THESIS

THE DEMENTIA-SPECIFIC LIVED ENVIRONMENT AND LIFE QUALITY MODEL:

ENVIRONMENTAL INTERVENTIONS AND ROLES OF EXPERT PRACTITIONERS

Submitted by

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ABSTRACT

THE DEMENTIA-SPECIFIC LIVED ENVIRONMENT AND LIFE QUALITY MODEL:

ENVIRONMENTAL INTERVENTIONS AND ROLES OF EXPERT PRACTITIONERS

Individuals with Alzheimer's disease and related neurodegenerative dementias (ADRD) are particularly vulnerable to their environments due to diminished abilities to correctly process, organize, and integrate sensory information, leading to potential behavioral problems and functional deficits (Cohen-Mansfield, 2004; Kitwood, 1997). For individuals living in long-term care facilities, qualities of the physical and social environment can have an immediate and compounding effect on the quality of life of residents. Yet, to date there is little research on current best occupational therapy practices related to environmental interventions for people with ADRD living in long-term care. A proposed model of practice unique to occupational therapy called the Lived Environment Life Quality Model provides an appropriate theoretical framework in which to identify and examine processes of physical and social environmental interventions. This research study employed an action research methodology to identify physical and social environmental interventions employed by six expert occupational therapy practitioners, framed within the context of confirming and disconfirming the Lived Environment Life Quality Model. The results showed an overall confirmation of the model. Physical and social environmental interventions identified represent a vast and complex list that infiltrated all aspects of care, with the practitioner operating as a powerful change agent capable of dictating, influencing, and operating as part of the environmental intervention itself. Ultimately, it is important for occupational therapists to serve as *ambassadors of care*, and step into the foreground of enacting large-scale systems change within all aspects of the physical and social environment of the long-term care facility to elevate quality of life for residents with ADRD.

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CHAPTER ONE: BACKGROUND TO THE STUDY

Alzheimer's disease and related neurodegenerative dementias (ADRD) are characterized by progressive debilitating memory loss, resulting in a disparity between what individuals can, need, and want to do, and what opportunities and contexts are afforded them (Wood, Womack, Hooper, 2009). Individuals with ADRD are particularly vulnerable to their environments due to diminished abilities to correctly process, organize, and integrate sensory information, leading to potential behavioral problems and functional deficits (Cohen-Mansfield, 2004; Kitwood, 1997). There is evidence to suggest that familiar or engaging *environmental conditions*, including physical aspects of the environment, task, and social characteristics, can cue an individual with ADRD to recognize the task, object, or surroundings and, in turn, promote engagement in meaningful occupations, or important life activities unique to each individual (Gitlin & Corcoran, 2005, Gitlin, Liebman, & Winter, 2003). Thus, environmental conditions serve as a means to ground confused thoughts to a reliable, stable, and tangible source that individuals can interact with and recognize (Chard, Liu, Mulholland, & 2009). As a result, a positive and engaging environment allows the potential for engagement to come to fruition. Thus, it is imperative that the environment is set-up to support engagement in meaningful activities, and thereby promote an improved quality of life. Quality of life, in general, is characterized by a collective state of emotional and social well-being that yields a natural and sustained positive affect and interaction with others (Kane, 2001).

Due to the significant role of the environment among people with ADRD, it is imperative to identify, characterize and understand facility-based environmental interventions that are effective in promoting engagement in life activities and in turn elevates quality of life. Understanding the commonalities that exist among effective environmental-based interventions

is a critical step in creating systemic clinical guidelines of standard care for individuals diagnosed

with ADRD (Gitlin & Corcoran, 2005; Shulz et al., 2003). Employing an action research

methodology, this research study explores how expert occupational therapy practitioners in the

field of ADRD care adapt the environment to improve the quality of life for individuals with

ADRD in long-term care. This study is framed within the context of reviewing and modifying a

conceptual model of practice, the Lived Environment and Life Quality Model (LELQ),

developed by Dr. Wendy Wood (2011).

