted that one driving task, the ability to merge with traffic, presents a cognitive challenge because the older driver with cognitive impairment would "have difficulty maintaining all the information needed to make a decision about joining the flow of traffic" (p. 320). This task would lead to the older driver responding slower than what the driving task requires which in turn increases their risk of an accident (Duley & Adams, 2013).

Carr and Barco (2009) reports that 3 % of people aged 65 to 74 have moderate cognitive impairments while those aged 75 to 84 have 14 % moderate cognitive impairments, and those aged 85 and up have greater that 20% moderate cognitive impairment. An older driver's cognitive performance is critical when driving as it requires the driver to be attentive to their driving environment by perceiving and recognizing the stimulus of the driving task followed by executing that response (Duley & Adams, 2013). When a driver exemplifies impaired cognitive skills whether mild or moderate, appropriate measures should be implemented early to decrease the likelihood of an accident.

Vision.

Vision is the primary skill needed for safe driving as it plays a major role in driving related sensory input (American Medical Association, 2012). All states set minimum standards for acuity and many have a visual field limitation to allow individuals to safely and confidently drive (Colenbrander, 2006; American Medical Association, 2012; Steinkuller, 2010). Over time, everyone experiences some type of vision loss such as decrease visual acuity, a decrease in night vision, less color

sensitivity, and difficulty recognizing objects that are in motion (Pennsylvania Department of Transportation, 2012; Stav, Hunt, & Arbesman, 2006). Vision is known as the most important information source when driving because even a small loss of vision can affect a person's ability to read road signs or recognize objects from a distance (Colenbrander, 2006; Vicroads, 2012). There are over 2.7 million people over the age of 55 with vision impairments and this does not include blindness (Prevent Blindness America, 2012). Given that 90 percent of the information needed to drive comes through our eyes, a person is more likely to restrict their driving when visual impairments are noted (Evans, 2004; Pennsylvania Department of Transportation, 2012; Wick, 2002). However, evidence has shown that visually impaired drivers are involved in more motor vehicle crashes and citations when compared to unimpaired drivers (Wick, 2002).

Physical Abilities.

Driving requires physical abilities in order to enter and exit the automobile, hold the body upright to use and control the steering wheel and other needed controls, maintain sitting balance, controlling your head, neck, arms, hands, legs, and feet, and operating the automobile (American Medical Association, 2012). However, Romoser and Fisher (2009) noted that with aging the body will have a decrease in the range of motion of the joints, tendons, and muscles. Although all physical abilities are needed to safely and confidently operate a vehicle, studies have shown that reduced flexibility in an older driver's neck and torso contributes to an increase in the likelihood of a crash while driving (Romoser & Fisher, 2009). In addition, physical frailty reduces driving

performance which can lead to an accident as well as increase the risk of injury during a traffic accident (Caragata, Tuokko & Damini, 2009).

Reaction Time.

Reaction time refers to the time in which the eyes see and the brain process what is seen in order for the body to react (i.e. light turns red and the person applies brakes) (Pennsylvania Department of Transportation, 2012). The brake reaction time provides valuable information when conducting an evaluation but the reaction time alone will not predict a client's fit to drive (Dickerson, 2010). The reaction time of an older driver is an important component when looking at crash avoidance as an increase in reaction time is highly predictive of crash risk (McGehee, Mazzae, & Baldwin, 2000; Kong, 2012). The reaction time of an older driver is important as it allows the driver to react quickly which is needed to avoid accidents and stay safe on the road (National Institute on Aging, 2013).

Medication.

Medication can impact a person's driving abilities at any age, especially older drivers (Pennsylvania Department of Transportation, 2012). According to AAA Senior Driving (2011) "two-thirds of people age 65 and older take five or more daily medications that can affect driving ability." Both prescription and over the counter medications can affect a driver's driving performance (American Medical Association, 2012). Older drivers are more prone to side effects because they often use multiple medications, they are more sensitive the medicine, and are more likely to have pre existing conditions which can increase the frequency and severity of the adverse effects

(AAA Foundation for Traffic Safety, 2009). Many older drivers argue that it is discriminatory to focus on age alone; therefore we must remember that age alone does not determine a person's driving abilities (Korner-Bitensky, Toal-Sullivan, and von Zweck, 2007). Rather, the person's decline in driving abilities is the result of medical conditions, other health problems, or the medication they use to treat those conditions (Dickerson, Molnar, Eby, Adler, Bedard, Berg-Weger, Classen, Foley, Horowitz, Kerschner, Page, Silverstein, Staplin, & Trujillo, 2007). It is also important to remember that these medical conditions can occur at any age; however, they are more likely to occur as a person gets older (Dickerson et al., 2007).

Theoretical Construct

The theoretical base of the study is the Ecology of Human Performance Framework (EHP) by Winifred Dunn and the Occupational Therapy Faculty at the University of Kansas (Walker & Ludwig, 2004). The model consists of four elements: person, context, task, performance and therapeutic intervention (Stav, 2004; Dunn, Brown, McGuigan, 1994). In this study, the person is the occupational therapist, the context is the environment where the therapist provides therapeutic services, the task is determining an older driver's driving ability, and performance and therapeutic intervention is the therapist use of or lack of use of screenings, assessments, and interventions.

The theoretical postulate of the EHP framework is that ecology or the interaction between person and environment, affects both human behavior and performance (Dunn, Brown, & McGuigan,1994).When looking at the EHP, the environment or practice

setting in which the OT work, plays a major role in determining which assessments and or interventions would be appropriate after the screening process. For example, an older driver recently admitted to the hospital with multiple medical complications may not be a good candidate for a behind the wheel assessment at that time while an older driver four weeks post rehabilitation at a skilled nursing facility may need to advance from the screening process to the clinical and behind the wheel assessment. Although both patients are performing at different levels, OTs are able to determine the appropriate screen, assessment, and intervention in order to provide client centered and meaningful sessions that will facilitate in the safety of older drivers.

Dunn, Gilbert, and Parker (1997) used the EHP framework to help identify needs and design strategies for adult basic educators. The use of the EHP framework allowed the educators to identify desired goals and tasks by taking into account the contextual supports and barriers that could influence successful performance (Dunn, Gilbert, & Parker, 1997. Not only did the EHP framework take into consideration the skills that a person could develop but also the skills that the person has (Dunn, Gilbert & Parker, 1997). Similarly to the adult basic educators, OTs are able to utilize the EHP framework to identify which skills they currently have and use frequently and which skills have the potential to develop in relation to older driver screening, assessment, and intervention. Dunn, Gilbert, and Parker (1997) enabled adult educators to organize their knowledge and expertise in order to best make decisions about which accommodation strategies would be the best match for the person. By using the EHP framework to acknowledge their current capacity building needs, OTs will possess the tools to more effectively

implement best practices related to older drivers which range from a simple screen to the referral for a specialist.

The main limitation of the Dunn, Gilbert, and Parker (1997) study is that the researchers did not include ways that occupational therapists could incorporate the EHP framework into the various settings in which they work. This is important as the EHP framework may differ from the hospital, nursing home, outpatient, rehabilitation, and school systems settings. The gap in the literature is the date in which this study was conducted which was over 10 years ago. Therefore, this author's proposed study is needed to increase the understanding of how the EHP framework can be used by occupational therapist who works with adult clients particularly older drivers.

Rationale for the theory.

The EHP framework was chosen for two main reasons. First, it is a client centered model that allows each person to be viewed in a unique and complex way and includes their past experiences, skills, needs, and attributes (Pendleton & Schultz-Krohn, 2001). Secondly, it includes the process of learning about self (Dunn, Brown, & McGuigan, 1994). Given that OTs who provide services to older adults have different demographical information such as years of experience, level of education, practice setting, gender, and regional location, the EHP framework is used to understand their specific skill set and needs on an individual level.

Occupational Therapists addressing Older Drivers

OTs encounter clients with driving issues at various stages in the continuum of care (Stav, 2008). Stav (2008) argued that it is during this time that OTs, regardless of if

they are a generalist or a specialist, address driving. Scott (2003), Korner-Bitensky, Bitensky, Sofer, Man-Son-Hing, and Gélinas (2006), McGwin, Sims, Pulley, and Roseman (2000) all agree that OTs can play a vital role in assessing the driving ability of older adults through the use of screens and comprehensive assessments.

With baby boomers getting older, Korner-Bitensky, Toal-Sullivan, and von Zweck (2007) proposed that all health care professionals assist in identifying unsafe drivers while Dickerson, Reistetter, Davis & Monahan (2011) attested that OTs are able accurately determine drivers who are safe, at risk, and who needs further evaluation by a specialist. In the study by Yanochko (2005), barriers that impeded the California OT community in addressing older driver safety and mobility was identified as limited knowledge and narrow focus of entry level OTs, concerns over reimbursement for services, time and productivity issues, training and awareness of experienced OTs. Although OTs in all practice areas have the unique skills that enable them to evaluate and enhance senior driving and mobility it is unclear as to what the current capacity- building needs are for OTs working with older drivers (Yanochko, 2005).

Various research strategies were used to find literature pertaining to the capacity-building needs of OTs related to older driver screening, assessment, and intervention. However, the findings were limited. The study by Stav (2004), which consisted of 79 OTs in eight states revealed that the therapists address driving in different ways and to varying degrees and mainly depended on the work setting. Statistics from the study revealed 92.4% of the participants inquired about the client's driving status while 59.5% assessed the client's driving history and needs (Stav, 2004). Another study by Korner-

Bitensky, Menon, von Zweck, & Van Benthem (2010) entailed the survey responses of 133 Canadian OTs working with older clients. Their results determined that OTs were more confident in performing screens rather than assessments which explains the preference of screening tools over in depth assessments. Although only 25% of the OTs offered on road assessments, most OTs were interested in continuing education (Korner-Bitensky, Menon, von Zweck, & Van Benthem, 2010).

Research Variables

The key variables of this study that will be discussed is the OTs' training related to older drivers, the OTs' current driving related professional activities, the OTs' continuing education interests, and the OT's competence in screening, assessment and intervention.

OT Older Driver Training.

In order for OTs to address the needs of older drivers, appropriate training is required. Although training can be completed at any time during an OTs professional career, Yanochko (2005) recommended OT graduate students are exposed to the field of driving while emphasizing driving as an important component of IADLs. Driver training may range from understanding specific driving related clinical assessments to hands on training for the behind the wheel assessment (Yanochko, 2005). It must be noted that both the clinical and behind the wheel trainings are equally important when determining the safety of an older driver. Driver training allows OTs to use general assessment skills to understand how everyday impairments such as sensory, cognitive, motor performance

skills, performance patterns, and safety concerns relate to everyday driving (Yanochko, 2005; American Occupational Therapy Association, 2010).

The American Occupational Therapy Association (2010) and Dickerson et al. (2007) agreed that driver training reiterates OTs abilities to recognize disability and aging as implications of risk in driving in addition to understanding the importance of independence and community mobility. Many older drivers lack insight of their cognitive, behavioral and functional deficits which jeopardize their ability to live and drive independently (Wild & Cotrell, 2003). This lack of insight can also lead to performing driving errors such as lane maintenance, speed regulation , adjustment-to-stimuli, yielding , signaling, vehicle positioning , and gap acceptance errors (Shechtman, Awadzi, Classen, Lanford, & Joo, 2010; Classen, Shechtman, Awadzi, Joo & Lanford, 2010). With the appropriate driver training, OTs are able to identify these potential driving errors during the clinical and or behind the wheel assessment.

OT Professional Activities for Driving.

