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The Home Health Aide Experience: Opportunities for Occupational Therapy

Julia Mindlina
Eastern Kentucky University, julia_mindlina@mymail.eku.edu

THE HOME HEALTH AIDE EXPERIENCE: OPPORTUNITIES FOR OCCUPATIONAL THERAPY

Presented in Partial Fulfillment of the
Requirements for the Degree of
Doctor of Occupational Therapy

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Julia Mindlina
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EASTERN KENTUCKY UNIVERSITY
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This project, written by Julia Mindlina under direction of Dr. Shirley O'Brien, Faculty Mentor, and approved by members of the project committee, has been presented and accepted in partial fulfillment of requirements for the degree of

DOCTOR OF OCCUPATIONAL THERAPY

CAPSTONE COMMITTEE

Shirley O'Brien 5-2-19

Faculty Mentor Date

Leah Simpkins 5-2-19

Committee Member Date

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DEPARTMENT OF OCCUPATIONAL SCIENCE AND OCCUPATIONAL THERAPY

Certification

We hereby certify that this Capstone project, submitted by Julia Mindlina conforms to acceptable standards and is fully adequate in scope and quality to fulfill the project requirement for the Doctor of Occupational Therapy degree.

Approved:

Dana Howell 5/17/19

Dana Howell, PhD, OTD, OTR/L, FAOTA Date
Program Coordinator, Doctor of Occupational Therapy

Colleen Schneck 5/17/19

Colleen Schneck, ScD, OTR/L, FAOTA Date
Chair, Department of Occupational Science and Occupational Therapy

Executive Summary

Background: Home health aides provide necessary multi-faceted care to individuals requiring assistance to age within their home. Current literature is scarce in providing a comprehensive picture of the daily experiences of home health aides to adequately address education and training.

Purpose: The purpose of this capstone was to gain an in-depth understanding of the subjective experiences of home health aides when working with their clients. An additional focus was placed on the physical challenges home health aides face daily in their work.

Theoretical Framework: This capstone used the Model of Human Occupation as the guiding theoretical framework.

Methods: A descriptive qualitative approach was implemented with eight home health aides, using semi-structured interviews. Colaizzi's descriptive phenomenological method was utilized for data analysis procedures. Data triangulation occurred to strengthen rigor in the analysis.

Results: Home health aides believed the use of a client-centered approach to providing care to their clients was important. The exhaustive description of the phenomenon was: "Know the rules and know your clients even better." Additional results from the capstone project findings suggested the following: home health aides assist their clients with a wide range of activities to support their independence within their home, transferring clients was identified as the most physically demanding task for the home health aides, and study participants believed new home health aides could benefit from training in client positioning, appropriate use of adaptive equipment, and proper lifting mechanics in various contexts.

Conclusions: The results of this capstone project expanded our awareness of the home health aide population by gaining insight into their subjective experiences when engaging in co-occupations with their clients. Ensuring home health aides have proper support and educational training to address the physical obstacles they face in their line of work daily is key in supporting their physical health and improving work retention. Future research examining the role of occupational therapy involvement with education and training would provide relevant information for possible strategies to support home health aides in their service roles.

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CERTIFICATION OF AUTHORSHIP

Submitted to (Faculty Mentor's Name): Dr. Shirley O'Brien
Student's Name: Julia Mindlina
Title of Submission: The Home Health Aide Experience: Opportunities for Occupational Therapy

Certification of Authorship: I hereby certify that I am the author of this document and that any assistance I received in its preparation is fully acknowledged and disclosed in the document. I have also cited all sources from which I obtained data, ideas, or words that are copied directly or paraphrased in the document. Sources are properly credited according to accepted standards for professional publications. I also certify that this paper was prepared by me for this purpose.

Student's Signature: Julia Mindlina

Date of Submission: 5/3/19

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SECTION ONE: NATURE OF PROJECT AND PROBLEM IDENTIFCATION

Introduction

According to the American Association of Retired Persons' (AARP) survey in 2012, ninety percent of seniors stated they planned to live in their current homes in the upcoming five to ten years. Twenty percent of Americans seventy or older reported they could not live independently without assistance from the community or caregivers (American Association of Retired Persons, 2012). Some individuals may need guidance with organizing and sequencing their daily routines; for example, taking medications, maintaining finances, home-maintenance, and other activities to support independence. Others may require assistance with completing self-care activities such as bathing, dressing, and toileting due to decreased cognition, generalized weakness, injury, or a debilitating medical condition. Thus, a large percentage of the aging population plan to stay in their homes but may not be cognizant of the challenges of aging in place without considerations of the necessary supports.

When an individual is no longer able to live within their home independently, they are required to make a choice about how they will support their health care needs. If they are unable to independently make this decision due to impaired cognition, a family member or selected Power of Attorney surrogate in charge of their care is required to make a choice on their behalf. Individuals who require more intensive medical services, physical assistance, and supervision can reside in a skilled nursing facility where they have access to professional and medical support twenty-four hours per day (Senior Living, n.d.). This is often an option that individuals and families decide upon when support is not available at home. While this setting provides individuals with around the clock care, one study suggested individuals who reside in a nursing home experience a lower quality of life than individuals receiving care within their own home

(Olsen et al., 2016). In comparison to peers receiving home health care services, individuals with moderate dementia living in a skilled nursing facility displayed a higher frequency of assistive device use for ambulation and use of psychotropic medications, decreased exposure to natural light, and fewer social interactions with others (Olsen et al., 2016). Thus, an individual receiving assistance within the comfort of their own home may display more positive health outcomes.

The aging in place movement which supports the concept of home health care, has allowed many individuals to stay in their homes and receive medical assistance rather than relocate to a skilled facility (Wiles, Leibing, Guberman, Reeve, & Allen, 2012). By remaining within their familiar surroundings, individuals were able to maintain social relationships and participate in the community functions they were accustomed to. Olsen et al., (2016) suggests the ability to maintain function within the home setting, even with assistance is correlated with an increased sense of acceptance and inner-connectedness within one's community. Home health care offers both skilled (occupational therapy, physical therapy, nursing, etc.) and non-skilled services (home health aides) based upon the needs of the client (Senior Living, n.d.). Thus, different levels of supports are present to support aging in place.

When an individual needs extra support to live at home, others are called upon to step in to assist performing daily living tasks. Non-paid, or informal caregivers include spouses, children, family members, friends, or neighbors (Family Caregiver Alliance, 2016). Formal caregivers, also referred to as home health aides are individuals employed through a home health organization that provide services in self-care, home maintenance, community mobility, and other tasks within the individual's home (Bureau of Labor Statistics, 2018). Other terms used in the literature describes individuals in this role include home care aide, home support worker, and direct service worker (Blau, Chapman, & Neri, 2016; Campbell, 2018; Ejaz, Bukach, Dawson,

Gitter, & Judge, 2015). For the general purposes of this capstone project, employees who are paid to assist individuals in the completion of daily self-care, home maintenance, and community mobility activities were referred to as home health aides.

Review of current literature and discussion with several home health agencies have revealed inconsistent prerequisite requirements and training to prepare home health aides for working with clients. Information was gained from interviews with six home health aides from a total of three different agencies for a needs assessment data collection during Summer 2018. This data revealed that home health aides were performing many of the same responsibilities with clients as occupational therapists including self-care activities and physical handling tasks like bathing, dressing, community mobility, and functional transfers (American Occupational Therapy Association, 2018). While some of the home health aides stated they felt comfortable assisting their clients with these activities due to minimal assistance required of the client, others admitted that if their client needed more physical help or if family members were not around to assist, they were not sure if they would be able to help their client to the capacity necessary.

The Accreditation Council for Occupational Therapy Education (ACOTE) Standards preamble states that following education preparation through an accredited institution, occupational therapists are expected to provide skilled interventions to address physical, psychological, cognitive, and additional factors impeding successful performance in daily activities that impact overall health and quality of life of individuals. This education includes specialized practice in task adaptation and positioning to properly perform function transfers from one surface to the next during activities including toileting, bathing, getting out of bed, and other self-care tasks. In addition, occupational therapists are trained in strategy implementation to reduce fatigue of the client as well as prevention of injury for both the client and the

occupational therapist. These services that are provided by occupational therapists to their clients are classified as “skilled services.” If home health aides are assisting clients with similar activities, it could be beneficial for occupational therapists to provide educational training to home health aides on how to perform these tasks safely.

According to Gleason, Boerner, and Barooah (2016), approximately thirty percent to sixty-five percent of home health aides leave their job every year. A study by Ejaz and colleagues (2015) found the following to be predicting factors of job turnover in home health aides: job exhaustion, pessimistic social support, and the area (rural, urban, metropolitan). Metropolitan areas were found to have the lowest rate of home health aide retention (Ejaz et al., 2015). The factors identified may encompass a pattern of emotional and physical stress which plagues this healthcare position. Any level of stress that is sustained for a long period of time can take a physical toll on an individual, and those who regularly participate in physically demanding tasks could be at a greater risk of physical ailment. This is supported by literature that suggests home health aides experience physical injuries at a heightened frequency in comparison to other job positions (Brown & Mulley, 1997; Macdonald & McLean, 2018). Hands-on activities including patient handling and physical assistance during activities of daily living (ADL) or instrumental activities of daily living (IADL) create increased risk of injury for home health aides. According to the American Occupational Therapy Association (AOTA) Practice Framework, ADLs include self-care activities such as bathing, dressing, eating, walking, personal hygiene (grooming), and sexual activity (2014). IADLs include more complex activities such as: caregiving (people and pets), financial management, home maintenance, communication needs (computer or phone use), driving, and community participation (AOTA, 2014).