This thesis consists of five chapters. Chapter one contains of an extended literature

review, highlighting research related to the role of the environment in long-term care for people

with ADRD, the importance of employing conceptual models of practice to guide selection of

effective environmental interventions, and the role and importance of applied theory building in

implementing an occupation based conceptual model of practice, the LELQ Model. In Chapter

two, I will provide a detailed description of the LELQ model, guiding research questions, and an

extended description of the methodology will properly frame the study results. Chapter three

consists of an extended description of results, and Chapter four includes discussion, study

limitations, and implications for practice. Chapter five features personal reflection on future

direction of research, including how this research study will shape my own practice as I enter the

job market, and overall reflection on lessons learned during this process.

The Environment and People with ADRD: An Overview

There is consensus within the literature regarding the impact of the environment on

people with ADRD (Padilla, 2011b). Due to diminished cognitive abilities, people with ADRD

incorrectly process environmental stimuli, and as a result, are in a state of vulnerability (Lawton,

1974). Called *environmental vulnerability*, the conditions of the environment have a greater

impact on the health and well-being of people with ADRD as they progressively lack the cognitive and communication abilities to actively engage in and modify their environment, and instead are often subject to the environmental conditions that are afforded them. This is especially true in the case of long-term care settings as individual autonomy is restricted to ensure safety and security of residents (Warchol, 2006). Thus, by virtue of logic, individuals with ADRD who lack the ability to manipulate their environment to best suit their needs and preferences are potentially more environmentally vulnerable than individuals who can remain in familiar and engaging environments. Increased environmental vulnerability, in turn, can lead to an increased risk for *excess disability*. Excess disability is characterized by secondary effects of a disease that manifest as reversible functional deficits (Dawson, Kline, Wianchko, & Wells, 1986). Thus, the role of the environment in long-term care for people with ADRD is a critical.

To date, however, there is a lack of research that focuses on the impact of environmental conditions within long-term care settings (Padilla, 2011a). The lack of relevant research related to modifying the environment in long-term care is concerning given the impact these institutions potentially have on behavior and well-being of residents (Wood, 2011). There is research that links behavior of those residing in isolated environments separated from the dominant society, called *total institutions*, to the length of time and opportunities for engagement provided (Wood, 2011). Examples of total institutions include long-term care facilities, prisons, or boarding schools (Wood, 2011). Using a captive non-human primate model, Wood, Towers and Malchow (2000) found that the longer a family of sifaka (prosimians) resided within institutionalized environments where they were not permitted to leave at will, the greater the environmental conditions pressed or yielded the expression of certain types of behavior over others. Called *environmental press*, the pressing or shaping of certain behaviors ultimately impacts the quality

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of life for residing individuals. For example, an environment that is void of prolonged and

ongoing opportunity for engagement and positive stimulation will progressively yield negative

behaviors among inhabitants, resulting in narrowing or channeling of behaviors. Channeling of

behaviors is characterized by monotonous and repetitive conduct, stripped of nuanced sentiment

and reaction that ultimately impacts the health and quality of life of inhabitants (Wood, Towers,

& Malchow, 2000). In other words, there is a link between the amount of time spent in these

isolated environments and the degree to which these behaviors manifest and further narrow. This

concept known as *environmental channeling* elevates the significance and gravity the role the

environment has on individuals with ADRD residing in long-term care facilities; a population

that is already particularly vulnerable to environmental stimuli. For this reason, the nature,

quality, and consistency of engaging environments are of paramount concern and opportunity

within ADRD research.