OTs across all practice areas are able to utilize unique skills to evaluate and enhance driving and community mobility (Yanochko, 2005). OTs have the training, knowledge, and skill to observe and determine the levels of functional performance of clients regardless of the practice setting (Dickerson, Reistetter, Davis, & Monahan, 2011). These practice settings may have an OT address driving in the role as either a Generalist or a Specialist. There are some slight variations when identifying the role of the Generalist. Yanochko (2005) suggests Generalists look at driving and community mobility as part of the OT assessment by addressing the client's ability to access mobility

options and the impact on daily living. In contrast, Scott (2003), Hunt and Arbesman (2008) suggest the Generalists address both community mobility needs and other rehabilitation concerns such as strength, flexibility, and reaction time. Regardless, as a skilled evaluator, the Generalist OT can assist older clients in the area of driving; however, additional resources must be known (Dickerson, Reistetter, Davis, & Monahan, 2011). In order for the Generalist OT to make the best clinical judgment, driver training is needed to be able to fully interpret the evaluation results (Dickerson, Reistetter, Davis, & Monahan, 2011).

The Specialist on the other hand has advanced training. Unlike the Generalists, Yanochko (2005) and Yuen and Burik (2011) identified the Specialist as being able to conduct clinical assessments and behind the wheel assessments. With advanced training, OT Specialists can assess the actual driving abilities of older drivers and provide an accurate picture of current driving skills (Yanochko, 2005). Unfortunately, as the older driver ages, their vision, cognition, physical abilities, and reaction time all decline (Johnson, Crabb, Opfer & Thiel, 2000; Davis & DeBarros, 2007). However, Scott (2003) argues that "occupational therapists can teach older drivers how to compensate for some of their functional limitations" (p. 41).

When a driving limitation that cannot be rehabilitated is presented, OT Specialists are able to teach older drivers about adaptive equipment as an option to promote driving independence. Some adaptive equipment as mentioned by Scott (2003) includes a wide angle rearview mirror for the driver with decreased neck range of motion, spinner knobs and key extender for the driver with hand deformity, hand controls for the driver with

impaired lower body use, and the left foot accelerator for the driver with impaired movement of the right leg. Dickerson, Reistetter, Davis, and Monahan (2011) encouraged both the Generalists and the Specialists to become driving advocates and not just take away the keys of older drivers. This requires the OT to offer interventions within the specific scope of practice and based on the professional training as either a Generalist or a Specialist (Dickerson, Reistetter, Davis, & Monahan, 2011).

OT Continuing Education.

Despite the fact that the American Occupational Therapy Association (2004) feels all OTs have the education and training to address driving and community mobility, driving for older drivers continues to be an issue. In order to encourage and incorporate driving into the OT practice, Yanochko (2005) suggested that more education on driving at all levels, from OT school to regular facility in services, is implemented. Yanochko (2005) and Scott (2003) both agreed that OTs are ready and willing to address the needs of older drivers. Given the increase in number of older drivers in the communities, consistent older driver education will allow OTs to effectively meet the needs of current and future clients (Yuen & Burik, 2011). Yuen and Burik (2011) noted that by providing education that equips the therapist with the knowledge, skills, and practice in driver assessment and training, the therapist had the confidence and competence to provide this service. However, in order to attract OTs, Yanochko (2005) recommended continuing education courses be formatted in both online trainings and in person trainings, consist of a formal layout, and be free or low cost.

OT Competence in Screening, Assessment, and Intervention.

The screening, assessment, and intervention process allows OTs to not only understand the mobility needs and fears of older drivers but also to find and incorporate solutions that promote safety and independence (Scott, 2003; Yuen & Burik, 2011).According to Korner-Bitensky, Toal-Sullivan, and von Zweck (2007) there is an increase in OTs being asked to perform screens and assessments in order to identify potentially unsafe drivers. The clinical decisions made by OTs have a crucial impact on a client's life; therefore OTs must ensure decisions are based on valid instruments that can effectively and effortlessly be discussed in the results (Shechtman, Awadzi, Classen, Lanford, & Joo, 2010).

Screening.

An OT should use driving screens to assess the prerequisite skills that are needed for driving as it can give an accurate picture of his or her skills (Korner-Bitensky and Sofer, 2009; Scott, 2003). Due to screens not being used to their full potential by OTs, physicians and family members are not able to take preventative measures to ensure the safety of their loved one (Korner-Bitensky and Sofer, 2009).

Assessment.

When an OT is competent in assessing an older driver, it consists of more than "Pass, OK to drive" or "Fail, not OK to drive" (Yanochko, 2005, p. 3). Rather, OTs use the assessment to make an individualized intervention plan which may include the options of remediation, adaption, compensation, or exploration of alternatives (Yanochko, 2005). The OT is responsible for interpreting the results of any assessment administered and using those results to develop an analysis for the entire assessment

(American Occupational Therapy Association, 2010). It is during the assessment process that driving errors are identified. According to Shechtman, Awadzi, Classen, Lanford, and Joo (2010), the assessment is the "gold standard for assessing driving safety and determining fitness to drive" (p, 241). A full comprehensive assessment includes a clinical portion and a behind the wheel portion to determine the client's driving abilities (Dickerson, Reistetter, Davis, & Monahan, 2011). Given that the clinical testing and behind the wheel testing can yield different results- the client completing the clinical assessment without difficulty however, presents difficultly behind the wheel where the demands for stimuli and decision making is different- OTs should feel competent in all aspects of the screening, assessment, and intervention process when working with older drivers (Scott, 2003). If the OT determines that driving is no longer a safe option and recommends the older driver to "retire" from driving, the OT is able to identify other means of transportation (Scott, 2003).

Intervention.

Kowalski, Tuokko, and Tallman (2010) identified research of older drivers that emphasized the need for interventions in order to increase older driver safety (p. 76). According to Hunt and Arbesman (2008) the OT in collaboration with the client need to identity all possible interventions that may improve the client's driving skills. By having the knowledge to intervene appropriately, there will be an increase in the number of older clients valuing and benefiting from driving services (Hunt & Arbesman, 2008). During the intervention process, it is vital that the OT continue to collaborate with their client as the success of the older driver occurs only if they are matched with the appropriate

intervention (Hunt & Arbesman, 2008; Custer, Huebner, Freudenberger, & Nichols, 2013).

Survey Tool

The capacity building questionnaire survey tool used in this study was developed by N. Korner-Bitensky, C. von Zweck, and K. Van Benthem (2010). This was the only study that used this tool. The survey was comprised of demographic information, Likert type questions, and open ended questions (Appendix A). This survey differed from other survey tools related to driving such as Yuen and Burik's (2011) study that "examined preclinical content pertaining to driving evaluation and rehabilitation in professional entry-level occupational therapy programs" (p. 217) and Korner-Bitensky, Bitensky, Sofer, Man-Son-Hing, and Gelinas's (2006) study that determined "off-road and on-road driving evaluation practices of clinicians in the United States and Canada who assess individuals with disabilities for fitness to drive" (p. 428) in that is was administered by telephone versus an electronic source like Survey Monkey. The administration of the survey by telephone was thought to result in a high response rate in which Korner-Bitensky, von Zweck, and Van Benthem (2010) had a total of 147 occupational therapist from all ten providences and two territories in Canada who met the inclusion criteria out of the 240 who were originally contacted. Yuen and Burik (2011) electronic administration via email to 144 occupational therapy program directors in the United States which included two follow up emails received 90 responses while Korner-Bitensky, Bitensky, Sofer, Man-Son-Hing, and Gelinas (2006) in person distribution at

the 2003 Association for Driver Rehabilitation Specialists (ADED) annual conference resulted in 114 participants.

The self- assessment survey tool in each of the three studies consisted of closed ended and open ended questions related to driving. As noted by and Korner-Bitensky, Bitensky, Sofer, Man-Son-Hing, and Gelinas (2006), surveys with closed ended questions are ideal because "open ended questions result in lower response rates and more missing data" (p. 429). Due to the purpose of each study, the survey questions varied in length. Yuen and Burik (2011) survey was short with only seven items while Korner-Bitensky, Bitensky, Sofer, Man-Son-Hing, and Gelinas (2006) survey although no specific number of questions was given consisted of clinician variables, client variables, pre-road assessment variables, on road assessment variables, and variables related to referral and licensing. Korner-Bitensky, von Zweck, and Van Benthem (2010) survey questions included five sections: Section A covering demographics information on gender, professional education, work setting, and province, Section B covering 27 Likert type questions to rate importance of continuing education in various knowledge areas: screening and assessment (e.g., physical function, vision, visual perception, behavior, cognition, and endurance), intervention (e.g., refresher or retraining programs, driving cessation), and advanced practice (e.g., evidence-based practice, effects of medications and medical conditions on driving skills), Section C covering 11 Likert type questions to elicit information on occupational therapists' perceived competence in various knowledge areas specific to older drivers (i.e., screening, assessment, interventions, and advanced practice), Section D requesting OTs to provide information regarding their

actual practices, and Section E covering 8 Likert type questions regarding the occupational therapist's likelihood of undertaking driving-related continuing education according to course content and mode of delivery (online vs. in person) (p. 318). Although the current capacity building need survey was lengthy, it allowed occupational therapists to assess their personal skills related to driving related services.

Methodology

There are limited studies related to the self assessment of occupational therapist that provide screening, assessment and or intervention for older drivers. However, there are various studies related to the topic of driving such as drivers with deficits (vision, cognition, and or physical), older drivers, driving simulators and evaluation tools to help predict a driver's on road safety. The use of a quantitative survey to answer various research questions related to the topic of driving has been common in research as seen in Gaines, Burke, Marx, Wagner, and Parrish (2011), study *Enhancing older driver safety: A driving survey and evaluation of the CarFit program* and Korner-Bitensky, Bitensky, Sofer, Man-Son-Hing, and Gelinas (2006) study *Driving evaluation practices of clinicians working in the United States and Canada*. The use of a quantitative self assessment survey method allowed both Gaines, Burke, Marx, Wagner, and Parrish (2011) and Korner-Bitensky, Bitensky, Sofer, Man-Son-Hing, and Gelinas (2006) to identify trends, attitudes or opinions of their participants and they provided a generalization about that population in order to answer their specified research question.

Summary and Conclusions

The studies presented in this literature review support the idea that older drivers are a public health concern and will continue to be a concern unless appropriate actions are taken. The literature also describes how OTs as a Generalist and a Specialist can aid in older drivers maintaining their independence and safety on the roads by incorporating screenings, assessments, and interventions in their various practice settings. Despite the fact that OTs have the ability to recognize disability and aging as implications of risk in driving, they understand the importance of independence and community mobility. This literature review has summarized the trends in older drivers and how important it is for OTs to address driving with older clients. The gap in the literature stems from not knowing the readiness and skill set that OTs have related to older drivers. Although some barriers to OTs addressing older drivers were identified, that study was completed greater than 5 years ago. Therefore, a need has been established to determine the current capacity-building needs of occupational therapists related to older driver screening, assessment, and intervention.

In chapter 3, detailed information about the methods that will be used in this study will be presented in addition to the presentation of the research questions and the null and alt native hypotheses. This chapter also included a discussion about the cross-sectional survey design and the random sampling approach followed by the explanation of the statistical test and analytic methods. Chapter 4 outlined the study's participants, presented the results of the statistical analysis and summarized both data collection process and the analysis of the results. Chapter 5 summarized the study's

findings with their interpretations, discussed limitations found while conducting the study and concluded with recommendation for possible future research.

Chapter 3: Research Method

Introduction

The purpose of this study was to determine the current capacity building needs of OTs related to older driver screening, assessment, and intervention. The independent variables of interest in this study were the OTs' training related to older drivers, the OTs' current driving related to professional activities, and the OTs' continuing education interests. The dependent variable for this study was the OT's competence in screening, assessment, and intervention. Descriptive statistics involving the covariates of years of experience, level of education, practice setting, gender, and regional location were implemented as well as performance of the Pearson correlation statistical test. In this chapter, I will discuss the research design and rationale, methodology, and threats to this study's validity.