In Czuba, Summerich, and Lavender's research (2012), assistance during bathing was an activity that was found to be correlated to injuries incurred by home health aides. Acquired physical injuries have been attributed to inadequate training, lack of support from supervisors, and inadequate equipment for assisting their clients; for example, devices to assist with lifting, carrying, and moving clients (Macdonald & McLean, 2018). Ensuring home health aides have proper support and training to address the physical obstacles they face in their line of work daily is key in supporting their physical health and improving work retention.

Problem Statement

Home health aides undergo significantly increased physical stress within their line of work with minimal support which may contribute to decreased satisfaction with a home health aide position (Czuba et al., 2012). The problem this capstone project addressed was the perceived challenges facing home health aides as related to their work for success in employment to support aging in place considerations.

Purpose of the Project

Current literature displays statistics regarding the frequency of physical injuries in the home health aide population. A heightened physical stress level accompanies fulfilling role expectations in this position. However, few studies go in depth of the subjective experiences of home health aides in their daily routines. The purpose of this capstone was to gain an in-depth understanding of the subjective experiences of home health aides in a Midwestern area. An additional focus was placed on identifying the physical challenges home health aides face daily in their work.

Research Objectives

The objectives of the capstone were: (a) gain an in-depth understanding of the daily experiences of home health aides when working with their clients; (b) identify physical challenges home health aides face within their paid employment in natural settings; (c) determine if there are strategies occupational therapists can provide to prevent physical strain or injury for home health aides to support their service role in the home setting.

Theoretical Framework

The Model of Human Occupation (MOHO) provides a theoretical framework for how individuals initiate and adapt their actions based on feedback about their performance from the environment. In this model, humans are open systems comprised of three key segments: habituation, volition, and performance (Kielhofner, 2008). Volition involves an individual's values, interests, and personal causation. Personal causation is understood as the individual's confidence with their ability to accurately perform a task. The roles home health aides assume require different levels of physical strength and problem-solving skills, challenging their self-concept and confidence in their abilities. Habituation consists of the roles and routines individuals take on in their daily lives (Kielhofner, 2008). In this capstone project, the habituation of home health aides was focused on the activities they participated in as well as the tasks they assisted their clients with. The final component, performance, is where the individual develops efficiency with their actions through feedback. The MOHO is a dynamic system that alters as the interests, values, roles, routines of the individual change with their interaction with their surroundings to build occupational identity and competence (Kielhofner, 2008).

This model was utilized to enhance understanding in the factors that influenced the decision-making skills home health aides use while assisting their clients. By gaining insight into

the personal causation, values, and interests of the individual, I formulated a detailed picture of their current satisfaction with their occupational performance. If an individual does not feel confident in their ability to fulfill their responsibilities as a home health aide, this would negatively impact their self-esteem and concept of self. Insight into what may be causing the home health aide's current perception of their skills with consideration to the external factors impacting this can inform future interventions to address this discrepancy. In addition, having increased knowledge of the habituation of this population provided a basis of areas where occupational therapists can intervene to provide support for the home health aide

Significance of the Study

Due to the independent nature of their work, home health aides have minimal opportunity to receive assistance with patient care activities (Czuba et al., 2012). The resulting information could shed light on the experiences of home health aides as well as gaps in training and education for this population of workers. Home health agencies can utilize this knowledge to improve the structure of their training and support to discuss topics that are relevant and directly address the needs of the home health aides. It could also contribute to the concept of occupational therapists providing skilled services for proper lifting, task/environmental adaptations, and other support strategies for the home health aides. Through proper training and support, burnout, anxiety, depression, physical injury, and ultimately job turnover may be prevented which has been identified in review of research (Atler, Moravec, Seidle, Manns, & Stephans, 2016; Gleason et al., 2016; Macdonald & McLean, 2018).

Home health aides are crucial in facilitating the ability of individuals who require assistance to remain within their own homes (MacDonald & McLean, 2018). Inadequate education and training will result in continued job turnover within this field, resulting in

inconsistent service delivery and potentially contributing to a lack of support for individuals aging in their own homes. Aging in a facility instead of one's home where surroundings are familiar has been correlated with a decreased quality of life (Olsen et al., 2016). Therefore, it is important to ensure that home health aides are efficiently trained and supported through their work. Changes in home health trends will impact a multitude of areas in the medical field including discharge from hospitals, reimbursement from insurance companies, and regulations set by healthcare policy makers.

Summary

The cohesiveness between one's values, self-perceived effectiveness, and occupational performance is influential on satisfaction in occupational pursuits and overall quality of life. Home health aides play a vital role in supporting the ability for elderly requiring assistance to be able to remain living within their home environment. The occupational responsibilities involved in the day to day job expectations as a home health aide coincide with many areas that occupational therapists address in their skilled services; for example, assisting the client with dressing, bathing, medicine management, and community mobility. This population would benefit from additional research to gain an in-depth understanding of their subjective experiences as home health aides when working with their clients. Information about obstacles encountered, access to resources, task adaptations and other supports can inform the development of intervention supports to help close the gap between the content and training provided to home health aides and the roles and responsibilities they are expected to fulfill.

SECTION TWO: LITERATURE REVIEW

Introduction

The literature review focused on relevant information highlighting the value of home health care to aging in place and discrepancies surrounding home health aides to further display the need for this capstone project. Risk factors to safety included inadequate training (Ejaz et al., 2015; Gleason et al., 2016; Institute for Career Research, 2010; Palesy & Billett, 2017; Wu, 2015) and lack of support from colleagues and supervisors (Czuba et al., 2012; Gleason et al., 2016; Stacey, 2011; Olson et al., 2016).

Background information was retrieved through an internet-based search of academic journals using key words such as aging in place, home health aide challenges, home health aide job turnover, physical injury in home health, quality of life for elderly, home health versus institutional care, roles of home health aides, occupational therapy in home health, and physical labor of home care. Academic data bases such as Academic Search Premier, MEDLINE, Wiley Online Library, and Google Scholar were utilized to analyze current research on home health aide role discrepancies, job turnover, present barriers to occupational performance and satisfaction, and potential for occupational therapy intervention. The American Occupational Therapy Association (AOTA)'s website and related materials were explored to support content knowledge about the topic.

Aging in Place

Environment holds value to individuals because many of life's experiences are associated with the places where they occurred. Whether positive or negative, individuals create emotional ties to where they have spent much of their time. Aging in place is the concept that individuals experience a greater quality of life when they can "age" within their home. For those who require

assistance, this includes receiving formal and informal help within the home setting rather than relocating to a facility for the extra care. The ability to remain within one's familiar surroundings provides individuals with a sense of safety and belonging. Social connections within the community are maintained, and individuals can continue to visit the places they frequent. In fact, in one study, participants identified accessibility to habitual places of interest as central to their satisfaction in life (Wiles et al., 2012). Thus, the ability to stay in their physical home, maintain social interactions, and participate in community functions are primary factors for individuals wanting to age in place.

For individuals who require assistance to complete their daily self-care activities, aging within one's home becomes an option if help is available (Senior Living, n.d.). When an individual is fortunate to have available assistance, it is usually members of their family who are the first in-line to provide help. This informal caregiving requires time and additional finances as family members are required to take time off work or leave their employment all-together (Plichta, 2018). In addition to financial burdens, other concerns stem from negative health outcomes faced by informal caregivers. Informal caregivers may have accurate knowledge of what their loved one's abilities are, but many do not have the formalized training in proper lifting strategies and ways to adapt activities for decreased physical stress. In one study, informal caregivers were found to have elevated levels of anxiety, depression, obesity, chronic illness, and decreased overall physical health in comparison to same-aged individuals not involved in caregiving (Centers for Medicare and Medicaid Services, n.d.; National Academies of Sciences, n.d., as cited in Plichta, 2018).

In some situations, informal support is not available; therefore, other options for maintaining residence within one's home need to be considered. The alternative to family

member or other informal support is to receive formal health care services within one's home. Formal care within one's home can be received by an individual referred to as a home health aide. In addition to companionship, self-care activities such as bathing, dressing, toileting, and the patient handling tasks associated to complete them (transfers) are typically completed by a home health aide (Macdonald & McLean, 2018).

Receiving healthcare services within one's home rather than an institution has been found to be less costly for individuals as well as the healthcare system (World Health Organization, 2007 as cited in Wiles et al., 2012). This financial pattern has been recognized internationally as well. In fact, many foreign healthcare systems have placed emphasis on shifting from institutionalized care to home-based care to decrease overall national spending (Chappell et al., 2004; Kok, Berden, & Sadiraj, 2015). Thus, aging in place with home health support is a cost-effective alternative for healthcare, reinforcing a sense of belonging for senior citizens.

Home Health Aides

Limited data exists regarding home health aides as an independent position within the home health workforce. Current statistics that are depicted encompass multiple groups such as personal care aides, home health aides, and nursing assistants which are all referred to as the "home care workforce" (Campbell, 2018). Most individuals employed in the home care workforce are female with the average age of forty-seven (Campbell, 2018). Seventy-seven percent of those employed in the home care workforce have earned a minimum of a high school diploma, and about fifty percent live with a significant other or are married (Bercovitz et al., 2011). As a result of home health aides being grouped with other professions in the health care field, it is difficult to gain a detailed picture of what the home health aide work force consists of demographically.

Training

According to the Institute for Career Research (2010), prior education and experience requirements are based on the unique home health organization. Training varies in length among states and typically training is regulated by and provided through the home health organization of interest (Institute for Career Research, 2010). While some trainees participate in classroom-based education, other home health aides may learn through on the job shadowing from an experienced aide or a nurse. Some individuals may learn best through practicing with hands-on training and immediate feedback. If this type of training is not offered to the individual, there is an increased risk that they may not feel adequately prepared for their roles and expectations as home health aides. "The federal government does not mandate training in order to prove competency. The necessary knowledge and skills can come from experience" (Institute for Career Research, 2010, p. 23). Thus, individuals may be able to begin their work as a home health aide without prior training and learn as they go on the job. For an individual who does not have any prior experience in the medical field, this creates great concern to their safety and physical well-being as well as the clients they assist.