In addition, not only is there a gap in environmental-based research in long-term care, but

there is also a lack of intervention-driven research that includes direct involvement of

occupational therapists in the implementation of intervention processes. Of six systematic

reviews covering occupational therapy interventions for people with ADRD, only 15 or 9.6% of

the 156 reviewed studies that were not systematic reviews directly involved occupational

therapists in the facility-based treatment protocol (Padilla, 2011b). This statistic is alarming given

that occupational therapists are uniquely positioned to treat individuals with ADRD as they

promote engagement in meaningful occupations, or day-to-day activities, in any capacity

possible. Further, the lack of research that directly involves occupational therapists is concerning

given that residents of ADRD long-term facilities are by default, in an environment that is

unfamiliar, and therefore would benefit from support from practitioners to create an accustomed,

accommodating, and appealing space to provoke engagement. Thus, it is crucial that comprehensive ADRD care in long-term institutions includes occupation-based interventions delivered by occupational therapists to elevate engagement, and in turn, quality of life for residents.

In addition, for individuals with ADRD, the literature to date supports the need to ground environment-based interventions in conceptual models of practice that can help to promote consistency and quality in evidence-based care. In fact, the AJOT systematic reviews previously mentioned emphasized the need to employ conceptual models of practice that focus on the context and environment rather than restorative treatment of the person to maximize quality of life for ADRD patients (Padilla, 2011b). Further, employing conceptual models of practice allows frontline caregivers and therapists to target treatment goals and interventions to better meet the needs of the individual. In turn, targeted individualized treatment has been linked to positive health and quality of life outcomes for patients (Stewart et al., 2000).

Yet, conceptual models of practice used by occupational therapists that include the environment are not addressed cohesively and consistently in the ADRD literature. In fact, conceptual models of practice used by occupational therapists that guide environmental interventions greatly range in the literature (Padilla, 2011b). Only two of the six systematic reviews focused on facility-based environmental interventions, and among those two, only 3 out of 34 studies involved occupational therapists and were most often characterized by different models. These models include the unmet needs model, the environmental vulnerability/reduced stress-threshold model, and the Montessori Method. The *unmet needs model* attributes emotional distress to an impaired ability to express needs, wants, and desires resulting in manifestation of inappropriate behaviors including agitation and wandering (Cohen-Mansfield, 2004). The

environmental vulnerability/reduced stress-threshold model holds that individuals with ADRD are more vulnerable to environmental conditions and as a result, have a lower tolerance to stimuli that yield changes in behavior (Cohen-Mansfield, 2004). The *Montessori Method* is a type of multi-sensory stimulation model, encompassing multiple activities to illicit engagement and participation among children; it has more recently been applied to elevating quality of life for individuals diagnosed with ADRD (Lee, Camp & Malone, 2007). And most importantly, these three models are not specific to occupational therapy and therefore do not fully represent an occupation-centric theoretical foundation central to the field.

These and other conceptual models of practice provide unique contributions to addressing the link between environmental conditions and quality of life for people with ADRD. However, the wide range in methods, practices, and outcome measures makes it difficult to discern what specific environmental interventions work with what particular model and why (Gitlin & Corcoran, 2005). What ensues is the implementation of a wide range of interventions instead of substantiated and systematic practices derived from empirically driven conceptual models of practice (Cohen-Mansfield, 2004; Gitlin & Corcoran, 2005). As a result, there is need to create, evaluate, and modify a conceptual model of practice that examines the link between the environment, opportunity to engage, and quality of life for individuals with ADRD.

Prior to modifying and implementing such a model, it is important to understand best methods for evaluating and implementing theory-based conceptual models of practice. The nature and process of applied theory-building proposed by Lynham (2000) provides a comprehensive method to systematically create and employ theory for implementation into practice.

Applied Theory Building

Applied theory-building is defined by Lynham (2000) as a process to create, confirm, refine and put into practice meaningful theory to explain and understand an experienced phenomenon. At the heart, theory building aims to motivate action by generating useful and applicable knowledge to address a recognized problem through creating and implementing a theoretical framework. Theory building, by nature, involves a process of generating the conceptual foundations of a theory, confirming and disconfirming the theory, and applying it to practice, with the end goal of disbanding division between research and practice (Lynham, 2002). As it relates to applied health care research, applied theory building is a method used to address and potentially solve problems observed in practice.