Research Design and Rationale

A cross-sectional survey was used to determine the current capacity building needs of OTs related to older driver screening, assessment, and intervention. The cross-sectional survey design allowed inferences about OTs working with older clients to be made based on their collective responses (Cottrell & McKenzie, 2011; Hall, 2013). I modified the capacity building questionnaire previously developed by Korner-Bitensky et al. (2010), which consists of demographic information, Likert-type questions, and open-ended questions (Appendix A). The survey was available through an online survey tool, which was accessible for 6 weeks (45 days) starting at 11:59pm EST on Day 1 and ending 11:59pm EST on Day 45. This method was appropriate for this study because it

allowed data to be collected from OTs working with older clients over a short period of time, at a time that was convenient for the OT, and in a way that did not require the information to be collected directly from the OT (Lee, 2000). Several surveys have been used in research to answer questions relating to OTs and or driving. Surveys are used because they "provide first hand information from the persons about their behaviors" (Spencer, 2009, p. 49). Surveys have been used for research involving community mobility/ driving programs (Stav, Weidley, & Love, 2011; Yanochko,2005), self reported surveys of drivers to understand their perception of their skills and their limitations (Bauer, Adler, Kuskowski, & Rottunda, 2003; Stutts & Wilkins, 2003), to determine the skill set and measures used for various health care professionals working with older drivers (Korner-Bitensky et al., 2010; Szlyk, Myers, Zhang, Wetzel, & Shapiro, 2002;) and the curriculum at various OT schools as it relate to driving (Yuen & Burik, 2011).

Methodology

Population and Sampling

The target population of interest for this project was OTs who worked with clients who were ages 55 and up. This included OTs in the United States who worked in various settings (i.e., hospital, outpatient, rehabilitation, skilled nursing facility, etc.). I used the probability sampling method and the multistage design of clustering. The clusters included the social media pages (i.e., Facebook, LinkedIn, Google groups, etc.) of the ACTA, The Association for Driver Rehabilitation Specialists, as well as the various OT groups as associations do not have the e-mail addresses of its members (Creswell, 2009). To compute the sample size, the input parameters in G*Power for an *f*-test was 0.15 for a

medium effect size when using linear regression as the statistical test, an alpha level of 0.05, with the largest number of predictors for either question of three. The statistical power to determine the strength of the study at 80% (0.80; Refer to Figure 1) results in a sample size of 77, while a strength at 95% (0.95; Refer to Figure 2) results in a sample size of 119. These numbers are general standards used by researchers (Portney & Watkins, 2009). Although this study had 61 participants, it did not have a statistically significant participation rate.

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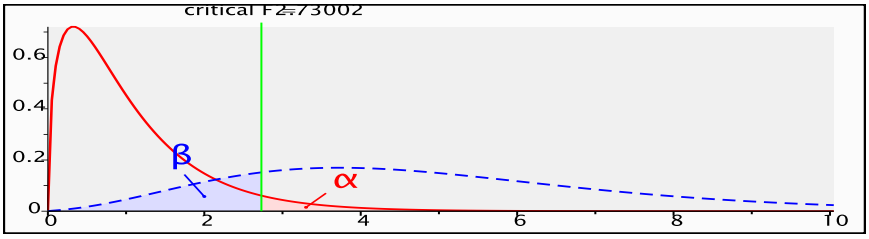

Figure 1 Power as a function of minimum sample size

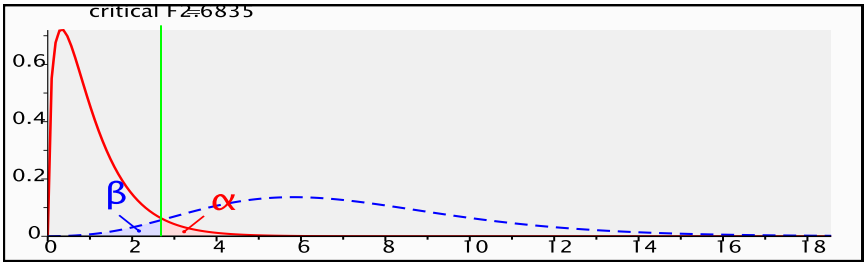

Figure 2. Power as a function of maximum sample size

Procedures for Recruitment

OT participants were recruited electronically through technological channels such as Google groups for OTs, Twitter accounts for OT associations and individual OT accounts, LinkedIn accounts for OTs, OTConnections, AOTA's various social media outlets, and Facebook accounts for OT associations, groups, and individual accounts. When recruiting from associations and groups, the administrator(s) of each group were contacted to get approval to solicit OTs through their group (Appendix B). Upon approval of the group administrator(s), a message was posted to the discussion board asking OTs to go to the link to start the survey questionnaire in which the first page required them to agree and complete the consent form (Appendix C). When recruiting individual therapists, the therapist was asked to go the link to start the survey questionnaire in which the first page required them to agree and complete the consent form.

Completing the Questionnaire

OT participants were given access to the questionnaire one time only. This was monitored by choosing the option in Survey Monkey to allow one computer to complete the questionnaire. No personal information such as name, address, date of birth, or license number was collected. Once the OT completed the questionnaire, they were not able to submit another questionnaire on that same device.

Participation

To be included in the study, participants had to be OTs in the United States who currently worked with older adults- individuals 55 years of age and over. Age, gender, demographical location, and work experience was not be a factor. However, participants

were excluded if they indicated they did not have at least one older adult on their caseload, which was determined on the survey.

Data Collection

The study was initially conducted for 45 days. The capacity building needs survey was designed to collect data and opinions of OTs in Canada. This method has been successfully used by Korner-Bitensky et al. (2010) in which the survey was completed via a telephone interview. A brief description of this survey with its target population of OTs working with older adults was posted in the various discussion areas on social media sites and or included in e-mails to representatives of the OT groups, departments, associations, or individual OTs. In addition, the purpose and procedures were explained on the first page of the questionnaire when the participant clicked on the survey link, which was included on the various social media sites and in e-mails. There was no anticipated risk for participants in this study.

Researcher Instruments

I assumed that all participants who completed the survey were licensed and or registered as an OT in the United States and currently worked with the older population. I also assumed that all participants would complete the survey in its entirety and answer all questions as truthfully as possible to the best of their ability.

Instrumentation and Operationalization of Constructs

The capacity building questionnaire about older driver screening, assessment, and intervention was developed by Korner-Bitensky et al. (2010). This questionnaire was appropriate to the study as I determined the current capacity building needs of OTs

related to older driver screening, assessment, and intervention in the United States. Permission to use the capacity building questionnaire was granted on March 26, 2013 by Dr. Nicol Korner-Bitensky via e-mail in which a Word document of the questionnaire was also included. The survey questionnaire conducted included 147 OTs in Canada. This study consisted of three independent variables: the OTs training related to older drivers, the OTs current driving related to professional activities, and OTs continuing education interests and one dependent variable of the OTs competence in screening, assessment and intervention. For the purpose of this study the following operational definitions were used.

Older drivers: Older drivers were individuals ages 55 and older who have driving history.

Screening: Screening was a procedure used to identify those who "require further evaluation regarding their driving safety from those who are most likely safe drivers, on the basis of a quick examination of their driving-specific skills" (Korner-Bitensky, Menon, von Zweck, & Van Benthem, 2010, p. 30).

Assessment: An assessment was an extensive and comprehensive evaluation of the driver's driving specific skills in which data is obtained and interpreted for intervention (Korner-Bitensky, Menon, von Zweck, & Van Benthem, 2010; Pendleton & Schultz-Krohn, 2001).

Intervention: Intervention was the process and methods used by occupational therapists to help older drivers achieve their desired driving goal (Boyt Schell, Crepeau, & Cohn, 2003.

Training: Referred to the educational training gained while in an OT program as well as any entry level/ intermediate training/ courses attended since becoming an OT.

Professional activities: Professional activities referred to the OT's current driving related practices.

Continuing education: Any course(s) taken after graduation specifically related to driving practices.

Competence: Having sufficient skills, knowledge, and experience related to driving practices.

To determine the reliability and validity of the questionnaire, Korner-Bitensky, Menon, von Zweck and Van Benthem (2010) created the questions using the Total Design Method by Dillman. They verified that they had all the "content areas" covered by matching the literature review with the area that outlined the main "themes/topics" that were important to elicit information on (N. Korner-Bitensky, September 30, 2013). Finally they created the wording and ask clinicians (a convenience sample) to answer if the question was clear or not, are there any ambiguities, etc. and if there were any important omissions in question content. If important questions were omitted, the researchers would generate a question. Then they gave the final version to a number of clinicians who are similar in nature to those they actually studied and had them fill in the final questionnaire in which they also gave feedback and their responses were reviewed to see if they made sense etc.(N. Korner-Bitensky, September 30, 2013).

Data Analysis Plan

The purpose of this analysis was determine the current capacity building needs of OTs related to older driver screening, assessment, and intervention. In order to analyze the data, the *SPSS* software was used. Based on the review of existing literature in the area of Occupational Therapists addressing older drivers, the following research questions and hypotheses have been derived (Table 2).

Research Question #1. What is the current capacity-building needs of occupational therapists related to older driver screening, assessment, and intervention?

Research Question #2. What is the relationship between an OT's actual practices and perceived competence in older driver screening, assessment, and interventions?

$H_0$2. There is no relationship between an OT's actual practices and perceived competence in screening, assessment, and interventions, as measured by the Capacity Building Needs Questionnaire, specific to older drivers.

Research Question #3. What is the influence of demographic variables on actual practices related to older driving screening, assessment, and intervention and perceived competence?

$H_0$3**.** There will be no influence of demographic variables, as measured by the Self-Designed Demographic Questionnaire, on actual practices related to older driving screening, assessment, and intervention, and perceived competence, as measured by the Capacity Building Needs Questionnaire, specific to older drivers.

Research Question #4. What is the relationship between the need for continuing education and perceived competence of OT's in older driver screening, assessment, and intervention?

$H_0$4. There is no relationship between the need for continuing education and perceived competence in the areas of older driver screening, assessment, and intervention as measured by the Capacity Building Needs Questionnaire, specific to older drivers.

Table 2 Statistical Analyses Conducted per Research Question and Corresponding Null Hypothesis

Research Question	Null Hypothesis	Statistical Procedure
What is the current capacity-building needs of occupational therapists related to older driver screening, assessment, and intervention?		Descriptive statistics
What is the relationship between an OT's actual practices and perceived competence in older driver screening, assessment, and interventions?	There is no relationship between an OT's actual practices and perceived competence in screening, assessment, and interventions, as measured by the Capacity Building Needs Questionnaire, specific to older drivers.	Linear regression
What is the influence of demographic variables on actual practices related to older driving screening, assessment, and intervention and perceived competence?	There will be no influence of demographic variables, as measured by the Self-Designed Demographic Questionnaire, on actual practices related to older driving screening, assessment, and intervention, and perceived competence, as measured by the Capacity Building Needs Questionnaire, specific to older drivers.	ANOVA
What is the relationship between the need for continuing education and	There is no relationship between the need for continuing education and	Linear regression

perceived competence of OT's in older driver screening, assessment, and intervention?	perceived competence in the areas of older driver screening, assessment, and intervention as measured by the Capacity Building Needs Questionnaire, specific to older drivers.

The coding of the variables was done in SPSS (see Table 3). In order to clean and screen the data, the researcher used SPSS given that data was inputted by hand. In SPSS the researcher went to Analyze, Descriptive Statistics, and Frequencies. There, the entire variable were selected and the statistics tab was chosen followed by checking both minimum and maximum in the dispersion box. If data was entered incorrectly, it would be easily identified in each variable. However, if it was determined that a survey was completed by someone outside of the sample population (i.e. an Occupational Therapy Assistant) the cases were sorted according to description and those cases that identify participants outside of the intended sample population was omitted from the study.

Linear regression was used to determine the relationship between (a) an OT's actual practices and perceived competence in older driver screening, assessment, and interventions and (b) the relationship between the need for continuing education and perceived competence of OT's in older driver screening, assessment, and intervention. Significance was determined based on p. Therefore, if $p < .05$ there was significance. The positive or negative correlation was determined by the scores- the variable scores go up equal positive correlation or the variable scores go down equals a negative correlation (Portney & Watkins, 2009).

Analysis of variance (ANOVA) was used to determine the influence of demographic variables on actual practices related to older driving screening, assessment, and intervention and perceived competence. Significance was determined based on p. Therefore, if $p < .05$ there was significance.