In the state where the capstone project was conducted, to become a home health aide for an agency which is reimbursed by Medicare or Medicaid, individuals are required to complete at least seventy-five hours of training (Home Health Aide Guide, n.d.). In this training, a minimum of sixteen hours is focused on clinical content. This training is typically provided by the agency and the content and method of training is based on the agency's preference. Following certification, state law requires individuals to receive twelve hours of continuing education every year (Home Health Aide Guide, n.d). There are also private organizations which provide home health aide services that are not bound to minimum training requirements since they do not rely

on reimbursement of services from Medicare or Medicaid. As a result, individuals employed through these companies receive training based solely on the agency's policy, without regard to minimum state or federal requirements. This creates a discrepancy of prior education, experience, and training standards required for individuals to become home health aides within this state. As a result, home health aides are prepared contrastingly from one another based on the agency of employment, and sometimes they are trained insufficiently, as evidenced in needs assessment data and review of research (Macdonald & McLean, 2018).

Home Health Aide Turnover

A great majority of home health aides are dissatisfied with their job benefits, leading to a staggering retention rate. In the 2007 National Home Health Aide Survey, approximately thirty-seven percent of home health aides reported they were somewhat or extremely dissatisfied with their jobs (U.S. Department of Health and Human Services, 2011). Low wage and limited health benefits cause individuals to leave their position as home health aides (Ejaz et al., 2015). Should a medical event occur, there is little to support the individual in receiving the necessary care. Due to the low income and unpredictable hours, nearly twenty percent of home care workers live in homes that are below the federal poverty line (Campbell, 2018). Thus, it is evident that for individuals who are raising a family and require a steady income with good health benefits for their children, this field does not create a sense of stability and security.

Another reason for decreased retention of home health aides is the lack of opportunity for moving up in position. Individuals wanting to transition into a higher paid role are required to complete additional specialized training (Institute for Career Research, 2010). With their low wages, home health aides are less likely to afford additional training to advance their position and benefits within their agency. Not all home health aides enter the field with an end goal of

remaining in this position. Some individuals become home health aides as a necessary step prior to entering a different medical-based career with higher pay and more benefits (Blau et al., 2016).

Alongside monetary and professional goals, another area that was found to be associated with employee turnover was lack of support from staff; including coworkers and supervisors (Gleason et al., 2016; Olson et al., 2016). Home health aides are challenged by these working conditions. By nature of their work, home health aides have limited interactions with coworkers and do not have many opportunities to exchange ideas or ask for assistance during shift changes (Gleason et al., 2016). Quite often, supervisors become the most consistent individual home health aides interacts with outside of the client. As a result of limited interaction with coworkers and supervisors, home health aides who are uncertain of their skills or expectations may feel they are not being adequately supported (Gleason et al., 2016). This could lead to individuals using unsafe strategies to slip under the radar without receiving assistance with correcting their technique. This results in an increased opportunity for the home health aide to injure themselves or the client.

Lastly, inadequate training and physical demand were identified as contributing factors to decreased home health aide retention (Ejaz et al., 2015; Gleason et al., 2016; Wu, 2015). The discrepancy between preparation to and actual responsibility of accurately transferring skills learned from isolated training to the client's home is challenging for home health aides. Individuals demonstrate competency in a skill in a controlled practice setting and are then expected to replicate the same efficiency with an actual client in an unpredictable environment; many without supervision (Palesy & Billett, 2017). Working independently limits control and evaluation of skill competency. Home health aides who utilize unsafe methods while completing

patient handling risk causing injury to the client as well as themselves. According to McCaughey and colleague's study (2012), employees who experienced injuries in their work were less satisfied, less likely to recommend their agency to others, and more inclined to leave their job as a home health aide. Thus, training in skills and competencies is an important aspect in the retention of home health aides.

Physical Challenges

Home health aides who provide formal caregiving as their full-time employment are typically expected to balance several clients throughout their week. Some report working anywhere from forty to sixty hours per week to financially to support themselves and their family (Stacey, 2011). In comparison to nursing home aides, home health aides spend more time with their patients (Stacey, 2011). This creates a challenge for home health aides who have multiple clients throughout the day and their week. "A home health aide spends an hour or more with each patient per visit, during which numerous activities are completed, while a nursing home aide may only spend a few minutes with each patient, doing just one or two activities" (Czuba et al., 2012, p. 352). Depending on the organization, home health aides may have little control over client assignments. An inappropriate match between the client's needs and home health aide's abilities to assist could lead to inadequate service to the client as well as an increased risk of physical injury.

Limited research thoroughly depicts the discrepancy of roles for a home health aide from an institutional setting (nursing facility) to a home health care setting. Home health aides face greater physical labor responsibilities in comparison to health aides working in an institutional setting. The home health setting involves independent work with a client without opportunity for a co-worker to provide help with more physically demanding tasks (Czuba et al., 2012). For

example, when attempting to assist an individual out of bed, a health aide in a hospital can call for a nurse or another aide for additional help if they cannot complete the task alone with the client. A home health aide working at a client's home can either ask a family member to assist if they are home or physically strain themselves beyond their typical capacity to help the client. A greater frequency of physical handling tasks; especially if completed independently and beyond the physical assist level the home health aide should be providing, puts home health aides at an increased risk of sustaining an injury. The National Institute for Occupational Safety and Health (2010) concluded in their research that individuals who were most often involved with transferring tasks, bathing, and dressing tasks with their clients had the largest occurrence of physical injury.

Back straining has been identified as one of the most common chronic conditions faced by home health aides (Stacey, 2011); U.S. Department of Health and Human Services, 2011). A back injury impacts an individual's ability to complete many of their daily activities. For home health aides who participate in many hands-on activities with their clients, a back injury can make their work increasingly challenging. Many of the injuries to the back are attributed to improper lifting of clients from one surface to the next, also referred to as "transferring" (Stacey, 2011). While some home health aides may seek out medical assistance for their injuries, others may choose to continue with their work despite their chronic conditions. This creates an additional work hazard to overcome during their daily work. Some reasons a home health aide could make this decision are because they do not have adequate insurance coverage, or they cannot afford to take time off work and lose their paycheck (Stacey, 2011). Rather than taking the time off work to allow time for their back to recover, individuals are choosing to work through their injury (Campbell, 2017). One can imagine how working with a back injury,

especially as a home health aide can impact an individual's satisfaction with their work and their life. In Stacey's (2011) research, a home health aide described her thoughts after she became injured and had to retire. This individual was left with no other option but to move to a retirement facility to receive the necessary care. "I mean, it's not right. It isn't. You dedicate your whole life to taking care of people, then there's nothing for you. You just put so much in, and you get very little back" (Stacey, 2011, p. 46). Thus, we have a profession in which people are putting out much more work and effort than they are receiving in return as support. What incentive is there to become a home health aide or stay in the position if the future health outcomes are as uncertain as the support they may or may not receive?

OT Role in Supporting Training of Home Health Aides

Vision 2025 of AOTA (2017) states occupational therapy is an inclusive profession that aims to support the health and well-being of others through skilled intervention to promote participation in the valued occupations of their daily lives. Having the physical ability to engage in work tasks and complete them competently is important in an individual's personal causation and overall satisfaction with their employment. The Institute of Medicine (1996) suggests additional training and repetition of proper body mechanics and methods for transferring safely can assist with decreasing physical strain for home health aides (as cited in Ejaz et al., 2015). Occupational therapists can support home health aides in participating in their expected roles within their work. Following graduation from an accredited occupational therapy program, an occupational therapist is expected to have the skills necessary to, "apply, analyze, and evaluate the interaction of occupation and activity, including areas of occupation, performance skills, performance patterns, context(s) and environments, and client factors" (AOTA, 2018, p. 26). Occupational therapists have specialized knowledge in adaptation strategies and environmental

modifications that can assist home health aides in maximizing their client's function. In addition, occupational therapists can provide recommendations to home health aides on proper equipment to utilize for facilitation of independence for clients (Guay, Levasseur, Turgeon-Londei, Dubois, & Desrosiers, 2013). For example, a client who is unsteady while standing and fatigues quickly may benefit from a shower chair during bathing tasks and a propped door to decrease steam in the bathroom for optimal breathing. Other relevant areas occupational therapists could provide education and training to home health aides in include the safe transfer of a client to and from a chair, bed, bathtub, toilet, and car. This information is crucial to home health aides for prevention of chronic injury when physically assisting clients during self-care and transfer tasks.

Conclusion

Some researchers suggest the definition of health is not the absence of disease, but an individual's capability to adapt and self-regulate when met with psychological and physical adversity (Huber, Knottnerus, Green, et al., 2011). Home health aides assist individuals living within their homes to meet their self-care needs through physical assistance. The population of elderly individuals is predicted to rapidly increase in the upcoming decades. "Currently, there are 32 working age adults for every adult aged 85 and over. By 2050, that number will plummet to 12" (Campbell, 2017, p. 8). Knowing that this ratio of working adults to elderly will be a reality in the next thirty years, it is imperative to take preventative steps to supporting the future of elderly care services.

The U.S. Department of Health and Human Services released a National Quality Strategy with three aims for improving health and health care quality: better care, healthy people/healthy communities, and affordable care (2017). Client-centeredness, reliability, research-based intervention, and cost-effectiveness were factors identified in supporting this national strategy.

Home health is the preferred choice of elderly in comparison to institutionalized care based on literature review of client outcomes and quality of life of the individual. Review of literature has revealed several areas in which the roles of a home health aide overlap with activities occupational therapists assist clients with (Guay et al., 2013).

Home health aides are displaying a concerning number of physical injuries which could be correlated with improper technique. Much of the difference lies in the depth of education and training occupational therapists receive in their graduate studies and clinical experiences. It is imperative to gain a more descriptive idea of the roles and responsibilities home health aides are expected to fulfill in their line of work, with emphasis on the tasks that are physically demanding. With this information, it will be possible to address physical challenges to reduce the risk of injury and increase job satisfaction of home health aides. This will support their physical health and efficiently address the employee turnover rate in the home health profession.