There is an inherent growth cycle characteristic to theory building that consists of five phases described below. However, the nature and process of theory building is ongoing and iterative, and often requires overlapping of the five phases. The iterative, overlapping qualities characteristic to this process is illustrated in Figure 1. Thorough theory building requires each of the five phases, but the order and importance of each step will vary. Which phase is carried out and when depends on the theory-building process strategy and role of the researcher/theorist. The iterative nature of this process suggests that the theory is never final or complete, but rather it is always in a perpetual state of progress. Thus, although there are five distinct phases (conceptual development, operationalization, confirmation or disconfirmation, application, ongoing refinement and development) to theory building, it is important to understand that it may require repetition or increased attention to one or more steps in order to fully undertake the process.

The first phase is the *conceptual development* of a theory. In this phase, a problem is identified and the nature and dynamics of the identified problem are explained in a theory. This

phase includes the development of key elements of a theory, an explanation of the relationship between the key elements, and the conditions or situation in which the theory will apply (Lynham, 2002). This phase requires theoretical inquiry, employing quantitative or a deductive method or qualitative research approaches. Qualitative research methods typically engage the theory building process by applying initial elements of the theory within a real-life context, gathering results, and then modifying the conceptual framework based on these results. The conceptual development phase is the core of the theory building process (Lynham, 2002). The conceptualization of the LELQ model has already been completed. The LELQ model was developed in response to an observed need to improve the quality of life and care for individuals with ADRD in long-term care facilities (Wood, 2011). As a result, the conceptual development phase of theory building is not the focus of this study.

The *operationalization of a theory*, the second phase in this process, establishes a clear connection between conceptualization of a theory and implementation into practice (Lynham, 2002). During this phase, the operationalization of a theory is vetted in a real-life setting. Application of the theoretical framework within a real-life context must be empirically confirmed in order to build trust and confidence surrounding the utility of the theory. Empirical confirmation requires that the theory be translated to observable and confirmable elements that can be further validated through application and further research. This research study uses an action research methodology in order to gather empirical information needed to engage in this phase of the theory building process.

The third phase, *confirmation or disconfirmation*, involves systematic evaluation and implementation of an appropriate research plan or study that assesses credibility of the established theory to address the recognized problem (Lynham, 2002). This research study is

primarily concerned with this phase of the theory building process. This phase has a practice component as it requires the development, implementation, and evaluation of a research agenda aimed to test, inform, and evolve the theoretical framework. When this phase is thoroughly undertaken, the result is a 'confirmed and trustworthy theory' that can be used with a degree of confidence within practice (Lynham, 2002, p. 232).

In the *application phase*, the fourth phase, the theory is put into action. During this phase, the theory has been operationalized and tested in a real-life context and requires further analysis. During this phase, the theory is fully implemented and applied in the day-to-day operations of the institution. The application phase is the central practice component of theory building as the theory is applied to the identified phenomenon or problem in order to further inform and refine the theory. It is during this phase that the utility or relevance of the theory to the problem is put to the test (Lynham, 2000).

The fifth phase, *ongoing refinement and development*, requires ongoing revision, improvement, and development of the theory. Thus, in this stage, the researcher/theorist acknowledges that the process is never finalized or complete. This stage requires an ongoing improvement of the theory as it is in action while also maintaining the relevance and rigor of the theory in the future. This phase is a bridge between the practice and conceptual theoretical framework development inherent to the theory building process (Lynham, 2002).

The theory building process provides a systematic and ongoing blueprint for conceptualizing, operationalizing, confirming, applying, and implementing a theory aimed to improve practice (Lynham, 2002). With that in mind, there is a demonstrated need for a theoretical model of practice that bolsters the quality of life for individuals with ADRD residing in long-term care. As a result, the development and application of a theoretical framework that

addresses this need, such as the LELQ Model, requires vetting through the theory building

process. A detailed explanation of the LELQ Model is necessary in order to frame research