Descriptive statistics was used to determine current capacity-building needs of occupational therapists related to older driver screening, assessment, and intervention. This included the covariates of years of experience, level of education, practice setting, gender, and regional location in order to get a better understanding of the capacity building needs of OTs.

Table 3

Operationalization of Variables and Coding

Variable Category	Variable	Level of Measurement	Description	Code
Independent	OTs' training related to older drivers	Ordinal	1= Very important, 2 = Somewhat important, 3 =Not very important, 4= Not at all important and 9 = Refused/ Don't know	Q8
Independent	OTs current driving related to professiona l activities	Nominal	1= Yes 2= No	Q10
Independent	OTs continuing education interests.	Ordinal	1= Very likely, 2 = Somewhat likely, 3 =Not very likely, 4= Not at all likely, and 9 = Refused/ Don't know	Q11 –Q19

			1= Satisfied, 2= No time, 3= Too expensive, 4= No need, 5= Other (specify), 9= Refused/ Don't know 1= Yes 2= No 0 Hours, 1-6 Hours, 6-11 HOURS, 11-16, Hours, >16 Hours, Refused/ Don't know 1= You, 2 = Your employer, 3 =Shared between you and your employer, 4= Other and 9 = Refused/ Don't know	
Dependent	OTs competence in screening, assessment and intervention	Ordinal	1= Very competent, 2 = Somewhat competent, 3 =Not very competent, 4= Not at all competent and 9 = Refused/ Don't know	Q9
Covariate/ Mediating	Years of experience	Interval	Fill in the blank	Q22
Covariates/Mediating	Level of Education	Ordinal	1= Diploma, 2 = Bachelor, 3 =Master, 4= PhD, 5 =Other (specify), 9= No degree in another discipline	Q20-Q21
Covariate/ Mediating	Practice setting	Nominal	Fill in the blank	Q6

Covariate/ Mediating	Gender	Nominal	1= Male 2= Female	Q5
Covariate/ Mediating	Regional location	Nominal	Drop down with states	Q7

Scope and Delimitations

The scope of this quantitative, cross-sectional survey of occupational therapist in the United States was to determine the current capacity-building needs of occupational therapists related to older driver screening, assessment, and intervention. The research design allowed the researcher to broaden the limited knowledge regarding the skill set for OTs working with older drivers. The design allowed OTs working with geriatrics across the United States to participate in order to achieve a sufficient sample size to answer the research question of what is the current capacity-building need of occupational therapists related to older driver screening, assessment, and intervention.

Delimitation

Although the field of Occupational Therapy consist of both occupational therapists and occupational therapy assistants, only responses from occupational therapists was included in the study. The OT scope of practice states that "an occupational therapist is responsible for all aspects of the screening, evaluation, and re evaluation process" (American Occupational Therapy Association, 2010, p. 3). Therefore, occupational therapy assistants were not included as the OT scope of practice does not allow OTAs to provide full assessments or develop intervention plans without an OT. In addition, the researcher limited this research to occupational therapists working with older adults (individuals ages 55 and up).

Threats to Validity

There are internal and external threats to validity when it comes to this study. The internal threat was selection in which the participants were selected who has certain characteristics (i.e. all participants for the Association of Driver Rehabilitation Specialists) (Creswell, 2009). Therefore, driver specific associations and organizations were not included in this study. The external threat was interaction of setting and treatment and interaction of selection and treatment. In interaction of setting and treatment, the researcher "cannot generalize to individuals in other settings" while interaction of selection and treatment the researcher "cannot generalize to individuals who do not have the characteristics of participants" (Creswell, 2009, p. 165). To address interaction of setting and treatment, this researcher recommends this study is completed in other countries as well while the interaction of selection was addressed as the results pertained to OTs and no other profession.

Ethical procedures

Occupational therapists are faced with a unique ethical challenge when it comes to driving and community mobility especially when the risk may endanger the public and the client (Davis & Dickerson, 2013). However, safety is the key and OTs are obligates to follow the ethical principles as applicable to practice (Davis & Dickerson, 2013). According to Davis and Dickerson (2013) OTs have the ethical obligation to use (1) evaluations to identify deficits in performance skills that affects a person's ability to do daily activities such as driving, (2) administer current and appropriate evaluation and assessments tool to obtain meaningful data, (3) identify and warn the patient when safety

deficits or risks have been identified. (4) use professional, clinical, and ethical reasoning to make judgments about realistic appropriate goals, (5) to know the law in their state as it relates to reporting obligations and options with impaired drivers and to (6) provide services that benefit the patient and avoid hard . The Walden University Institutional Review Board (IRB) provided Approval # 04-28-14-0226460.

Summary

In this chapter, detailed information about the methods that were used in this study has been presented in addition to the identification of the threats of validity and the ethical procedures. In chapter 4 an outline of the study's participants, a presentation of the statistical analysis results was given in addition to a summary of data collection process and the results analysis was given. Finally, chapter 5 summarized the study's findings with their interpretations, discussed limitations found while conducting the study and concluded with recommendation for possible future research.

Chapter 4: Results

Introduction

The purpose of the current study was to determine the current capacity building needs of OTs related to older driver screening, assessment, and intervention. I targeted OTs in the United States who worked with older clients ages 55 and up. Four research questions and hypothesis under investigation are below:

RQ 1: What is the current capacity-building need of OTs related to older driver screening, assessment, and intervention?

RQ 2: What is the relationship between an OT's actual practices and perceived competence in older driver screening, assessment, and interventions?

H_0 2: There is no relationship between an OT's actual practices and perceived competence in screening, assessment, and interventions, as measured by the Capacity Building Needs Questionnaire, specific to older drivers.

H_1 2: There is a relationship between an OT's actual practices and perceived competence in screening, assessment, and interventions, as measured by the Capacity Building Needs Questionnaire, specific to older drivers.

RQ 3: What is the influence of demographic variables (years of experience, level of education, practice setting, gender, and regional location) on actual practices related to older driving screening, assessment, and intervention and perceived competence?

H_0 3: There will be no influence of demographic variables, as measured by the Self-Designed Demographic Questionnaire, on actual practices related to older driving

screening, assessment, and intervention, and perceived competence, as measured by the Capacity Building Needs Questionnaire, specific to older drivers.

H_1 3: There will be an influence of demographic variables, as measured by the Self-Designed Demographic Questionnaire, on actual practices related to older driving screening, assessment, and intervention, and perceived competence, as measured by the Capacity Building Needs Questionnaire, specific to older drivers.

RQ 4: What is the relationship between the need for continuing education and perceived competence of OT's in older driver screening, assessment, and intervention?

H_0 4: There is no relationship between the need for continuing education and perceived competence in the areas of older driver screening, assessment, and intervention as measured by the Capacity Building Needs Questionnaire, specific to older drivers.

H_1 4: There is a relationship between the need for continuing education and perceived competence in the areas of older driver screening, assessment, and intervention as measured by the Capacity Building Needs Questionnaire, specific to older drivers.

The design was a quantitative survey of Likert question and the data were analyzed with the Statistical Package for the Social Sciences (SPSS) Version 21.0. In this chapter, I outline the study's participants, present the results of the statistical analysis, and summarize the data collection process, as well as the analyses of the result.

Data Collection

Following approval from IRB, the research questions were put into Survey Monkey. The informed consent included the purpose, background information, procedure, sample questions, the voluntary nature of the study, and the risks and benefits

of being in the study. A direct Survey Monkey link was embedded in the OTconnection message boards and other OTconnection affiliates on Facebook, twitter, LinkedIn, Instagram, and the Florida Occupational Therapy Association (FOTA) Facebook page. Participants were encouraged to share the link with other OTs and were asked to complete the survey within 45 days. However, due to the low response rate, the survey was extended an additional 25 days in which a reminder was given. This decision was made after consulting with the chair. This resulted in a discrepancy in the data collection from the plan presented in Chapter 3 as the survey was available for a total of 70 days and ended July 7, 2014 at 11:59pm.

The descriptive characteristics included years of experience, level of education (OT degree and non-OT degree), practice setting, gender, and regional location. The survey included 69 participant responses. Following a review of the collected data, eight surveys were excluded due to participants' failure to complete all questions in the survey. The final response rate was 61, which did not meet the minimum sample size of 77 participants at 80% strength. In addition, it must be noted that the 61 responses did not meet a statistically significant participation rate. Although the survey was available electronically, the challenge was getting participants to complete the survey given that I was unsure as to how often participants viewed the OT- related social media sites. Not having some type of tracking system, such as sending the survey through an e-mail list serve, was also a limitation to the study. Reminders were posted; however, I did not want to agitate the OTs and have them not participate at all.

Results

Descriptive Statistics

Data collected with Survey Monkey were downloaded directly to SPSS software for analysis. The responses provided descriptive statistics on gender, practice setting, regional location, level of education, and years of experience. Univariate procedures were used to analyze the demographic data, which are reported as frequency distributions.

Gender

Eleven and a half percent (n = 7) of study participants completing the survey were male, 86.9% (n = 53) were female, and 1.6% (n=1) refused to answer.

Practice Setting

Eleven and a half percent (n=7) of the study participants completing the survey worked in an inpatient hospital setting, 21.3% (n=13) worked in a rehab hospital, 24.6% (n=15) worked in an outpatient setting, 8.2% (n=5) worked in an acute care setting, 6.6% (n= 4) worked in a community base setting, 4.9% (n= 3) worked in home health, and 23% (n= 14) worked in other (Refer to Table 4).

Table 4

Comparison of Work Settings

	Frequency	Percent	Cumulative Percent
Inpatient Hospital	7	11.5	11.5
Rehab Hospital	13	21.3	32.8
Outpatient	15	24.6	57.4
Acute Care	5	8.2	65.6
Community Base	4	6.6	72.1
Home Health	3	4.9	77.0
Other	14	23.0	100.0

Total	61	100.0

Regional location One point six percent (*n*=1) worked in Alabama, Indiana, Maine, Maryland, North Carolina, Rhode Island, Texas, Vermont, Washington, and Wisconsin, 8.2% (*n*=5) worked in California, 24.6% (*n*=15) worked in Florida, 13.1% (*n*=8) worked in Georgia, 6.6% (*n*=4) worked in Michigan and Minnesota, 4.9% (*n*=3) worked in New York and Tennessee, 3.3% (*n*=2) worked in Ohio and South Dakota, and 8.2% (*n*= 5) worked in Pennsylvania (Refer to Table 5).

Table 5

Comparison of Regional Location

	Frequency	Percent	Cumulative Percent
Alabama	1	1.6	1.6
California	5	8.2	9.8
Florida	15	24.6	34.4
Georgia	8	13.1	47.5
Indiana	1	1.6	49.2
Maine	1	1.6	50.8
Maryland	1	1.6	52.5
Michigan	4	6.6	59.0
Minnesota	4	6.6	65.6
New York	3	4.9	70.5
North Carolina	1	1.6	72.1
Ohio	2	3.3	75.4
Pennsylvania	5	8.2	83.6
Rhode Island	1	1.6	85.2
South Dakota	2	3.3	88.5
Tennessee	3	4.9	93.4
Texas	1	1.6	95.1
Vermont	1	1.6	96.7

Washington	1	1.6	98.4
Wisconsin	1	1.6	100.0
Total	61	100.0	1.6

Level of education . Thirty nine point three percent (*n*= 24) held a bachelor degree in OT, 45.9% (*n*=28) hold a master's degree in OT, 13.1% (*n*=8) held a doctoral degree in OT, and 1.6% (*n*=1) held other in OT (Refer to Table 6).

Table 6

Comparison of the Highest Occupational Therapy Degree

	Frequency	Percent	Cumulative Percent
Bachelor	24	39.3	39.3
Master	28	45.9	85.2
Doctoral	8	13.1	98.4
Other	1	1.6	100.0
Total	61	100.0	

Another discipline degree. Thirty four point four percent (*n*= 21) held a bachelor degree, 14.8% (*n*=9) held a master's degree, 4.9% (*n*=3) held a doctoral degree, 3.3% (*n*=2) held another degree, and 42.6% (*n*=26) did not hold another degree (Refer to Table 7).