SECTION THREE: METHODS

Project Design

The project design for the capstone project was a qualitative descriptive approach. Stanley (2015) suggests that a descriptive qualitative design is a more fitting approach for new researchers, yet retains the rigor of a qualitative study. Qualitative descriptive studies involve the use of observation, interview, focus group, and other less-structured means of obtaining subjective information to create the opportunity to learn about the given population. They follow a pragmatic approach with rigor in methodology, data collection and analysis. In addition, they provide a way of studying a question in practical context. The proposed objectives of this study were the following:

a) Gain an in-depth understanding of the daily experiences of home health aides when working with their clients.
b) Identify physical challenges home health aides face within their paid employment in natural settings.
c) Determine if there are strategies occupational therapists can provide to prevent physical strain or injury for home health aides to support their service role in the home care setting.

This study was approved by the Institutional Review Board of Eastern Kentucky University.

Setting

The capstone project took place in a mid-western state, based upon convenience for the researcher. The home health agency selected for investigation has several locations across the state, providing an opportunity to obtain input from a variety of locations. Home health agencies typically employ both skilled and semi-skilled workers to provide the care necessary to support

an individual's ability to live within their home setting. Home health aides are paid, non-skilled workers who assist clients with self-care tasks, home maintenance, and community-based activities based upon their specific needs. Many self-care activities such as bathing, dressing, and toileting require home health aides to assist in the physical movement (patient handling) of the client (Macdonald & McLean, 2018). Research has suggested that patient handling tasks are one of the main contributors to physical injury sustained by home health aides (Brown & Mulley, 1997; Czuba et al., 2012) causing barriers to work and decreased job satisfaction. (Atler, et al., 2016; Gleason, et al., 2016; Macdonald & McLean, 2018). Home health aides have independent, unique schedules in which they provide care to a varying number of clients throughout the day and week. Therefore, interviews occurred over the telephone due to distance and schedule conflicts.

Identification of Participants

The experiences of individuals working as home health aides at a selected home health agency was the focus of this study. The exclusion criteria for this capstone was individuals who were not actively working as a home health aide at the selected agency or had not worked as a home health aide within the past year (2018) for the selected agency. Data depicting the demographic information of participants are detailed below in Table 1. All eight participants were female with an age range of 35-65 years. The average experience of the home health aide participants was 6.25 years. Their years of experience as a home health aide ranged from 1.5 years to 15 years with multiple agencies. The minimum education level of the home health aides was a high school degree, some with college experience. Seven of the participants were actively working as home health aides for the selected agency. One participant had worked as a home health aide for the agency during the 2018 year. For the individuals that worked full time, they

often reported seeing their clients more than once in a day. In addition, some reported seeing their clients over a seven-day period.

Table 1

Participant Demographics

Participant	Age	Years as home health aide	Education	Number of clients	Hours per week
1	54	2.5	High school	3	35-40
2	63	2	High school	1	6
3	35	1.5	College	1	14
4	46	2	High school	1	24
5	65	9	College	2	27
6	46	11	High school	2	26
7	52	7	High school	3	51
8	48	15	College	3	42

Sampling

Convenience sampling was utilized to gain recruitment of participants for the capstone project. Due to time constraints associated with the agency's monthly meeting being postponed one month, the researcher sent out an email with a brief description of the capstone project to home health aides at the selected agency. Individuals who expressed interest in taking part in the study through email were invited to volunteer by signing a consent form.

Data Collection

According to Colaizzi's phenomenological descriptive method, data can be collected through multiple means in addition to in-person interview; for example, online interviews, blogs, research accounts online, and more (Morrow, Rodriguez, & King, 2015). Data in this study were collected through semi-structured telephone interview based upon availability of the participant. A semi-structured format was used to encourage the participant to elaborate in describing their experience as a home health aide. Sample interview questions are provided in Appendix A.

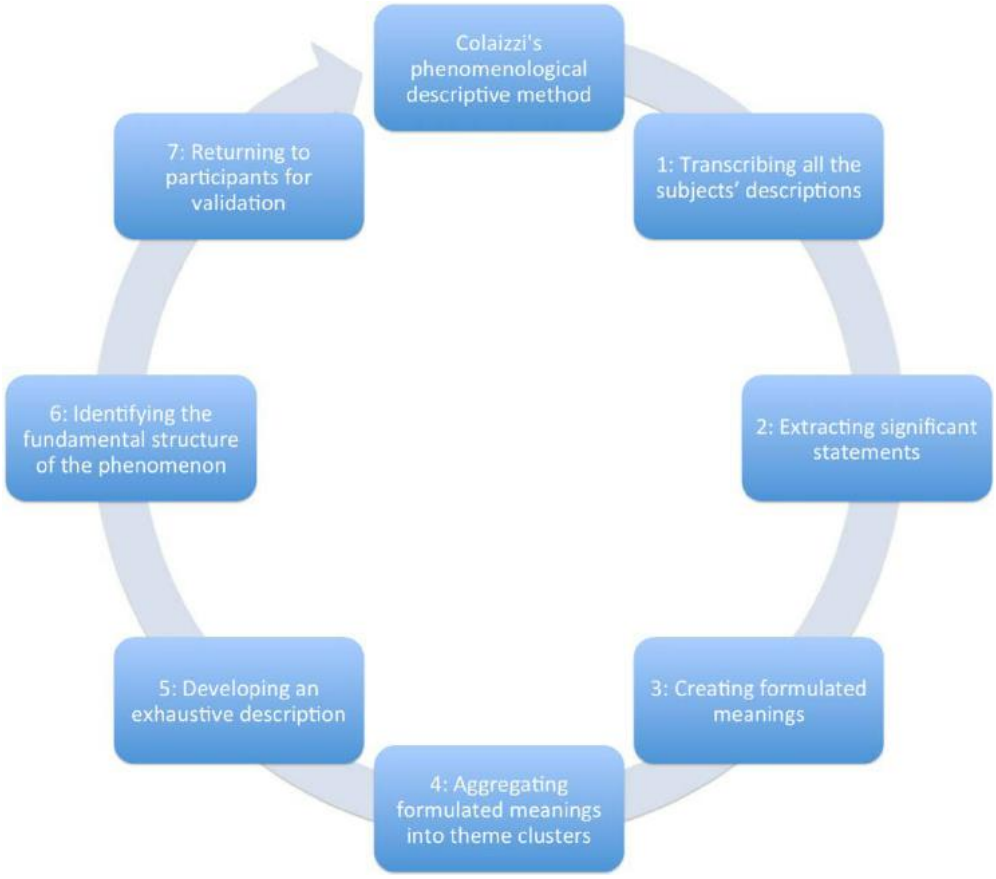
Procedures

Study participants were contacted individually by telephone to determine a time to complete the telephone interview. I described the purpose of the study, data collection procedure, and interview questions ahead of time in person or via telephone based upon the preference of the participant. The participants were reminded that their participation in the study was voluntary and they could withdraw at any point in time.

The interviews were audibly recorded for the most accurate representation of data in analysis. Following transcription, and preliminary coding by the researcher, a second interview was conducted (see Appendix B). The second interview was conducted to add accuracy and clarity in content, obtain further information about capstone objectives, and discuss preliminary themes for member checking.

Data Analysis Procedures

Data for the capstone project was analyzed using Colaizzi's seven-step phenomenological descriptive method.



(Research gate, n.d.)

Figure 1. Colaizzi's phenomenological descriptive method.

Colaizzi's seven-step data analysis method has been recognized as a thorough descriptive review in which the researcher remains proximate with data obtained (Morrow et al., 2015). Morrow and colleagues (2015), break down the steps in Colaizzi's data analysis as the following:

The first two steps of Colaizzi's data analysis, transcription and identification of compelling statements involve investigation of raw data gathered from the interviews with participants. In the following two steps, the researcher takes the prominent testimonies of

participants and derives associated meanings (step three) to the capstone project objectives. These are then collectively analyzed and compiled into thematic groups (step four). These thematic groups are intended to represent the overarching thoughts and experiences that were expressed by the participants. In step five, I utilized the information gathered in the preceding steps with emphasis on the themes identified in step four and creates a conclusive narrative describing the phenomenon (Morrow et al., 2015). Step six and seven are structured so that the researcher depicts the most relevant information that correlates with the phenomenon being studied. This occurs when the researcher creates an all-encompassing description of the phenomenon (step six), sharing the statement with participants, and receiving feedback on whether the participants felt the statement accurately reflected their experience. Based on their responses, the researcher may revisit previous steps to analyze data further to ensure concluding information is relevant and correctly depicts the phenomenon (Morrow et al., 2015).

Outcome Measures

To evaluate the efficacy of the findings in the phenomenological study, several methods were utilized. Data was analyzed through Colaizzi's method to gain an in-depth understanding of the daily experiences of home health aides when working with their clients, identify physical challenges home health aides face within their paid employment in natural settings, and determine if there are strategies occupational therapists can provide to prevent physical strain or injury for home health aides to support their service role in the home care setting. Interviews were conducted twice to ensure substantial information was gathered regarding the experiences of home health aides. In the second interview, the researcher shared the preliminary findings with participants. The participants were then asked to provide feedback on the accuracy of the results creating a member check in which the findings were either supported or refuted by the

direct source of information; the participants (Birt, Scott, Cavers, Campbell, & Walter, 2016). This strategy was incorporated to increase validity of the study by decreasing the opportunity for false conclusions based on inaccurate interpretations of data. The researcher also maintained a journal in which thoughts and observations from the interviews were written down as a reflexive tool throughout the research process. In addition to thoughts, this journaling was used to conceptualize strategies in occupational therapy practice that could be implemented to prevent physical strain and injury for home health aides. Rigor was maintained through the triangulation of the data.