questions and the role of theory building in this research study.
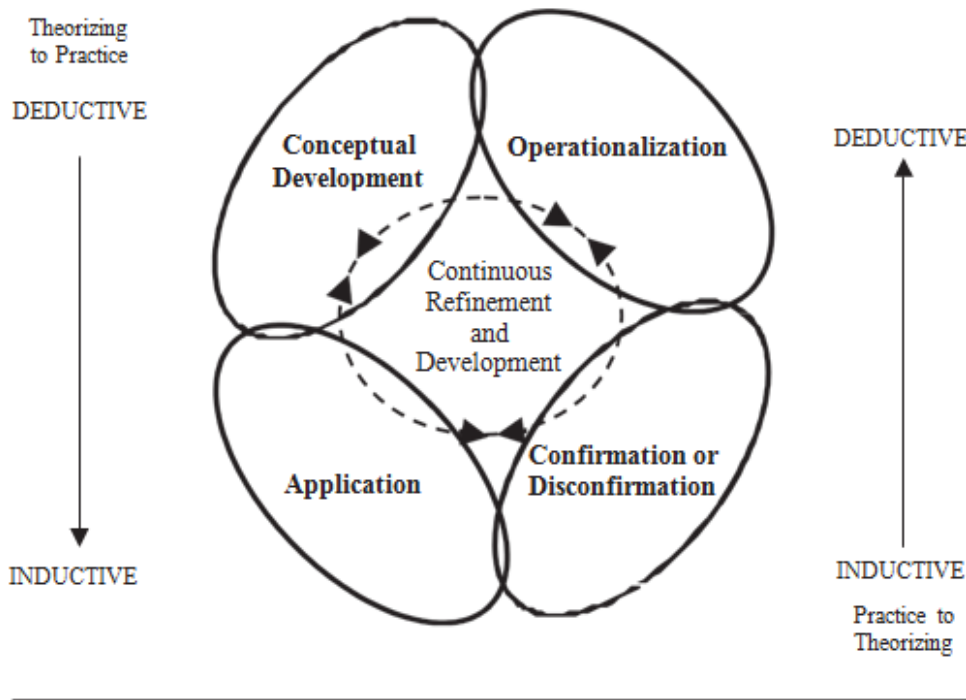
Figure 1: The five phases to applied theory-building (Lynham, 2002).

The Lived Environment Life Quality Model (LELQ)

The LELQ Model is a conceptual model of practice specifically designed to improve the

quality of life for individuals with ADRD residing in long-term care facilities through the

provision of occupational therapy services (Wood, 2011). Given the scope of practice that the

LELQ model aims to inform and improve, it is an appropriate framework to identify facility-

based environmental interventions for people with ADRD. Cataloging and understanding what

environmental interventions are effective and how they manifest within the LELQ model could

provide ADRD long-term care practitioners with strategies to evaluate and modify current practices to better promote enhanced quality of life for residents (Wood, 2011). Figure 2 provides a visual schematic of the LELQ Model including domains and distinguishing characteristics of each component that will be described in detail below.