Table 7

Comparison of the Highest Degree in Another Discipline

	Frequency	Percent	Cumulative Percent
Bachelor	21	34.4	34.4
Master	9	14.8	49.2
Doctoral	3	4.9	54.1

Other	2	3.3	57.4
No degree in another discipline	26	42.6	100.0
Total	61	100.0	

Years of experience. Eleven point five percent (*n*=7) had been a licensed OT for 0-3 years, 3.3% (*n*=2) had been a licensed OT for 3-5 years, 14.8% (*n*=9) had been a licensed OT for 5-10 years, 14.8% (n=*9)* had been a licensed OT for 10-15 years, 19.7% (*n*=12) had been a licensed OT for 15-20 years, 21.3% (*n*=13) had been a licensed OT for 20-30 years, and 14.8% (*n*=9) had been a licensed OT for 30+ years (Refer to Table 8).

Table 8

Comparison of Years of Experience

	Frequency	Percent	Cumulative Percent
0-3 years	7	11.5	11.5
3-5 years	2	3.3	14.8
5-10 years	9	14.8	29.5
10-15 years	9	14.8	44.3
15-20 years	12	19.7	63.9
20-30 years	13	21.3	85.2
30+ years	9	14.8	100.0
Total	61	100.0	

Data Analysis

In addition to the descriptive statistical procedures, inferential statistical procedures were performed for all research questions. Bivariate linear regression and ANOVA procedures were used to analyze the study's data. In the survey it was noted that

each variable had multiple questions. For analysis purposes, the multiple questions related to the variables of training, perceived competence, actual practices and continuing education was formatted into a composite variable. The composite variable was created in SPSS and produced an average of each variable based on the responses. This allowed an overall analysis of the training, perceived competence, actual practices and continuing education variables to be used. Assumptions relevant to these statistical procedures were evaluated and are discussed with each research question in the following section.

RQ 1: What is the current capacity-building need of occupational therapists related to older driver screening, assessment, and intervention?

Based on the current capacity needs of participants, it was determined that OTs feel that addressing driving through screening, assessment, and intervention is somewhat important (Mean= 1.62) as it relate to their current training, that currently OTs seldom address driving through screening, assessment, and intervention (Mean= 3.25), and OTs are not very likely to take continuing education courses related to driving in the next two to three years (Mean= 2.65) (Refer to Table 9).

Table 9

Frequency of OT Training, Professional Activities, and Continuing Education

N= 61	Training	Professional Activities	Continuing Education
Mean	1.6242	3.2541	2.6511
Std. Deviation	.55699	.91419	.68090
Skewness	1.526	-1.234	.161
Kurtosis	2.638	.124	-.473
Range	2.67	2.83	2.71

RQ 2: What is the relationship between an OT's actual practices and perceived competence in older driver screening, assessment, and interventions?

Bivariate linear regression analysis was performed to evaluate the relationship between an OTs actual practices and perceived competence in older driver screening, assessment, and interventions. A significance level of .05 was used for the regression coefficients and the ANOVA analysis was also performed with the independent variable being an OT's actual practices and the dependent variable being the perceived competence of older driver screening, assessment, and intervention.

The null hypothesis was that there is no relationship between an OT's actual practices and perceived competence in screening, assessment, and interventions, as measured by the Capacity Building Needs Questionnaire, specific to older drivers. A linear regression was performed to analyze the impact of OTs actual practices on perceived competence in screening, assessment and interventions. The linear regression analysis revealed a strong, positive relationship between an OTs actual practices and an OTs perceived competence ($\beta = 0.591$, $t(59) = 7.611$, $p = .000$). Regression results indicated that perceived competence significantly predicted an OTs actual practice, $R2=0.495$; $R=0.704$; $R2adj=0.487$; $F(1, 59) = 57.933$, $p = 0.000$ (Refer to Table 10; Table 11). This model accounted for 49.5% of variance in perceived competence (Refer to Table 10).

Table 10 Model Summary of Actual Practices and Perceived Competence

Model	R	R Square	Adjusted R Square	Std. Error of the

				Estimate
1	.704[a]	.495	.487	.54951

Table 11

ANOVA of Actual Practices and Perceived Competence

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	17.493	1	17.493	57.933	.000[b]
	Residual	17.816	59	.302		
	Total	35.309	60			

a. Dependent Variable: q9_1_11

b. Predictors: (Constant), q10_1_6

In addition, a separate linear regression analysis was conducted on: 1) the perceived competence of screening, 2) the perceived competence of assessment, and 3) the perceived competence of intervention. The analyses revealed a strong, positive relationship between an OTs actual practice and perceived competence in screening (β = 1.075, t (59) = 5.556, p= .000). Regression results indicated that the perceived competence of screening significantly predicted an OT's actual practice, $R2$=0.343; R=0.586; R2adj=0.332; F (1, 59) = 30.869, p = 0.000 (Refer to Table 13; Table 14). This model accounted for 34.3% of variance in perceived competence of screening (Refer to Table 14).

Table 13

ANOVA of Actual Practices and Perceived Competence of Screening

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	57.999	1	57.999	30.869	.000[b]
	Residual	110.854	59	1.879		
	Total	168.852	60			

a. Dependent Variable: Screen competence

b. Predictors: (Constant), q10_1_6

Table 14

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.586[a]	.343	.332	1.37072

A strong, positive relationship between an OTs actual practice and perceived competence in assessment (β = 1.373, t (59) = 6.462, p= .000). Regression results indicated that the perceived competence of assessment significantly predicted an OT's actual practice, *R*2=0.414; R=0.644; R2adj=0.404; *F* (1, 59) = 41.754, *p* = 0.000 (Refer to Table 15; Table 16). This model accounted for 41.4% of variance in perceived competence of assessment (Refer to Table 16).

Table 15

ANOVA of Actual Practice and Perceived Competence of Assessments

Model	Sum of Squares	df	Mean Square	F	Sig.

1	Regression	94.487	1	94.487	41.754	.000[b]
	Residual	133.513	59	2.263		
	Total	228.000	60			

a. Dependent Variable: Assessment competence
b. Predictors: (Constant), q10_1_6

Table 16

Model Summary of Actual Practice and Perceived Competence of Assessments

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.644[a]	.414	.404	1.50431

It also revealed a strong, positive relationship between an OTs actual practice and perceived competence of intervention (β = 1.367, t (59) = 7.132, p= .000). Regression results indicated that the perceived competence of intervention significantly predicted an OT's actual practice, $R2=0.463$; R=0.680; R2adj=0.454; F (1, 59) = 50.863, p = 0.000 (Refer to Table 17; Table 18). This model accounted for 46.3% of variance in perceived competence of intervention (Refer to Table 18).

Table 17

ANOVA of Actual Practices and Perceived Competence of Intervention

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	93.686	1	93.686	50.863	.000[b]
	Residual	108.675	59	1.842		
	Total	202.361	60			

a. Dependent Variable: Intervention Competence
b. Predictors: (Constant), q10_1_6

Table 18

Model Summary of Actual Practices and Perceived Competence of Intervention

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.680[a]	.463	.454	1.35718

RQ 3: What is the influence of demographic variables (years of experience, level of education, practice setting, gender, and regional location) on actual practices related to older driving screening, assessment, and intervention and perceived competence?

An ANOVA analysis was used to analyze the influence of demographic variables (years of experience, level of education, practice setting, gender, and regional location) on actual practices and competence related to older drivers. An exploratory analysis was conducted to determine the influence of demographic characteristics on an OT's actual practice and an OT's perceived competence. A series of one-way ANOVAs were utilized for analyzing each of the demographic variables: years of experience, level of education, practice setting, and regional location. A t-test was used for gender since it only has two categories of male and female. Demographic variables were eliminated if values had post hoc tests less than 2 responses (n=61) which included regional location and highest OT degree. An alpha level of 0.05 was used for the ANOVA analysis. There were no significant differences ($p > 0.05$) based on gender, regional location, highest degree in OT, non OT degree, and years in practice with OT's actual practices (Refer to Table 19). However, there was a significant difference ($p < 0.05$) based on practice setting with OT's actual practice, F (6, 54) = 2.668, p = 0.024 (Refer to Table 19).

Table 19

ANOVA of Demographic Variable on Actual Practices and Competence

	Sum of Squares	Df	Mean Sq	F	Sig
Years of Experience	8.482	6	1.414	1.832	.110
Level of Education (OT degree)	.683	3	.228	.263	.852
Level of Education (Non OT degree)	2.452	4	.613	.720	.582
Practice Setting	11.467	6	1.911	2.668	.024
Gender	2.213	2	1.107	1.339	.270
Regional Location	14.260	19	.751	.858	.632

A post hoc Bonferroni test was conducted to determine where the differences occurred. Post hoc analysis revealed that there was no significant difference between the different practice setting (Refer to Table 20).

Table 20

Bonferroni Post Hoc Test Between Practice Setting

	Work Setting (I)	Work Setting (J)	Mean Difference (I-J)	Std. Error	*P*
Perceived Competence	Inpatient Hospital	Rehab Hospital	.29970	.36245	1.000
		Outpatient	.32208	.35389	1.000
		Acute Care	-.07792	.45270	1.000
		Community Base	-.35065	.48459	1.000
		Home Health	.10390	.53351	1.000
		Other	-.12987	.35789	1.000

	Rehab Hospital	Inpatient Hospital	-.29970	.36245	1.000
		Outpatient	.02238	.29296	1.000
		Acute Care	-.37762	.40685	1.000
		Community Base	-.65035	.44205	1.000
		Home Health	-.19580	.49520	1.000
		Other	-.42957	.29778	1.000
	Outpatient	Inpatient Hospital	-.32208	.35389	1.000
		Rehab Hospital	-.02238	.29296	1.000
		Acute Care	-.40000	.39924	1.000
		Community Base	-.67273	.43507	1.000
		Home Health	-.21818	.48897	1.000
		Other	-.45195	.28730	1.000
	Acute Care	Inpatient Hospital	.07792	.45270	1.000
		Rehab Hospital	.37762	.40685	1.000
		Outpatient	.40000	.39924	1.000
		Community Base	-.27273	.51863	1.000
		Home Health	.18182	.56462	1.000
		Other	-.05195	.40279	1.000
	Community	Inpatient Hospital	.35065	.48459	1.000
	Base	Rehab Hospital	.65035	.44205	1.000
		Outpatient	.67273	.43507	1.000
		Acute Care	.27273	.51863	1.000
		Home Health	.45455	.59049	1.000
		Other	.22078	.43832	1.000
	Home Health	Inpatient Hospital	-.10390	.53351	1.000
		Rehab Hospital	.19580	.49520	1.000
		Outpatient	.21818	.48897	1.000
		Acute Care	-.18182	.56462	1.000
		Community Base	-.45455	.59049	1.000
		Other	-.23377	.49187	1.000
	Other	Inpatient Hospital	.12987	.35789	1.000
		Rehab Hospital	.42957	.29778	1.000
		Outpatient	.45195	.28730	1.000
		Acute Care	.05195	.40279	1.000
		Community Base	-.22078	.43832	1.000
		Home Health	.23377	.49187	1.000
Actual	Inpatient	Rehab Hospital	.64469	.39676	1.000
Practice	Hospital	Outpatient	.66349	.38739	1.000

	Acute Care	-.11429	.49555	1.000
	Community Base	-.42262	.53046	1.000
	Home Health	-.43651	.58401	1.000
	Other	-.19048	.39177	1.000
Rehab Hospital	Inpatient Hospital	-.64469	.39676	1.000
	Outpatient	.01880	.32070	1.000
	Acute Care	-.75897	.44536	1.000
	Community Base	-1.06731	.48390	.665
	Home Health	-1.08120	.54207	1.000
	Other	-.83516	.32597	.278
Outpatient	Inpatient Hospital	-.66349	.38739	1.000
	Rehab Hospital	-.01880	.32070	1.000
	Acute Care	-.77778	.43703	1.000
	Community Base	-1.08611	.47625	.557
	Home Health	-1.10000	.53526	.939
	Other	-.85397	.31450	.186
Acute Care	Inpatient Hospital	.11429	.49555	1.000
	Rehab Hospital	.75897	.44536	1.000
	Outpatient	.77778	.43703	1.000
	Community Base	-.30833	.56772	1.000
	Home Health	-.32222	.61806	1.000
	Other	-.07619	.44092	1.000
Community	Inpatient Hospital	.42262	.53046	1.000
Base	Rehab Hospital	1.06731	.48390	.665
	Outpatient	1.08611	.47625	.557
	Acute Care	.30833	.56772	1.000
	Home Health	-.01389	.64638	1.000
	Other	.23214	.47981	1.000
Home Health	Inpatient Hospital	.43651	.58401	1.000
	Rehab Hospital	1.08120	.54207	1.000
	Outpatient	1.10000	.53526	.939
	Acute Care	.32222	.61806	1.000
	Community Base	.01389	.64638	1.000
	Other	.24603	.53843	1.000
Other	Inpatient Hospital	.19048	.39177	1.000
	Rehab Hospital	.83516	.32597	.278
	Outpatient	.85397	.31450	.186
	Acute Care	.07619	.44092	1.000

Community Base	-.23214	.47981	1.000
Home Health	-.24603	.53843	1.000

RQ 4: What is the relationship between the need for continuing education and perceived competence of OT's in older driver screening, assessment, and intervention?