Ethical Considerations

Approval for the data collection necessary in the research phase of the capstone project was obtained from the Institutional Review Board at Eastern Kentucky University (see Appendix C). This capstone project was categorized as a minimum risk to participants due to data collection occurring through interview. By sharing their stories, participants were at risk of undergoing stress from recounting their experiences; however, it was determined to be no more than what they would be exposed to on a typical day. Yuksel and Yildirim (2015) highlighted the positive impact of notifying participants of their role in the research to establish a mutual trust. Therefore, in addition to providing an explanation of the capstone project purpose and procedures, the researcher informed the participants of their active role in the research when sharing their stories. If individuals expressed interest in taking part in the project, they were provided with a letter of consent to review. By signing this form, participants indicated they understood their rights as a volunteer participant and could withdraw from the study at any point in time.

SECTION 4: RESULTS AND DISCUSSION

Results

The intention of this capstone project was to gain an in-depth understanding of the subjective experiences of home health aides when working with clients. Current literature suggests home health aides face discrepancies in their work roles and training leading to injury, decreased satisfaction, and low retention rates (Czuba et al., 2012; Ejaz et al., 2015; Gleason et al., 2016; and Macdonald & McLean, 2018). Few studies analyze this phenomenon from the perspective of the home health aide. Due to the complexity of qualitative data analysis, Colaizzi's phenomenological descriptive method was used to guide data collection and analysis procedures. The results are a collective representation of the accounts of eight home health aide participants and provide insight into their subjective experiences. My capstone was based on three outcomes:

(a) gain an in-depth understanding of the daily experiences of home health aides when working with their clients; (b) identify physical challenges home health aides face within their paid employment in natural settings; (c) determine if there are strategies occupational therapists can provide to prevent physical strain or injury for home health aides to support their service role in the home setting.

Participants individually engaged in an audibly recorded phone interview. The information discussed in the initial interview was then transcribed by the researcher. In this stage, I completed the first stage of Colaizzi's method, "familiarisation" by reading through the interview transcripts several times. Following this, coding in the form of symbols was utilized to identify and categorize significant statements to the corresponding three outcomes. Then I formulated meanings from the significant statements from the participants and organized them

into clustered themes (stage four). These themes were then expanded into an elaborate description of the phenomenon and then synthesized into a concise statement representing the most relevant aspects of the phenomenon. I then engaged in the final step in Colaizzi's method (seeking verification) and conducted a second round of audibly recorded interviews. In these semi-structured interviews, I asked the home health aides additional questions pertaining to the capstone project outcomes to ensure saturation of data was reached. I then concluded the interviews by stating the found phenomenological statements and received feedback (member check) on whether they felt it accurately captured their subjective experiences. I then transcribed the interviews and reflected on the feedback provided by the participants of the proposed phenomenological statement and themes. All the home health aides agreed that the statements below accurately represented their experiences. This added to the validity of the data collected.

Exhaustive Description: Know the rules and know your clients even better.

Throughout the analysis of the data, it become clear that all the study participants felt it was important to familiarize themselves with their clients. The responses home health aides provided to the interview questions often included a statement involving what the client's personal needs were. When prioritizing strategies for new clients, one study participant stated, *"…just get to know them and find out what they need."* Participants described how important it was to be aware of their client's mood, their strengths, and their weaknesses to provide the appropriate support. When describing the method she used when providing care to her client, one home health aide stated, *"I make sure to take time with my client and work at their pace rather than my own. Being mindful of their restrictions and limitations as every person is different."* The immense value the participants placed on respecting and addressing the individuality of the clients they worked with came to the forefront in data analysis.

The exhaustive description that proclaimed the importance of maintaining a client-centered approach was supported by the themes that developed throughout the data analysis. Each theme, although independent in nature, correlated with the overarching concept of acknowledging the individuality of the client and their specific needs. In addition to adding depth to the multifaceted nature of their work, the themes provided organization that aided in expanding understanding of the subjective experiences of home health aides.

Outcome 1: Gain an in-depth understanding of the daily experiences of home health aides when working with their clients.

Theme: More than Activities of Daily Living

Home health aide participants described their daily routines with their clients. In addition to self-care tasks, home health aides reported assisting their clients with other aspects of their daily routine including executive functioning tasks, home maintenance, and other instrumental activities of daily living to support their independence within their home. In fact, none of the study participants stated only activities of daily living as areas in which they assisted their client. Additional activities home health aides assisted their clients with included medication management, laundry, cooking, community mobility, and more. One participant stated, *"Well the one the I have four hours a day on one day of the week, mostly I do housework for her because she has no fingers. They were amputated. She is not able to get around to do the cleaning herself. It makes it difficult for her to load and unload a dishwasher and do her laundry."* Another stated, *"I help the client with getting dressed and undressed if the client needs it. I will make food, like breakfast for the client. Sometimes we go outside and go for a walk together. Sometimes I will help her make her bed.*" Responses from study participants supported the theme that home health aides completed a combination of ADL and IADL tasks with their client.

A sub-theme that emerged during the data analysis was that the activities and physical assist levels provided by the home health aides varied each day based on the personal needs of their clients. Responses from study participants made it apparent that each day was a clean slate in terms of their client's status, and the home health aide needed to be ready to adapt to any changes. One participant stated, *"You have to walk into work every day expecting that you need to be prepared for anything to happen. Each day is different from the next based on the client's medical status or if they are having any physical or emotional issues that day."* In addition to the client's medical status, another participant noted her challenges with her client's changing cognitive state. When describing her typical day assisting her client with Dementia, the home health aide participant shared, "*I get up in the morning like everybody else. I have morning hours with one person, and this person suffers from Dementia. It requires almost everything. When I come to his place, he needs basically every possible help."* The participant described how her client would occasionally become confused, and this would impact how he reacted to physical assistance from her, sometimes physically resisting the help and becoming upset. These factors impact the emotional and physical strain placed upon home health aides when working with their clients, because they need to be consistently ready to respond to any given scenario. Another study participant stated that based on her client's status that day, she would provide emotional support and "*companionship*" if that was what they needed. This illustrated the importance of being multifaceted as a home health aide and addressing not only the physical of the client, but the emotional as well. The study participants unanimously placed value on being present with their client's needs. One study participant summarized the flexibility and adaptive skills required of home health aides as the following, *"It's not in the needs, it's in the health."*

Outcome 2: Identify physical challenges home health aides face within their paid employment in natural settings.

Theme: Would you like a hand with your transfer?

As a result of the varying levels of need of the clients, not all study participants reported providing physical assistance to their clients on their home visits. However; of the home health aides who did provide physical assistance, all stated that transferring clients created the most physical strain. These transfer tasks were not limited to helping a client into and out of a chair, but also included assisting the client into and out of the shower, bed, and toilet. In addition to the physicality of the task, the home health aide needed to use problem-solving skills with the use of adaptive equipment (shower chair, walker, etc.) with their client. One home health aide highlighted the importance of knowing their client's strengths and comfort level. In determining the appropriate level of assist to provide their client, the home health aide stated, *"It depends on what they are comfortable with. I have one client who sits in the shower. One that stands in the shower, because if they sit in the shower sometimes they cannot get up (chuckle)."*

Another factor that was identified as impacting to the level of assistance provided to the client for a transfer was cognitive awareness. One home health aide described her experiences with her client with Dementia, "*This is hard because he has a problem with his movement. Sometimes he is not responding well to assistance for moving, positioning him, assisting him to get up or lay down."* Thus, the home health aide would adapt the level of help she would provide based on her client's cognitive state and response to physical assistance needed that day.

Outcome 3: Determine if there are strategies occupational therapists can provide to prevent physical strain or injury for home health aides to support their service role in the home setting.

Theme: Let's get physical!

When participants were asked their thoughts on what would be important for a new home health aide to learn, many suggested training and education on lifting strategies. Several home health aides went in-depth describing the importance of proper positioning of themselves in relation to their client. One study participant described, "*The person needs to understand how and where to stand, how to bend, what not to do. I think this is what the person needs to learn."* Another home health aide described a previous experience in which she injured her back lifting a client. She stated that ever since her injury, she made sure to pay attention to the way she was positioning herself when assisting her client. She then warned that individuals should not assume lifting another individual was easy, because it could result in "*serious injury*."

In the data analysis of the study participant's response, it became apparent they believed the training and education would be necessary and appropriate if the individual was assigned to a client that required the physical assistance. *"Yeah, if they have a client that needs a lot of lifting and a lot of care. I would say the ones that haven't done the work before."* Another home health aide commented on the importance of versatility when physically aiding clients, *"You need to know how to help them in the car, out the car. In the shower, out the shower. Dress them. For a new person who never have experience, it's going to be hard because they won't know what to do."* This supports the theme discussed earlier regarding home health aides facilitating the client's independence with more than self-care activities. When discussing the value of this education and training, home health aide participants noted the isolated aspect of their work

setting and how this made it even more important for them to have this knowledge. *Working in a nursing home, you've got the extra help there if you need it. Where, at the home you're alone for the most part, and having someone show you what you need to do to help you support yourself or the patient is a big advantage."*

Discussion

This capstone project provided a unique perspective of the subjective experiences of home health aides that to the knowledge of this researcher, was limited in current literature. The main finding of this study was that home health aides valued the use of a client-centered approach when working with their clients. This fits well with the focus in the profession of occupational therapy. Additional themes arose throughout data analysis that supported this finding, added depth to knowledge, and indicated the use of multi-faceted skills. Resulting themes of the capstone project suggested home health aides provide daily support to their clients through assistance with self-care activities, household responsibilities, executive functioning tasks, and emotional support. A second theme identified the action of transferring the client from a chair, shower bench, or bed was classified as the most physically demanding for home health aides. The third theme arose from the collective home health aide responses on the importance of education and training in the proper mechanics for transferring clients to prevent physical injury of themselves or the client.