The LELQ Model is comprised of five domains, three of which are characterized as quality of life domains, and two as the lived environment. The two lived environment domains include the *caregiving microsystem* and the *person with dementia* resulting in an *emergent environmental press.* The three quality of life domains include *daily time use*, *retained capacities,* and *emotional well-being or ill-being* (Figure 2). In addition, the LELQ model has a temporal component in which the domains interact within a snapshot of time, as well as over time to influence the quality of life of the person with ADRD, depicted by the spiral clock in the right hand corner of the model.
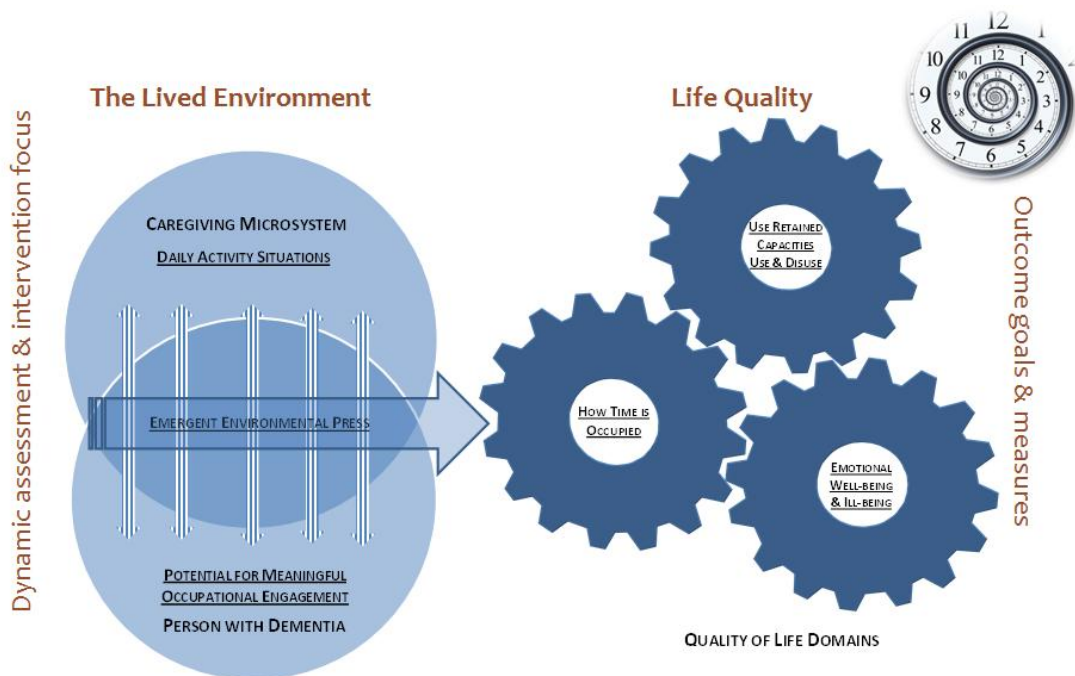
Figure 2: The LELQ Model domains (Wood, 2011).

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The Lived Environment

The LELQ quality of life domains are contingent upon the nature and quality of the *lived environment,* the starting point of the model. As mentioned above, the lived environment is characterized by the interaction of two domains, the *caregiving microsystem* and the *person with dementia* (Wood, 2011). The overlap of the two domains creates an *emergent environment press*, which can support or impede quality of life both in the moment and over time. In the model, the two lived environment domains are represented by two circles in which maximum overlap, characterized by vertical white arrows, facilitates a positive emergent environment press, represented by the large horizontal arrow pointing toward the three quality of life domains (Figure 2).

Caregiving Microsystem.

The caregiving microsystem encompasses the immediate environmental conditions in which the person with ADRD resides, which take the form of daily activity situations (Wood et al, 2013). *Daily activity situations* refer to reoccurring, observable blocks of time that span the entire day within a long-term care setting (Wood, 2011; Wood, Harris, Snider & Patchel, 2005). Examples of daily activity situations include daily time allotted for downtime or mealtimes. Activity situations link together and shape the daily routine of the person with ADRD residing within long-term care. The quality and nature of daily activity situations are shaped by multiple factors inherent to the caregiving microsystem.

The frequency, amount of time allotted, and the quality of opportunities for occupational engagement influence daily activity situations within a caregiving microsystem. Wood, Womack and Hooper (2009) found that frequency and amount of time allocated for occupational engagement is an incomplete evaluation of daily activity situations. Rather, it is also important to

evaluate how residents actually occupy time in specific activity situations. For instance, during an activity situation such as mealtime, it is not only important to evaluate how much time is allotted for eating and socializing, but it is also important to evaluate the level and quality of interactions between residents and staff, and the level of choice given to residents in what they eat and when. For example, is he or she actually eating, or interacting with others? Or is he or she being passively fed? This example illustrates the evaluation of frequency, amount of time allotted, as well as the quality of the opportunity to engage characteristic to daily activity situations within a caregiving microsystem.