Bivariate linear regression analysis was performed to evaluate the relationship between the need for continuing education and perceived competence in older driver screening, assessment, and interventions. A significance level of .05 was used for the regression coefficients and the ANOVA analysis was also performed with the independent variable being continuing education and the dependent variable being the perceived competence of OT's in older driver screening, assessment, and intervention.

The null hypothesis was that there is no relationship between the need for continuing education and perceived competence of OT's in screening, assessment, and intervention, as measured by the Capacity Building Needs Questionnaire, specific to older drivers.

A linear regression was performed to analyze the relationship between the need for continuing education and perceived competence of OT's in screening, assessment, and interventions. The linear regression analysis did not reveal a statistically significant relationship between an OTs perceived competence in screening, assessment, and intervention and the need for continuing education ($\beta = 0.101$, $t(59) = .688$, $p = .494$) .Regression results indicated that perceived competence did not predict the need for continuing education, $R2=0.008$; $R=0.089$; $R2adj=-0.009$; $F(1, 59) = 0.474$, $p = 0.494$

(Refer to Table 21; Table 22). This model accounted for .8% of variance in perceived competence (Refer to Table 21).

Table 21

Model Summary Continuing Education and Perceived Competence

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.089[a]	.008	-.009	.77051

Table 22

ANOVA of Continuing Education and Perceived Competence

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.281	1	.281	.474	.494[b]
	Residual	35.027	59	.594		
	Total	35.309	60			

a. Dependent Variable: q9_1_11

b. Predictors: (Constant), q11_1_7

In addition a separate linear regression analysis was conducted on the need for continuing education on: 1) the perceived competence of screening, 2) the perceived competence of assessment, and 3) the perceived competence of intervention. The regression analysis did not reveal a statistically significant relationship between an OTs need for continuing education and perceived competence in screening ($\beta = .235$, $t(59) = .735$, $p = .095$). Regression results indicated that the perceived competence of screening did not predict the need for continuing education, $R2=0.009$; $R=0.095$; $R2adj=-0.008$; F

(1, 59) = 0.540, p = 0.465 (Refer to Table 23; Table 24). This model accounted for 9.5% of variance in perceived competence of screening (Refer to Table 23).

Table 23

Model Summary of Continuing Education and Perceived Competence on Screening

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.095[a]	.009	-.008	1.68403

Table 24

ANOVA of Continuing Education and Perceived Competence on Screening

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1.530	1	1.530	.540	.465[b]
	Residual	167.322	59	2.836		
	Total	168.852	60			

a. Dependent Variable: Screen competence

b. Predictors: (Constant), q11_1_7

Linear regression did not reveal a statistically significant relationship between an OTs need for continuing education and perceived competence in assessment (β = .303, t (59) = .818, p =.417). Regression results indicated that the perceived competence of assessment did not significantly predicted the need for continuing education, $R2$=0.011; R=0.106; R2adj=-0.006; F (1, 59) = 0.668, p = 0.417 (Refer to Table 25; Table 26). This

model accounted for 10.6% of variance in perceived competence of assessment (Refer to Table 25).

Table 25

Model Summary of Continuing Education and Perceived Competence on Assessment

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.106[a]	.011	-.006	1.95477

Table 26

ANOVA of Continuing Education and Perceived Competence on Assessment

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.554	1	2.554	.668	.417[b]
	Residual	225.446	59	3.821		
	Total	228.000	60			

a. Dependent Variable: Assessment competence
b. Predictors: (Constant), q11_1_7

Linear regression did not reveal a statistically significant relationship between an OTs need for continuing education and perceived competence in intervention (β = .178, t (59) = .507, p= .614). Regression results indicated that the perceived competence of intervention did not significantly predict the need for continuing education, $R2$=0.004; R=0.066; R2adj=-0.013; F (1, 59) = 0.257, p = 0.614 (Refer to Table 27; Table 28). This model accounted for .4% of variance in perceived competence of intervention (Refer to Table 27).

Table 27
Model Summary of Continuing Education and Perceived Competence on Intervention

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.066[a]	.004	-.013	1.84797

Table 28
ANOVA of Continuing Education and Perceived Competence on Intervention

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.877	1	.877	.257	.614[b]
	Residual	201.484	59	3.415		
	Total	202.361	60			

a. Dependent Variable: Intervention Competence
b. Predictors: (Constant), q11_1_7

Summary

Chapter 4 provided a comprehensive analysis of the findings and detailed information regarding the current capacity needs of OTs related to older driver screening, assessment, and intervention. The results of the research questions and hypothesis have been presented and reviewed. A descriptive analysis determined OTs felt that addressing driving through screening, assessment, and intervention is somewhat important, that currently OTs seldom address driving through screening, assessment, and intervention, and OTs are not very likely to take continuing education courses related to driving in the next two to three years. A linear regression analysis was used and the findings supported a relationship between an OT's actual practices and perceived competence in older driver screening, assessment, and interventions. The Null Hypothesis 2 was rejected. A one way

ANOVA analysis was used with the Bonferroni post hoc and the findings supported the demographic variable of practice setting having an influence on actual practices related to older driver screening, assessment, and intervention and perceived competence. The Null Hypothesis 3 was rejected. However, the demographic variables of years of experience, level of education, practice setting, and gender did not support an influence on actual practices related to older driver screening, assessment, and intervention and perceived competence. Therefore, the Null Hypothesis 3 was accepted in that regard. A linear regression analysis was used and the findings did not support a relationship between the need for continuing education and perceived competence of OT's in older driver screening, assessment, and intervention. The Null Hypothesis 4 was accepted. The 61 survey responses analyzed did not reach statistical significance. Therefore, all the data has limited value as there is just not enough to draw any conclusions.

Chapter 5 summarized the study's finding and their interpretation, discussed limitations found while conducting the study, and concluded with recommendations for possible future research.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

This study was carried out to determine the current capacity building needs of OTs related to older driver screening, assessment, and intervention. In Chapter 5, I summarize this study's key findings, provide an interpretation of the results, and conclude with recommendations for future research. This research was primarily conducted to provide a better understanding of the skill sets of OTs who provide services to older drivers.

The EHP was the theoretical framework for this study. The EHP model was used as a client-centered model that viewed each person individually, while taking into account the person's past experiences, skills, needs, and attributes (Peddleton & Schultz-Krohn, 2001). According to the EHP model and the study results, OTs felt that addressing driving through screening, assessment; and intervention is somewhat important, that currently OTs seldom address driving through screening, assessment and intervention; and OTs are not very likely to take continuing education courses related to driving in the next 2 to 3 years. I found that there was a relationship between an OT's actual practices and perceived competence in older driver screening, assessment, and interventions, which resulted with the null hypothesis being rejected. I found that the demographic variable of practice setting had an influence on actual practices related to older driver screening, assessment, and intervention and perceived competence, which led to the null hypothesis being rejected. However, the demographic variables of years of experience, level of education, gender, and regional location did not have an influence on

actual practices related to older driving screening, assessment, and intervention and perceived competence, which led to the null hypothesis being accepted. I also found that there was a relationship between the need for continuing education and perceived competence of OT's in older driver screening, assessment, and intervention, which led to the null hypothesis being rejected. Given the limited number of responses, the study did not reach a statistical significant participant rate. Therefore, this presented a limitation as not enough data were collected to draw any conclusions.

Interpretations of the Findings

The primary research objective of this study was to determine the current capacity building needs of OTs related to older driver screening, assessment, and intervention. Previous researchers (Korner-Bitensky et al. 2010) reported that participants were most competent in using screening to address driving, a few participants conducted on-road assessments, and there was little perceived competence or professional focus related to older driver intervention. In addition, it was reported that a substantial portion of participants were willing to engage in continuing education (Korner-Bitensky et al., 2010). Three additional research questions were proposed to determine the relationship between an OT's actual practices and perceived competence, to determine the influence of demographic variables on actual practices related to older driver screening, assessment, and intervention and perceived competence, and to determine the relationship between the need for continuing education and perceived competence. RQ 1: What is the current capacity building need of OTs related to older driver screening, assessment, and intervention?

RQ1 evaluated the current capacity building need of OTs in which I determined that OTs felt that addressing driving through screening, assessment, and intervention was somewhat important. This disputed Korner-Bitensky et al.'s (2010) study, in which respondents felt addressing driving was very important. I determined that currently OTs seldom address driving through screening, assessment, and intervention. This also disputed Korner-Bitensky et al.'s study, in which the majority of the respondents were addressed through screening tools. I determined that OTs are not very likely to take continuing education courses related to driving in the 2 to 3 years. This disputed Korner-Bitensky et al.'s study, in which the respondents were most likely to consider taking continuing education courses. Given that this study disputed Korner-Bitensky et al.'s study, Stav (2008) stated that OTs encounter clients with driving issues throughout the continuum of care cycle; therefore, driving should be very important. Although it was determined that OTs seldom address driving, Dickerson et al. (2011) believed that OTs have the skills to determine drivers who are safe, at risk, and those who need further evaluation. Due to OTs' feelings of addressing driving being somewhat important and them seldomly addressing driving, this could be the reason as to why OTs are not likely to take a continuing education course in the next 2 to 3 years. Even though the results do not directly align with Scott's (2003) statement of OTs playing "a vital role in assessing the actual driving capability of older drivers who are thought to be potential risks" (p. 39) and it disputed Korner-Bitensky et al.'s study, OTs play a role in lives of older adults and driving needs to be addressed. This study also supported Yanochko (2005) study because,

if driving is emphasized and exposed to OT graduate students, as clinicians they are more likely to address this issue.

RQ 2: What is the relationship between an OT's actual practices and perceived competence in older driver screening, assessment, and interventions?

RQ2 examined the relationship between an OT's actual practices and perceived competence in older driver screening, assessment, and interventions. In a linear regression analysis, I determined that there was a strong positive relationship between an OT's actual practices and perceived competence ($p<.001$) in older driver screening, assessment, and interventions. This supported Korner-Bitensky et al.'s (2010) study in which the actual practice yielded a high competence percentage. When looking at the actual practices and perceived competence of OTs, it must be remembered that, if an OT feels competent, they will exemplify it in their actual practices as seen in Korner-Bitensky et al..There was also a strong positive relationship between an OTs actual practice and perceived competence in screening ($p<.001$), between OTs actual practice and perceived competence in assessment, and between OTs actual practice and perceived competence in intervention. The positive relationship between actual practices and perceived competence can enable older drivers to keep their driving independence longer, while encouraging them to operate their vehicle confidently and safely (Scott, 2003). The actual practices and perceived competence in screening, assessment, and intervention will give the driver an accurate picture of their driving skills (Scott, 2003).