Outcome 1: Gain an in-depth understanding of the daily experiences of home health aides when working with their clients.

Home health aides facilitated their client's independence with more than just self-care activities. They described household maintenance, executive functioning tasks, and companionship as part of their routine when visiting their clients. Although this finding was not

initially expected, it was supported by research from Stacey (2011) that highlighted the discrepancy of activities completed with clients between home health aides and aides within a medical facility. Stacey (2011) described how home health aides assisted their clients to complete an entire routine and other activities as needed. In contrast to a medical-based setting such as a hospital, where aides interacted with their clients for a shorter period; thus, limiting the number of tasks they could assist with. The information represented in Table 1 depicting the differing hours home health aides worked support Stacey's (2011) findings that home health aides support multiple, if not all aspects of their client's daily routine. Several of the home health aides reported seeing their clients more than once in a day. In addition, some home health aides visited their clients over a 7-day period. These findings reinforce the holistic support provided by home health aides to their clients in facilitating aging in place.

Additionally, this project outcome was addressed through the research finding that the daily activities home health aides assisted their clients with were determined by the client's specific needs that day. Home health aides reported their client's medical and cognitive status would change from one day to the next, sometimes drastically impacting the activities and amount of assistance they required from one day to the next. This information was not found in previous literature, thus the objective in the capstone is reinforced.

Outcome 2: Identify physical challenges home health aides face within their paid employment in natural settings.

This outcome was addressed through the finding that activities which required physical assistance, such as transferring and positioning were identified as the primary physical challenges for home health aides when working with their clients. Participants reported activities included assisting the client with getting into a bath tub, positioning the client in bed, and helping

the client stand up from a chair. Several participants stated they knew of other home health aides who experienced physical injury. Although the majority had not expressed this phenomenon, one participant reported experiencing a back injury when she first began working as a home health aide. Following her recovery, she described her new outlook on transfers and the importance of using the correct body mechanics when assisting her clients. This finding aligns with information concluded by the National Institute for Occupational Safety and Health (2010) that individuals most often engaging in transferring tasks, bathing, and dressing tasks with their clients had the largest occurrence of physical injury.

The isolated aspect of working within another individual's home without opportunity for outside assistance was another factor identified as a physical challenge for home health aides. This finding was supported by research from Czuba and colleagues (2012) who concluded that the home health setting involved greater independent work with clients in comparison to other settings. Researchers found that those working within the home health setting were taking on a greater amount of heavy lifting tasks without aide from a co-worker than peers working in an institutionalized facility. Gleason and colleagues (2016) found that limited interaction between new home health aide employees and their coworkers and supervisors was correlated with decreased satisfaction due to feeling inadequately supported. All the participants in this study reported they did not interact with other co-workers within their agency outside of group meetings. While they did not report feeling inadequately supported, this further demonstrates the independent and sometimes isolated aspect of working as a home health aide.

Outcome 3: Determine if there are strategies occupational therapists can provide to prevent physical strain or injury for home health aides to support their service role in the home setting.

This outcome was addressed through the finding that participants believed training in proper lifting strategies would be important knowledge for an individual without prior experience with providing physical assistance to a client. This population possessed at least 1.5 years through 15 years of experience working as a home health aide. Responses from participants indicated this training would help prevent the home health aide from injuring themselves or the client. This finding agrees with research from The Institute of Medicine which suggested additional training and repetition of proper body mechanics and methods for transferring safely could assist with decreasing physical strain for home health aides (as cited in Ejaz et al., 2015). This finding is also consistent with research correlating inadequate lifting techniques to chronic back injury (Stacey, 2011). Participants cited the following areas as necessary to be competent in when assisting their client in order to minimize their risk of injury: positioning of the client, choice/use of adapted equipment, and lifting mechanics. ACOTE Standards require graduates of occupational therapy programs to have the skills necessary to evaluate their client's personal factors in relation to the desired occupation and set up the environment and assist level to support the client's successful completion of the task (AOTA, 2018). This includes verbal and tactile cues provided to the client for positioning, problem solving to determine the appropriate equipment for use, and the utilization of proper lifting mechanics. This finding is important because it demonstrates areas in which occupational therapist skills corresponds with the skills home health aides are required to implement when working with their clients as their needs change daily. This area of overlap creates an opportunity

for occupational therapists to support home health aides in their service role. In their study, Guay and colleagues (2013) found that occupational therapists could assist home health aides by providing suggestions on the proper equipment to use to facilitate their client's independence. This becomes an area for occupational therapy consultation with home health agencies.

Additional Findings

This capstone project was successful in addressing the intended outcomes through the themes identified in the data analysis. An additional area that was brought to the forefront throughout the research process was training. While this study did not go in-depth about current training strategies, several concepts were discussed with home health aide participants during telephone interview. In addition to differing years of experience, participant's education level exhibited a range as well with all having obtained a high school degree. There are no national standards for educational preparation, and it varies from one agency to the next and whether they are reimbursed by Medicare/Medicaid (Home Health Aide Guide, n.d.). This is an important factor for home health aide agencies to consider when conducting trainings. Responses from study participants indicated they received varying styles of training including paper handouts, video demonstration, and in-person demonstration. In learning about their preferences, many of the participants shared belief that in-person training with immediate feedback would be more beneficial in contrast to solely a paper test or just being handed a resource printout. However, some participants felt paper handouts and resources could provide benefit as well. One participant stated, *"It might be a good idea to get some written information prior to the training so we have a general idea of the steps and procedures. That way we are more prepared to see it in person. That reference material may be useful for afterwards in case you have questions or forget something. Less as a test, but more as educational material would be more useful."* This

finding creates a cause for further consideration in the training and preparation individuals receive prior to beginning their work as a home health aide. Palesy and Billett's (2017) research identified an existing discrepancy regarding preparation and transferring of skills learned in training. Their research provided a unique insight to in-person training that also suggests future consideration with how trainings are conducted. Palesy and Billett (2017) illustrated the difficulty experienced by home health aides when they practice a skill in an isolated and controlled setting and then are expected to transfer this skill efficiently to a real-life scenario with a client. With the structure of training determined by the home health agency, this leaves room for multiple means of providing education and resources to home health aides. It is important for this area to be further explored in future research studies to support home health aides in their service role.

Connection to Theory

The theoretical framework that was used to guide the development of this project was the Model of Human Occupation (MOHO). The three components of this theory that were analyzed in their interaction with the environment were volition, habituation, and performance capacity (Kielhofner, 2008). Each of these components were clearly represented in the findings of this capstone project as well as how they impacted occupation. Volition was identified in the finding that home health aides were motivated to dedicate time to getting to know their client to understand their interests and personal needs. This client-centered approach supported the home health aide's personal causation in feeling confident in their ability to competently address their client's specific needs.

The habituation was identified in the findings of the shared occupations between the home health aides and their clients. These included the activities the clients required assistance

with and the strategies the home health aides implemented regularly to support their client's independence. For example, the use of verbal cues and physical support in the same manner to provide predictability for the client when completing desired occupations.

Lastly, performance capacity was identified through the participant's description of physically demanding tasks and activities they supported their client's participation in. For example, the home health aide's physical capacity to complete the tasks safely and without injury to themselves or their client. The physical environment of the capstone project was the client's home, and this setting did not change. During the interviews, home health aides discussed aspects of the social environment that impacted their performance each day which included cultural differences, and the client's emotional capacity. Throughout the research process, it became increasingly evident that the home health aide's volition, habituation, and performance capacity impacted one another in a dynamic cycle interacting with the surrounding environment.

Strengths and Limitations

This study had several strengths which supported the validity of the findings in this capstone project. The study had a sample size of eight participants and all the participants continued their involvement throughout the entire study. Conducting the interview over phone provided a means of convenience for the research participants as they were not required to drive to a designated location. This private setting also facilitated open responses from the participants due to participating in the comfort of their own home in a familiar setting. The capstone project was completed by a single lead researcher which meant the researcher had extensive familiarity with the research data. The following strategies to increase trustworthiness were used: correspondence with a faculty mentor with vast experience in the qualitative research process for

peer debriefing, member check to ensure themes were accurate representations of the study participant's experiences, triangulation of data, and the use of a reflexive journal.

One limitation of the study was the researcher's minimal experience with conducting semi-structured interviews where elaboration is encouraged. This may have impacted the strategic probing of information that a more experienced researcher could have implemented to gain additional data. Member check and peer debriefing were used to counterbalance this limitation. Several home health aides in the study spoke English as their second language, impacting their ability to thoroughly describe their experiences and expand in their responses. Only one home health aide was agreeable to the use of an interpreter during the interview, while the others stated they preferred to participate in English. Due to the nature of phone interviews, another limitation of the interview was the researcher's inability to observe the participant's nonverbal expressions as they described their experiences. This observable piece of qualitative evidence could have provided further insight into the subjective feelings of the home health aides as they provided their personal narratives. Thus, video conferencing may have added to the observational data.

Through self-reflection in the reflexive journal, the researcher became aware of bias through the expectation of specific responses from home health aides to select interview questions. Due to previous research suggesting a discrepancy in client need and home health aide physical capacity, the researcher initially assumed there would be a high volume of individuals who experienced injury working with their clients. In contrast, only a few reported previous incidents of injury. In addition, the researcher did not anticipate that most participants would feel competent in their skills and abilities to assist their clients. In collaboration with the faculty mentor, interview questions were assessed and adapted to ensure the question was

understandable, and that a specific response was not being elicited from the study participant based on the wording in the question.

Implications for Practice

According to the AOTA Practice Framework, a client's independence is not measured by the amount of assistance they require to complete a desired occupation or activity (AOTA, 2014). If the client can complete the actions required to participate and they are satisfied with their level of engagement in the task, they are independent. Therefore, home health aides support their client's independent functioning within the home setting. Occupational therapists strive to support their client's participation in their valued occupations as well. This study demonstrated an overlap of roles and activities between home health aides and occupational therapists when working with clients in the home health setting. Participant responses in combination with review of literature has suggested there is an opportunity for occupational therapists to support home health aides in their service role through sharing their skills and expertise.