Another characteristic of daily activity situations within a caregiving microsystem are the occurrence of physical and social environmental barriers and supports. The physical environment includes the built environment and physical environmental elements of the person's residence. The built environment includes the layout and size of the facility and room, and physical environmental elements include the occurrence and characteristics of facility amenities or personal belongings such as televisions, games, or photo albums (Wood, 2011). Supports and barriers of the social environment are characterized by the nature and quality of the opportunity for interpersonal interactions and relationships. Social environment supports and barriers also include a sociocultural component including facility policy and procedures that may impact the opportunity for engagement among persons with ADRD (Wood, 2011).

A part of the sociocultural environment is the prevalence of an optimistic or pessimistic caregiving culture. Within the context of the model, an optimistic caregiving culture is one in which the long-term care facility, staff, and frontline caregivers promote optimal engagement in meaningful occupations that elevate emotional well-being and quality of life for residents. The defining principle of an optimistic caregiving culture is a fundamental belief that an individual

with ADRD has the innate and enduring ability to participate and engage in some meaningful way, regardless of the level of ADRD stage. As a result, an optimistic caregiving culture is by default, set-up to support engagement in activities uniquely meaningful to the individual. What ensues is a caregiving microsystem that is innately set-up to promote meaningful occupation spanning the entire day, permitting the emergence of an optimistic caregiving culture that permeates all aspects of care.

In contrast, a pessimistic caregiving culture puts into practice the belief that individuals with ADRD eventually lack the ability to engage meaningfully and intentionally. As a result, a pessimistic caregiving culture is an environment void of deliberate intent to provide recurrent opportunities for meaningful engagement for residents, shifting focus away from occupation, and instead on keeping residents safe, clean, and injury-free (Warchol, 2006). Caregiving cultures can lie on the spectrum between being optimistic and pessimistic, potentially exhibiting a mixture of both characteristics simultaneously.

Person with Dementia.

The second domain in the lived environment is the *person with dementia*. The LELQ model theorizes that understanding who the person is and their remaining functional capacities is critical to perceiving an individual with ADRD as capable of engaging in meaningful occupations regardless of ADRD stage (Wood, 2011). Thus, understanding the person with ADRD as an occupational being is the key to maximizing the potential for meaningful occupation. There are three components to the *person with dementia* domain designed to understand the whole person as the mode to unearth hidden occupational potential: occupational history and profile, preferences and needs, and retained capacities.

Understanding the person as an occupational being requires compiling an occupational history and profile including past and current occupations and important relationships and friendships (Wood, 2011). Creating a detailed occupational history and profile allows the occupational therapist to create an individualized treatment plan that optimizes potential for engagement. Failure to compile a complete occupational history and profile reduces the potential for creating meaningful opportunities for engagement unique to the individual with ADRD. Another component to the *person with dementia* domain is identifying the current preferences and needs that comprise day-to-day life of the individual. These include meal preferences, daily routine preferences in order to enhance engagement including when the person prefers to get up in the morning, and go to bed at night. Failure to recognize preferences and needs can contribute to a lack of meaningful engagement, thereby impacting the quality of life and well-being of the individual with ADRD (Wood, 2011).

The final component characteristic to this domain is assessing and identifying retained cognitive, perceptual, sensory, physical, social, communicative, and emotional capacities of the individual (Wood, 2011). Understanding the collective retained capacities of the individual allows the occupational therapist to rule out physical health or related dysfunction to in turn focus on remaining abilities. Thorough assessment of retained capacities allows the occupational therapist to identify remaining abilities, which can be maximized in order to promote engagement. Meticulous, ongoing rigorous assessment of retained capacities is essential in order to uncover hidden occupational potential of the person with ADRD (Wells & Dawson, 2000).