RQ 3: What is the influence of demographic variables (years of experience, level of education, practice setting, gender, and regional location) on actual practices related to older driving screening, assessment, and intervention and perceived competence?

RQ3 examined the influence of demographic variables (years of experience, level of education, practice setting, gender, and regional location) on actual practices related to older driving screening, assessment, and intervention and perceived competence A one way ANOVA analysis was used with the Bonferroni posthoc, and the findings supported the demographic variable of practice setting having an influence on actual practices related to older driving screening, assessment, and intervention and perceived competence ($p<0.05$). However, the demographic variables of years of experience, level of education, practice setting, and gender were not an influence on actual practices and perceived competence ($p>0.05$). Rehab hospitals represented 20.9% ($n= 14$), outpatient 21.7% ($n=15$) and other 24.6% ($n= 17$) whereas acute care hospitals and rehabilitation centers equally represented the participants in study done by Korner-Bitensky et al. (2010). This study aligns with Stav's (2004) finding in which therapists address driving in different ways and to varying degrees depending on the work setting.

RQ 4: What is the relationship between the need for continuing education and perceived competence of OT's in older driver screening, assessment, and intervention?

RQ4 examined the relationship between the need for continuing education and perceived competence. A linear regression analysis was used and determined there was a strong positive relationship between the need for continuing education and perceived competence of OT's in older driver screening, assessment, and intervention ($p>.001$).

This supports Yanochko's (2005) study, in which it was suggested that more education on driving at all levels from OT school to regular facility in services is implemented. It also supported Yuen and Burik's (2011) study who noted that, by providing education that equips the therapist with the knowledge, skills, and practice in driver assessment and training, the therapist had the confidence and competence to provide this service. It did not reveal a strong, positive relationship between an OT's actual practice and perceived competence in screening ($p > .001$), between an OTs actual practice and perceived competence in assessment ($p > .001$), nor did it reveal a strong, positive relationship between an OTs actual practice and perceived competence in intervention ($p > .001$). When OTs are provided education that equips them the knowledge, skills, and practice in driver assessment and training, they have both the confidence and competence to provide this service their older adults (Yuen & Burik, 2011). However, I found that OTs are not interested in continuing education courses related to older drivers which in turn would increase their perceived competence.

Limitations of the Study

Research Design

A quantitative cross-sectional survey was chosen as the research design to allow me to broaden the limited knowledge regarding the skill set for OTs working with older drivers. A qualitative study would be challenging due to travel and time constraints given the geographical broadness of the study (all 50 states) to obtain data from participants. This design allowed OTs working with geriatrics across the United States to participate in order to achieve a sample size to answer the research question of what is the current

capacity-building need of occupational therapists related to older driver screening, assessment, and intervention. Another limitation to the design is the assumption that OT participants would answer the questionnaire honestly and one time only. In addition, the limitation of the design related to the number of participants who completed the entire survey as it did not reach a statistical significant participation rate as well as it did not include the option to fill in responses where "other" was a choice.

Generalizability

The target population for this study was occupational therapists who work with older adults ages 55 and up. The study did not include occupational therapy assistants as the scope of practice states occupational therapists are responsible for all aspects of screening, assessment, and intervention. The reliability and validity of the questionnaire was completed by Korner-Bitensky, Menon, von Zweck and Van Benthem (2010). Their questionnaire included themes and topics that were important to elicit information. The journey of establishing reliability and validity, Korner-Bitensky, Menon, von Zweck and Van Benthem (2010) gave the final version to several clinicians who were similar in nature to those they actually studied. The internal threat to validity which presented the concern of participants having the certain characteristic of driver rehabilitation background was controlled as driver specific associations and organizations were excluded from the study. It is suggested that the external threats of interaction of setting and treatment and interaction of selection and treatment be addressed by completing the study in other countries. However since this study did not reach a statically significant participant rate, this study cannot be generalized.

Recommendations

The execution and results of this study supports the need for further research about the current capacity-building need of occupational therapists related to older driver screening, assessment, and intervention. With the baby boomers aging and wanting to maintain their independence, the OT profession will steadily grow (Illinois Occupational Therapy Association, 2014). Although it was determined that OTs feel that addressing driving through screening, assessment, and intervention is somewhat important, that currently OTs seldom address driving through screening, assessment, and intervention, and OTs are not very likely to take continuing education courses related to driving in the next two to three years. This will need to be further researched especially when driving is a part of the occupational therapy practice framework. When compared to the number of OTs in this profession, the response rate for this study was low, 61 out of 102, 500. However, future studies should include determining how many therapists work with those 55 years and older and the possibility of conducting this survey study design at the American Occupational Therapy Association conference and or their state association conference to increase the response rate. Future studies could also consider using this survey in other countries outside of the United States and Canada.

Implications

Positive social change

As a person ages, driving skills such as vision, cognition, motor skills, and reaction time decline (Davis & DeBarros, 2007). This study is a significant endeavor in promoting older driver safety in the OT profession especially when baby boomers and the

number of license drivers are increasing (Carr, Duchek, Meuser, & Morris, 2006). The results are an eye opener to the OT profession given that OTs felt that addressing driving through screening, assessment, and intervention is somewhat important, that currently OTs seldom address driving through screening, assessment, and intervention, and OTs are not very likely to take continuing education courses related to driving in the next two to three years. These results will hopefully encourage OTs to become more involved in the driving concerns of their older clients by identifying their areas for improvement their areas for improvement related to the screening, assessment and or intervention process of older drivers. In addition this study could encourage OTs who provide screening, assessments, and or interventions to older drivers to develop and implement programs focused towards awareness of older driver's driving abilities in their various work settings. For the various OT programs this study could lead to the enhancement of current curricula to more fully address driving screening, assessment and intervention at the academia level.

This study can facilitate communication between older drivers, their families, other healthcare professionals and OTs by helping the older driver play an active role in the future of their driving plan. By understanding the functional areas that decline as a person ages, communities can benefit by facilitating changes at the local, state, and national level about the laws, policies, and development of older driver educational courses. With the current capacity building needs determined, this study can serve as a guide for both state and national OT associations to develop and implement older driver programs. In addition, this study supports the need of partnerships between OTs and the

Department of Highway Safety and Motor Vehicles (DHSMV), the Department of Motor Vehicles (DMV), and various associations for the geriatric population to promote safe drivers.

Conclusion

Prior to this study the current capacity building needs of occupational therapists related to older driver screening, assessment, and intervention were unknown. The results of this study yield the need for future studies to why OTs feel that addressing driving through screening, assessment, and intervention is somewhat important, why OTs seldom address driving through screening, assessment, and intervention, and why OTs are not very likely to take continuing education courses related to driving in the next two to three years when driving is a part of the occupational therapy practice framework. The focus of the OT profession related to older drivers alone can lead to positive social actions at the local, state, and national levels. Older drivers are a social issue that must be addressed in order to maximize their independence and their safety on the road.

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Appendix A: Capacity Building Questionnaire

CAPACITY BUILDING QUESTIONNAIRE

OLDER DRIVER SCREENING, ASSESSMENT AND INTERVENTION

Used with approval from N. Korner-Bitensky, C. von Zweck, K. Van Benthem

Health Professional Group - OCCUPATIONAL THERAPISTS

RESPONDENT IDENTIFICATION AND INTRODUCTION

Hello, my name is Ranyouri Hines from Walden University. We are conducting a study among American occupational therapists regarding their needs and interests for continuing education in the field of older drivers. Based on the study results we will design strategies to meet the needs of Canadian OTs.

Eligibility Checklist

E1. Are you currently providing clinical services as an OT? Yes (1) No (2)

E2. If yes, do you currently work with individuals whose age is >55? Yes (1) No (2)

E3. Do you feel you require professional training related to older driver safety? Yes (1) No (2)

E3a **- IF RESPONSE IS NO**- SPECIFY REASON PLEASE.

_____

_____

_____

As I mentioned, we are exploring the educational and resource needs of health care professionals as related to driver safety services including driver screening, in-depth driver assessment and driver safety interventions/retraining, car adaptations etc.

IF ELIGIBLE SAY - The survey will take about 10 minutes to complete. Please be assured that all of your responses will remain strictly confidential – your name will not appear in any reports or publications.

Demographics

S1. **RECORD GENDER**

Male	1
Female	2

S2.In what type of setting(s) do you work? (If more than one setting indicate both).

#1_____

#2_____

TRAINING NEEDS RELATED TO THE OLDER DRIVER

You will be asked some questions about your continuing education needs related specifically to older drivers. Please indicate how important each knowledge area is for you.

		Very important	Somewhat important	Not very important	Not at all important	REF/ DK
A1	Brief Screening of Physical Impairments	1	2	3	4	9
A2	Brief Screening of Visual Impairments	1	2	3	4	9
A3	Brief Screening of Visual-perception Imp.	1	2	3	4	9
A4	Brief Screening of Behavioral Impairments	1	2	3	4	9
A5	Brief Screening of Cognitive Impairments	1	2	3	4	9
A6	Brief Screening of Endurance/Fatigue	1	2	3	4	9

B1	In depth Assessment of Physical Impairments	1	2	3	4	9
B2	In depth Assessment of Visual Impairments	1	2	3	4	9
B3	In depth Assessment of Visual-perception Imp.	1	2	3	4	9
B4	In depth Assessment of Behavioral Impairments	1	2	3	4	9
B5	In depth Assessment of Cognitive Impairments	1	2	3	4	9
B6	In depth Assessment of Endurance/Fatigue	1	2	3	4	9
C 1	Evidence-Based Practice in Driving Assessment	1	2	3	4	9
C 2	Research skills (critical reading of driving literature, etc.)	1	2	3	4	9
C 3	Software/computer skills needed to use tests	1	2	3	4	9
C 4	Medical conditions and their effects on driving	1	2	3	4	9
C 5	Medications and their effects on driving	1	2	3	4	9
C 6	Information on validity of screening and assessment tools	1	2	3	4	9
C 7	Information on legal issues related to driving and the OT responsibility	1	2	3	4	9
C 8	Information on driving cessation and its impact	1	2	3	4	9
C 9	Information on how to optimize mobility after driving cessation	1	2	3	4	9
C10	Strategies for sharing news regarding the need for driving cessation	1	2	3	4	9
C11	On-road Assessment	1	2	3	4	9

C12	Vehicle modification for various disabilities	1	2	3	4	9
C13	Optimizing vehicle choice for healthy older drivers	1	2	3	4	9
C14	Refresher interventions for healthy older drivers	1	2	3	4	9
C15	Rehabilitation interventions for retraining disabled older drivers	1	2	3	4	9

C16. Before you move on to the next section please specify any other area(s) of knowledge related to older drivers that is important to you that we did not cover here. SPECIFY

_____

_____

_____

_____

_____

As related to older drivers and driving safety how competent do you feel right now regarding your clinical expertise related to:

		Very competent	Somewhat competent	Not very competent	Not at all competent	REF/ DK
O1	Choosing Valid Screening/Assessment Tools	1	2	3	4	9
O2	Performing Screening of Impairments	1	2	3	4	9
03	Performing In-depth Assessment of Impairments	1	2	3	4	9
04	Assessing on-road fitness to drive	1	2	3	4	9
05	Professional responsibility re older drivers	1	2	3	4	9

06	Legal issues and liability related to driver screening, assessment, retraining	1	2	3	4	9
07	Driving cessation and the OT role	1	2	3	4	9
08	Your state's regulations related to older driver screening/assessment	1	2	3	4	9
09	Recommending car adaptations	1	2	3	4	9
010	Knowledge about specific client populations or conditions that affect driving (e.g. stroke, arthritis, head injury etc.)	1	2	3	4	9
011	Research skills (analysis, critical reading of driving literature, etc.)	1	2	3	4	9

012. Before you move on please specify any other area(s) about competence related to older drivers that is important to you that we did not cover here. SPECIFY

_____

_____

_____

CURRENT DRIVING RELATED PROFESSIONAL ACTIVITIES

I am now going to ask you about your current (over the past year) driving related practices.