While the home health aide participants in this study reported feeling competent in their personal ability to support their clients, this information is not representative of home health aides at other agencies. In addition, study participants stated the following as important skills for a new home health aide to learn for a client that required physical assistance: correct body mechanics, proper positioning of the client, and strategies for transferring from a variety of surfaces (including use of adaptive equipment). Adaptive equipment are devices that are used to assist individuals with completing activities of daily living (AOTA, 2014). Occupational therapists have specialized training in determining the appropriate type of adaptive equipment to use based on their client's strengths and abilities. All the areas listed by the home health aide participants as important focuses for training are skills occupational therapists have and use

within the home health setting. While it would be beneficial for each client to be evaluated by the occupational therapist prior to home health aide implementation; this solution does not replace the value of equipping home health aides with problem solving skills that can be applied to multiple scenarios.

In their 2025 Vision, Occupational Therapy is described as an inclusive profession that supports the health and well-being of others through skilled intervention to promote participation in valued occupations (AOTA, 2017). Just as we value our ability to complete our job responsibilities to our expectations, home health aides value their ability to efficiently address their client's needs. Therefore, it would be beneficial to make home health agencies aware of the overlap in roles between home health aides and occupational therapists to determine a strategy to support home health aides in need of further training. Education on the skill base of occupational therapists may provide insight into potential for occupational therapy intervention in the areas of client positioning, task adaptation, and proper body mechanics when assisting clients with ADLs and IADLs.

Future Research

This capstone project concludes the following: home health aides assist their clients with a wide range of activities to support their independence within their home, transferring clients was identified as the most physically demanding task for the home health aides, and study participants believed new home health aides could benefit from training in client positioning, appropriate use of adaptive equipment, and proper lifting mechanics. The convenience sample for this study was restricted in that it included two classifications of home health aides at one selected home health agency: home health aides currently working at the selected agency and home health aides who had worked in the previous year (2018) at the selected agency. While this

information was certainly beneficial in understanding the subjective experiences of these study participants, the results cannot be applied to a general population. Future research with a broader sample of home health aides, potentially from a variety of home health agencies would enhance the understanding of training needs as consultants.

Future research should also examine if home health agencies use occupational therapists as consultants to train new home health aides in client positioning, lifting mechanics, and use of adaptive equipment. Information in this area could provide knowledge on current training targeted at equipping home health aides with problem-solving and task adaptation strategies with ADL and IADL tasks to assist with performing physically demanding tasks such as transfers. Information from this project may also identify specific styles of training as more beneficial in knowledge acquisition and transfer of skills from the practice setting to the client's home. This can inform future studies and highlight a need for this type of training for home health aides.

Summary

Caregiving is defined in the occupational therapy framework as a "co-occupation," because it involves the interaction of two individuals: the client and the caregiver (AOTA, 2014). Home health aides are caregivers for the clients they serve. This capstone project expanded our awareness of the home health aide population by gaining insight into their subjective experiences when engaging in co-occupations with their clients.

This project found that the role of a home health aide involves much more than simply assisting clients with self-care tasks. In addition, patient-handling tasks such as transferring a client from one surface to the next was the most strenuous for home health aides. This finding supports prior research suggesting home health aides most involved with these hands-on activities with their clients were at a higher risk of injury. Finally, this capstone project

confirmed prior research suggesting occupational therapists may have a role in supporting home health aides in their delivery of services. Therefore, gaining insight into the subjective experiences of home health aides can inform future interprofessional practice measures and strategies to facilitate the performance and satisfaction of home health aides in their positions.

The unexpected phenomenological theme of a client-centered approach to supporting their clients reminded the researcher of our roots in occupational therapy. Valuable occupations, as perceived by the client were the priority of the home health aides. The research outcomes and identified themes aided in expanding the understanding of the subjective experiences of home health aides when working with their clients. This project assisted in filling a gap of qualitative knowledge in prior research of this population.

The information gained from this capstone provides insight into the subjective experiences of home health aides. In addition, it highlights discrepancies faced by home health aides as well as a potential for occupational therapy involvement. Just as it is important to ensure clients experience balance and satisfaction in their occupational engagement, it is important that we support the home health aides that make this hope a reality for their clients in supporting aging in place.

References

American Association of Retired Persons. (2012). *The United States of aging survey*. Retrieved from https://www.aarp.org/content/dam/aarp/livable-communities/learn/research/the-united-states-of-aging-survey-2012-aarp.pdf

American Occupational Therapy Association. (2018). 2011 Accreditation council for occupational therapy educational (ACOTE) standards and interpretive guide. *American Occupational Therapy Association*, 1-45.

American Occupational Therapy Association. (2014). Occupational therapy practice framework: Domain and process (3rd ed.). *American Journal of Occupational Therapy, 68*(Suppl. 1), S1-S48.

American Occupational Therapy Association. (2017). Vision 2025. *The American Journal of Occupational Therapy, 71*, 1. doi: 10.5014/ajot.2017.713002

Atler, K., Moravec, A., Seidle, J. S., Manns, A., & Stephans, L. (2016). Caregivers' experiences derived from everyday occupations. *Physical & Occupational Therapy in Geriatrics, 34*(1), 71-87. doi:10.3109/02703181.2015.1120843

Bercovitz, A., Moss, A., Sengupta, M., Park-Lee, E. Y., Jones, A., Harris-Kojetin, L. D., & Squillace, M. R. (2011). An overview of home health aides: United States, 2007. *National Health Statistics Reports*, *34*, 1-32.

Birt, L., Scott, S., Cavers, D., Campbell, C., & Walter, F. (2016). Member checking: A tool to enhance trustworthiness or merely a nod to validation? *Qualitative Health Research*, *26*(13), 1802–1811.

Blau, G., Chapman, S. A., & Neri, M. (2016). Testing the relationship between personal/home care aide trainees' career goals and their commitment to home care. *Home Health Care Management & Practice, 28*(3), 150-154.

Brown, A. R., & Mulley, G. P. (1997). Injuries sustained by caregivers of disabled elderly people. *Age and Aging, 26*, 21-23.

Bureau of Labor Statistics (2018, June 8). *Home health aides and personal care aides*. Retrieved from https://www.bls.gov/ooh/healthcare/home-health-aides-and-personal-care-aides.htm

Campbell, S. (2018). *U.S. home care workers: Key facts (2017)*. Retrieved from https://phinational.org/resource/u-s-home-care-workers-key-facts-2018/

Center for Innovation in Research and Teaching. (n.d.). *Phenomenology Research Overview*. Retrieved from https://cirt.gcu.edu/research/developmentresources/research_ready/phenomenology/phen_overview

Chappell, N. L., Havens, B., Honorary, D., Hollander, M. J., Miller, J. A., & McWilliam, C. (2004). Comparative costs of home care and residential care. *The Gerontologist, 44*(3), 389-400.

Czuba, L. R., Sommerich, C. M., & Lavender, S. A. (2012). Ergonomic and safety risk factors in home health care: Exploration and assessment of alternative interventions. *Work, 42*(3), 341–353.

Ejaz, F. K., Bukach, A. M., Dawson, N., Gitter, R., & Judge, K. S. (2015). Examining direct service worker turnover in three long-term care industries in Ohio. *Journal of Aging & Social Policy*, *27*(2), 139–155.

Family Caregiver Alliance. (2016). *Caregiver statistics: Demographics*. Retrieved from https://www.caregiver.org/caregiver-statistics-demographics

Gleason, H. P., Boerner, K., & Barooah, A. (2016). Feature article: Supporting home health aides through a client's death: The role of supervisors and coworkers. *Geriatric Nursing*, *37*, 278–283.

Guay, M., Levasseur, M., Turgeon-Londeï, S., Dubois, M. F., & Desrosiers, J. (2013). Exploring support needed by home health aides in choosing bathing equipment: New challenges for occupational therapy collaboration. *Work*, *46*(3), 263–271.

Home Health Aide Guide. (n.d.). *Ohio home health aide requirements*. Retrieved from http://www.homehealthaideguide.com/hha-training/states/ohio-hha/

Huber, M., Knottnerus, J. A., Green, L., van der Horst, H., Jadad, A. R., Kromhout, D., . . . Smid, H. (2011). How should we define health? *BMJ*, *343*, d4163.

Institute for Career Research. (2010). *Career as a home health aide: Rapidly expanding healthcare career with minimal education requirements.* Retrieved from http://search.ebscohost.com/login.aspx?direct=true&AuthType=ip,sso&db=nlebk&AN=201893&site=eds-live&scope=site&custid=s8356098

Kielhofner, G. (2008). *The Model of Human Occupation: Theory and application* (5th ed.). Baltimore, MD: Lippincott Williams &Wilkins.

Kok, L., Berden, C., & Sadiraj, K. (2015). Costs and benefits of home care for the elderly versus residential care: A comparison using propensity scores. *European Journal of Health Economics, 16*(2), 119–131.

Macdonald, M., & McLean, H. (2018). Home care and home support worker safety: A scoping review. *The Journal of the Gerontological Nursing Association, 40*(1), 18–26.

McCaughey, D., McGhan, G., Kim, J., Brannon, D., Leroy, H., & Jablonski, R. (2012). Workforce implications of injury among home health workers: Evidence from the National Home Health Aide Survey. *The Gerontologist, 52*(4), 493–505.

Morrow, R., Rodriguez, A., & King, N. (2015). Colaizzi's descriptive phenomenological method. *The Psychologist, 28*(8), 643-644.