		Often	Sometimes	Seldom	Never	REF/DK
CE1	Currently do any driver screening	1	2	3	4	9
CE2	Currently do any in-depth pre-road assessments	1	2	3	4	9
CE3	Currently do any on-road assessments	1	2	3	4	9
CE4	Currently do any older driver refresher training	1	2	3	4	9
CE5	Currently do any driver retraining	1	2	3	4	9
CE6	Currently make recommendations about	1	2	3	4	9

vehicle adaptations/modifications

CONTINUING EDUCATION INTERESTS

You will be asked about your continuing education needs related specifically to driving practices and your preferred learning methods.

How likely is it that you will undertake training in driving over the next two to three years related to?

		Very likely	Somewhat likely	Not very likely	Not at all likely	REF/DK
SE1	Screening of older adults for driving safety	1	2	3	4	9
SE2	In-depth pre-road assessment of older drivers	1	2	3	4	9
SE3	In-depth on-road assessment of older drivers	1	2	3	4	9
SE4	Retraining/refresher interventions	1	2	3	4	9
SE5	Vehicle modification/ use of adaptations	1	2	3	4	9

SE6. How likely is it that you would undertake any type of training in driving over the next two to three years, if the programs required intensive daily in person attendance for a period of one or two weeks at a time and place convenient for you?

1	Very likely
2	Somewhat likely
3	Not very likely, or
4	Not at all likely
9	REFUSED/Don't know

SE7. How likely is it that you would undertake any type of training in driving over the next two to three years, if the programs required intensive Internet participation at a time and duration convenient for you?

1	Very likely
2	Somewhat likely

Not very likely, or 3
Not at all likely 4
REFUSED/Don't know 9

SE8. If you responded *not at all likely* or *not very likely* to SE1 or SE2 please select reasons.

I am satisfied with my current training in driving 1
I have no time for additional training in driving 2
Cost of training is too expensive 3
Don't need knowledge on driving for my work 4
Other (SPECIFY) _____ 5
REFUSED/Don't know 9

SE9. Do you live within a 25 mile of a major city or university that hosts educational events (courses, colloquiums, seminars etc.) in your field of practice? (25miles: about 40 minute drive)

YES 1 NO 2

SE10. Does your employer support you in upgrading your training, for example, by giving time off or funding educational pursuits such as conferences and seminars?

a. Time off
YES 1 NO 2
b. Covering the cost of courses YES 1 NO 2

C: Other - SPECIFY

_____

_____

_____

_____

SE11. About how many hours of training (courses, self-directed learning, conferences) have you participated in during the last year related specifically to older drivers?

_____ hours

SE11A. If >0 hours SPECIFY TYPE OF ACTIVITIES please:

_____

_____

SE12. On average, how many hours of training (courses, self-directed learning, conferences) have you participated in during the last year related to general driving related issues?

_____ hours

SE13. If you were to participate in driving related continuing education who would pay for these? Would it be _____?

You	1
Your employer, or	2
Shared between you and your employer	3
Other: _____	4
Don't know	9

SE14. Compared to other professional continuing education courses you might take, how important to you is continuing education on topics related to older drivers?

	Very important
1	
	Somewhat important
	2
	Not very important
	3
	Not at all important
	4
REFUSED/Don't know	9

We have just 3 questions left

SE15. What occupational therapy degree(s) do you hold?

Diploma	1
BSc OT	2

MSc (SPECIFY_)
3
PhD 4
Other (SPECIFY: _____) 5

SE16. Do you hold a degree in another discipline?

Diploma 1
BSc 2
MSc (SPECIFY_)
3
PhD 4
Other (SPECIFY: _____) 5
No degree in another discipline 9

SE17. In what year did you graduate with your latest degree?

_____ RECORD YEAR

THE QUESTIONNAIRE IS NOW FINISHED, THANK YOU VERY MUCH FOR YOUR TIME AND CO-OPERATION!

F1: Is there anything else you would like to tell us about your continuing education needs as related to older drivers?

_____

_____

_____

_____

Appendix B: Administrator Request Response

Apr 10 at 12:42 PM
Hi Ranyouri,
Thank you for checking. You may link to a survey, but you are not allowed to post the actual survey. If you are looking for a different way to engage participants, you should provide as much specific information as possible and a way for them to contact you. Also, to avoid spam, the system only allows you to post a message in one forum at a time. You can put the information in up to 3, but you need to change the wording for it to get through the filters. Let me know if you have additional questions.
Laura

Laura Collins
Director of Communications
American Occupational Therapy Association, Inc.
4720 Montgomery Ln.
Bethesda, MD 20814-5320
301-652-2682 x2866
301-652-7711 (Fax)
LCollins@aota.org

Greeting fellow OTs!

Response from Florida Occupational Therapy Association
Apr 16 at 8:30 PM
Dear Ranyouri,
Your question sent to FOTA last week was provided to me and I promised to respond. I apologize that it was taken me awhile to do so.

FOTA is in the process of developing our policy related to research and recruitment of research participants. We are not there yet, but hopefully soon.

In the meantime, feel free to use FOTA's Facebook page for recruitment. I hope this helps.

Sincerely,
Elena
Elena Vizvary
FOTA President
ervizvary@verizon.net

Appendix C: Consent Form

CONSENT FORM

You are invited to take part in a research study for OTs who currently work with older adults ages 55 and up. This study will include OTs only in the United States who work in various settings (i.e. hospital, outpatient, rehabilitation, skilled nursing facility, etc.). This form is part of a process called "informed consent" to allow you to understand this study before deciding whether to take part.

This study is being conducted by a researcher named Ranyouri Quanda Hines, who is a doctoral student at Walden University.

Background Information:
The purpose of this study is to determine what are the current capacity building needs of occupational therapists who work with older drivers as it relates to their screening, assessment, and intervention.

Procedures:
If you agree to be in this study, you will be asked to:

____Log onto the survey server (a link will be provided).
____Complete the survey questionnaire which will take 15- 30 minutes
____Complete the survey in one sitting from start to finish
____Data will be collected one time therefore participants are only granted access to the survey one time.

The survey questionnaire will be Likert type questions and open ended questions such as:

How competent do you feel right now regarding your clinical expertise related to....
Choosing Valid Screening/Assessment Tools **(**1= Very competent, 2 = Somewhat competent, 3 =Not very competent, 4= Not at all competent or 9 = Refused/ Don't know)

Do you currently do any driver screening? If yes, please describe.
In what type of setting(s) do you work? (If more than one setting indicate both).

In addition, demographical information such as practice setting will also be included.

Voluntary Nature of the Study:
This study is voluntary. Everyone will respect your decision of whether or not you choose to be in the study. No one at Walden University will treat you differently if you decide not to be in the study. If you decide to join the study now, you can still change your mind later. You may stop at any time.

Risks and Benefits of Being in the Study:

Being in this type of study involves some risk of the minor discomforts that can be encountered in daily life, such as fatigue, stress or becoming upset. Being in this study would not pose risk to your safety or wellbeing. However, participants would benefit by identifying what (if any) areas of improvement they have related to older drivers.

Payment:
There is none.

Privacy:
Any information you provide will be kept confidential. The researcher will not use your personal information for any purposes outside of this research project. Also, the researcher will not include your name or anything else that could identify you in the study reports. Data will be kept secure by providing participant number and only that number will be used throughout the research process. The researcher will store data collected in a password protected server. Data will be kept for a period of at least 5 years, as required by the university.

Contacts and Questions:
You may ask any questions you have now. Or if you have questions later, you may contact the researcher via email at ranyouri.hines@waldenu.edu. If you want to talk privately about your rights as a participant, you can call Dr. Leilani Endicott. She is the Walden University representative who can discuss this with you. Her phone number is 612-312-1210. Walden University's approval number for this study is **IRB will enter approval number here** and it expires on **IRB will enter expiration date.**

Please print or save this consent form for your records. (for online research)

Statement of Consent:

I have read the above information and I feel I understand the study well enough to make a decision about my involvement. By clicking the link below, I understand that I am agreeing to the terms described above.

Ranyouri Hines Senia, MHS, OTR/L, DRS
Riverview, Florida
rqhines@yahoo.com

QUALIFICATIONS

Over seven years of experience in the healthcare field as an Occupational Therapist including supervising Occupational Therapy Assistants and Occupational Therapy Students in various clinical settings. Utilizes teaching and consulting skills daily with clients, families, and other staff/ team members. Developed and managed the daily operations of a small business. Respectful and exemplifies professionalism at all times.

EDUCATION

Doctor of Philosophy, Health Services with specialization in Healthcare Administration, Expected Graduation March 2015
Walden University, ***Minneapolis***, Minnesota
Dissertation: What is the current capacity building needs of occupational therapist related to older driver screening, assessment, and intervention?
Chair: Dr. Jeff Snodgrass
Co-Chair: Dr. Cheryl Anderson
URR: Maria Jaworski

Master of Health Science, Occupational Therapy, May 2008
Medical College of Georgia, Augusta, GA
Thesis: Suitability of the Sensory Profile as a predictor for the use of weighted vests with young children exhibiting off task behaviors
Advisor: Sharon Swift

SCHOLARLY& PROFESSIONAL AFFILIATIONS

American Occupational Therapy Association
Member 2005- Present
Delta Sigma Theta Sorority Incorporated
Member 2009- Present
Second Vice President June 2014- Present
Southern Region Conference Committee member 2014
International Awareness and Involvement Committee Chair
August 2011- June 2014
Florida Occupational Therapy Association
2012- Present
Membership Committee October 2014- Present

Region 9 Representation October 2014-Present
South University Occupational Therapy Assistant Program
Board Member 2012-Present

EMPLOYMENT HISTORY

- Behind the Wheel Rehab, LLC, Owner and Operations Manager, February 2012-present
  Developed and built business from start up including developing relationship with stakeholders
  Overseeing the daily performance of the business such as the budget, compliance, marketing, recruiting, establishment of accounts and other administrative duties
  Responsibilities include providing driver rehabilitation services to the geriatric population as well as to those with disabilities which includes screens, evaluations, interventions, discharges and referrals as needed based on their driving needs.
  Consult with clients, families, healthcare professionals and various organizations about the medical diagnoses and their affect on driving
  Assisting those with mental disorders to become independent in the community
- United Therapy Staffing, Per Diem Occupational Therapist, September 2013-present
  Responsibilities include providing Occupational Therapy services to the adult and geriatric population with various dysfunctions in the home setting which includes screens, evaluations, interventions, discharges and referrals as needed.
- Innovative Senior Care, Full-time, Per Diem Occupational Therapist, July 2010- present
  Responsibilities include providing Occupational Therapy services to the adult and geriatric population with physical dysfunctions which includes screens, evaluations, interventions, discharges and referrals as needed.
  Supervise occupational therapy assistants.
  Comply with 85% productivity.
  Provide in service training as needed to promote patient safety in the facility.
  Reaching set productivity as designated by the rehab director.
- Cirrus Medical Staffing, Travel Occupational Therapist, September 2008- June 2010
  Responsibilities include providing Occupational Therapy services during a set contract agreement across multiple buildings to the adult

and geriatric population with physical dysfunctions which included screens, evaluations, interventions, discharges and referrals as needed.
Developed and implemented various activities for patients in inpatient, outpatient, skilled nursing facilities, acute care centers, hospice, and psychiatric settings based on their diagnosis
Provided in-service training to activity aides to facilitate in maximizing the independence of clients upon discharge

LICENSES/ CERTIFICATION

- Connecticut Board of Occupational Therapy State License, January 2015- *Active*
- Florida Board of Occupational Therapy State License, September 2008- *Active*
- Georgia Board of Occupational Therapy State License, September 2008- *Active*
- National Board of Occupational Therapy Certification, September 2008- *Active*
- Certified Lymphedema Therapist, June 2009- *Active*
- Certified Health Coach- April 2014- Active

SPECIALITY

- Driver Rehabilitation Specialist