National Institute for Occupational Safety and Health. (2010). *Occupational Hazards in Home Health Care* (DHHS Publication No. 2010–125). Retrieved from https://www.cdc.gov/niosh/docs/2010-125/pdfs/2010-125.pdf

Olsen, C., Pederson, I., Bergland, A., Enders-Slegers, M. Joranson, N., Calogiuri, G., & Ihlebaek, C. (2016). Differences in quality of life in home-dwelling persons and nursing home residents with dementia- a cross-sectional study. *BMC Geriatrics, 16*(137), 1-11.

Olson, R., Thompson, S. V., Elliot, D. L., Hess, J. A., Rhoten, K. L., Parker, K. N., & Marino, M. (2016). Safety and health support for home care workers: The COMPASS randomized controlled trial. *American Journal of Public Health, 106*(10), 1823–1832.

Palesy, D., & Billett, S. (2017). Learning manual handling without direct supervision or support: A case study of home care workers. *Social Work Education, 36*(3), 273–288.

Plichta, S. B. (2018). Paying the hidden bill: How public health can support older adults and informal caregivers. *American Journal of Public Health*, *108*(10), 1282–1284.

Research Gate. (n.d.). *Procedures of Colaizzi's phenomenological descriptive method* [Online Image]. Retrieved December 7, 2018 from https://www.google.com/search?q=colaizzi%27s+descriptive+phenomenological+method&source=lnms&tbm=isch&sa=X&ved=0ahUKEwjDlumi9Y3fAhUDH6wKHV3aBz4Q_AUIDigB&biw=1235&bih=682#imgrc=5IDbfCo2llaCnM:

Senior Living. (n.d.). *Assisted living vs skilled nursing*. Retrieved from https://www.seniorliving.org/compare/assisted-living-vs-skilled-nursing/

Stacey, C. L. (2011). *The caring self: The work experiences of home care aides.* Ithaca: ILR Press.

Stanley, M. (2015). Qualitative descriptive: A very good place to start. In S. Nayar & M. Stanley (Eds.), Qualitative research methodologies for occupational science and therapy (pp. 21-36). New York, NY: Routledge. doi:9781138283503Taylor, S. A. P., & Taylor, S. A. (2001). Place identification and positive realities of aging. *Journal of Cross-Cultural Gerontology*, *16*(1), 5–20.

U.S. Department of Health & Human Services. (2018). *The national quality strategy: Fact sheet*. Retrieved from https://www.ahrq.gov/workingforquality/about/nqs-fact-sheets/fact-sheet.html

Wiles, J. L., Leibing, A., Guberman, N., Reeve, J., & Allen, R. S. (2012). The meaning of "Aging in Place" to older people. *The Gerontologist*, *52*(3), 357-366.

Wu, T. (2015). Job satisfaction of home health aides: Influence of profit status and management models of home health care agencies. *Conference Papers -- American Sociological Association*, 1–12.

Yuksel, P., & Yildirim, S. (2015). Theoretical frameworks, methods, and procedures for conducting phenomenological studies in educational settings. *Turkish Online Journal of Qualitative Inquiry, 6*(1), 1-20.

Appendix A

Oral Script of Initial Interview

Hello! Thank you for expressing interest in participating in my capstone project.

Just to provide a refresher on the information I am seeking in this study, the purpose of this capstone is to gain an idea of what a typical day looks like as a home health aide and what physical challenges you come across. I am interested in learning about the different responsibilities and activities that are required of you throughout your day.

I would like to audibly record this interview if this is okay. I will use an alternative name in my research to keep your identity and the agency's identity anonymous.

Initial Interview

Preliminary Data Questions

1. What is your age?
2. How long have you been a home health aide?
3. What made you decide to become a home health aide?
4. What training were you required to complete? Did you feel prepared after completing it?
5. How many clients do you see and how often?
6. What are the average hours per week?

Target Questions

1. What does a typical day as a home health aide look like for you?
2. What are some activities that your clients require assistance with?
3. Which activities are the most physically demanding? Why?

4. Have you experienced physical injury when helping a client? Have you heard of others experiencing injuries?
5. Have you found any strategies or training to be helpful?

Appendix B

Oral Script of Follow-Up Interview

Hello! Thank you for meeting with me again and expressing interest in participating in my capstone project.

The focus of this interview is to discuss the findings from data analysis. I took the information from all the interviews I conducted and analyzed it for re-occurring ideas. If an idea was mentioned many times, I separated it and categorized it as a theme. I will discuss the themes that I found, and I would like you to tell me if you believe they are consistent with what you have experienced. I would like to audibly record this interview as well if this is okay. I will use an alternative name in my research to keep your identity and the agency's identity anonymous. Thank you again for your time!

Follow-up Interview- Discussion of themes identified

Target Questions

1. Do you agree with the themes that were found? If not, why?
2. What do you feel would be important for a new home health aide to learn?
3. Is there any other information that you feel is important for people to know about what it is like being a home health aide?

Appendix C

Consent to Participate in a Research Study

A PHENOMENOLOGICAL STUDY OF THE HOME HEALTH AIDE EXPERIENCE

Why am I being asked to participate in this research?

You are being invited to take part in a research study about the experiences of home health aides. You are being invited to participate in this study because you are actively working as a home health aide, or you have worked as a home health aide for the selected home health agency the past year (2018). If you take part in this study, you will be one of about 8-10 people to do so.

Who is doing the study?

The person in charge of this study is Julia Mindlina at Eastern Kentucky University. She is being guided in this research by Shirley O'Brien and Leah Simpkins. There may be other people on the research team assisting at different times during the study.

What is the purpose of the study?

By doing this study, we hope to gain an in-depth understanding of the subjective experiences of home health aides. A special focus of this capstone will be physiological barriers home health aides face on a daily basis in their work.

Where is the study going to take place and how long will it last?

The research procedures will be conducted at a point of interest that is convenient for you (the participant) to meet with the researcher. You will need to meet with the researcher 2 times during the study. Each of those visits will take about 30 minutes. The total amount of time you will be asked to volunteer through participation in interview for this study is 1-hour total (30 minutes for each interview, total of 2 interviews) over the next 6 months.

What will I be asked to do?

The researcher will ask you questions pertaining to your daily roles and responsibilities as a home health aide. You will be asked to answer your questions honestly and with as much detail as you would like to include. The researcher will record the audio of the interview for data collection purposes. Your name, as well as the home health agency that you work for will be kept anonymous. A fake name will be assigned to your responses when data is represented in the research.

<u>Timeline:</u>
Participant *agrees* to take part in study by signing consent form. (January 2019).
Participant *takes part* in the initial interview. (January/February 2019)
Participant *takes part* in the follow-up interview. (March 2019).

Are there reasons why I should not take part in this study?
You should not take part in this study if you have not been employed as a home health aide at the selected home health agency within the past year (2018).

What are the possible risks and discomforts?
To the best of our knowledge, the things you will be doing have no more risk of harm than you would experience in everyday life.

Will I benefit from taking part in this study?
You will not get any personal benefit from taking part in this study.

Do I have to take part in this study?
If you decide to take part in the study, it should be because you really want to volunteer. You will not lose any benefits or rights you would normally have if you choose not to volunteer. You can stop at any time during the study and still keep the benefits and rights you had before volunteering.

If I don't take part in this study, are there other choices?
If you do not want to be in the study, there are no other choices except to not take part in the study.

What will it cost me to participate?
There are no costs associated with taking part in this study.

Will I receive any payment or rewards for taking part in the study?
You will not receive any payment or reward for taking part in this study.

Who will see the information I give?
Your information will be combined with information from other people taking part in the study. When we write up the study to share it with other researchers, we will write about this combined information. You will not be identified in these written materials; a fake name will be used to represent the data.

We will make every effort to prevent anyone who is not on the research team from knowing that you gave us information, or what that information is. For example, your name will be kept separate from the information you give, and these two things will be stored in different places under lock and key.

However, there are some circumstances in which we may have to show your information to other people. For example, the law may require us to show your information to a court or to tell authorities if we believe you have abused a child or are a danger to yourself or someone else. Also, we may be required to show information that identifies you to people who need to be sure we have done the research correctly; these would be people from such organizations as Eastern Kentucky University.

Can my taking part in the study end early?
If you decide to take part in the study, you still have the right to decide at any time that you no longer want to participate. You will not be treated differently if you decide to stop taking part in the study.

The individuals conducting the study may need to end your participation in the study. They may do this if you are not able to follow the directions they give you, if they find that your being in the study is more risk than benefit to you, or if the agency funding the study decides to stop the study early for a variety of scientific reasons.

What happens if I get hurt or sick during the study?
If you believe you are hurt or if you get sick because of something that is done during the study, you should call Julia Mindlina at (614)-580-0682 immediately. It is important for you to understand that Eastern Kentucky University will not pay for the cost of any care or treatment that might be necessary because you get hurt or sick while taking part in this study. That cost will be your responsibility. Also, Eastern Kentucky University will not pay for any wages you may lose if you are harmed by this study.

Usually, medical costs that result from research-related harm cannot be included as regular medical costs. Therefore, the costs related to your child's care and treatment because of something that is done during the study will be your responsibility. You should ask your insurer if you have any questions about your insurer's willingness to pay under these circumstances.

What if I have questions?
Before you decide whether to accept this invitation to take part in the study, please ask any questions that might come to mind now. Later, if you have questions about the study, you can contact the investigator, Julia Mindlina at (614)-580-0682. If you have any questions about your rights as a research volunteer, contact the staff in the Division of Sponsored Programs at Eastern Kentucky University at 859-622-3636. We will give you a copy of this consent form to take with you.

What else do I need to know?
You will be told if any new information is learned which may affect your condition or influence your willingness to continue taking part in this study.

I have thoroughly read this document, understand its contents, have been given an opportunity to have my questions answered, and agree to participate in this research study.

_____ _____
Signature of person agreeing to take part in the study Date

_____
Printed name of person taking part in the study

_____
Name of person providing information to subject