The two lived environment domains interact, creating an *emergent environmental press*. An environmental press is comprised of social, symbolic, physical, and cultural features that warrant or enable the expression of some types of behavior and actions over the expression of

others (Wood et al., 2009). For example, meal times staged in a cafeteria likely promote the activity of eating, drinking, and potentially socializing than do reading groups, which likely prompt a quiet relaxed environment (Lawton, 1997). Maximum overlap of the *caregiving microsystem* and the *person with dementia* domains is indicative of a 'just right fit' between the person's capacities preferences, and needs, and the nature and quality of the caregiving microsystem. A 'just right fit' between the domains inherently fosters a positive and engaging emergent environmental press. However, a poor fit between the two domains is a result of little overlap between the *caregiving microsystem* and the *person with dementia* which negatively impacts the emergent environmental press. Thus, the interaction between the *caregiving microsystem* and the *person with dementia* domains collectively creates an emergent environment press that lies on the spectrum between being occupationally deadening or enlivening (Wood, 2011).

Activity situations that are *occupationally enlivening* are characterized by an environment press that supports quality of life. Quality of life, in turn, is understood in the model to encompass indivisible experiences of daily time use, retained capacities, and emotional well-being or ill-being. In short, occupationally enlivening activity situations promote a higher quality of life for individuals diagnosed with ADRD in long-term care facilities. Though, the opportunity for isolated instances of an occupationally enlivening environment in itself is insufficient. Instead, prolonged consistency in occupationally enlivening conditions is required to promote a positive and engaging environmental press over time and, in turn, a sustained improved quality of life (Wood et al., 2009).

In contrast, *occupational deadening activity situations* are environments that are an ill fit between the *caregiving microsystem* and *person with dementia* domains, leading to an emergent

environmental press that stifles the quality of life domains. For example, forcing a resident to eat breakfast early in the morning within a crowded noisy dining room despite his preference to sleep in and eat in a less stimulating environment could lead to the resident to experience anxiety, withdrawal, or anger, ultimately causing him to disengage from the task and avoid eating all together. In an occupationally deadening environment, it is impossible to bolster quality of life as the three quality of life domains are contingent upon conditions of the lived environment. Thus, it is critical that an environment is occupationally enlivening in order to support engagement in meaningful activities, the lynchpin of promoting quality of life within long-term care.

Quality of Life Domains

The three quality of life (QoL) domains interact symbiotically and instantaneously to form an indivisible experience of life quality stemming from the conditions of the lived environment and the nature of the environmental press (Wood, 2011). The three QoL domains are mutually influential in which the characteristics of one QoL domain inherently influences the other two. Symbolized as cogs in a machine, all three domains must work together to bolster quality of life for the person with ADRD (Figure 2). The transactional relationship between the domains is indiscriminate; meaning that they inherently influence each other (Wood, 2011). Even so, there are specific characteristics unique to each domain

Daily Time Use.

The first QoL domain, *daily time use*, is concerned with how time is occupied by the person with ADRD and behavioral indicators of occupational engagement or disengagement over time and in the moment during daily activity situations. Daily time use is defined as "what [long term care] residents with ADRD actually do when in the immediate proximity of an activity

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situation regardless of its ostensible purpose" (Wood, Womack & Hooper, 2009, p. 338). Thus, at the heart of evaluating daily time use is evidence of occupational engagement. Optimal time use is demonstrated when the person with ADRD participates in a meaningful occupation. The more time engaging in meaningful occupation in turn, facilitates positive engaged behaviors. Wood (2011) established four different categories to evaluate daily time use in relation to occupational engagement including: engaged gaze, participation in conversation, active participation, and interest in the activity. In comparison, occupational disengagement results from activity situations that are deadening, and expressed in behaviors like a blank unengaged gaze, withdrawn or disengaged participation. The level, prevalence, and quality of occupational engagement are directly linked to the second QoL domain, the use or disuse of retained capacities.

Use or Disuse of Retained Capacities.

This QoL domain is characterized by use or disuse of remaining retained capacities, characterized by cognitive, physical, communicative, perceptual, sensory, social, and emotional abilities of the person with ADRD (Wells & Dawson, 2000). The sustained use of retained capacities is possible when a positive lived environment provides ongoing opportunities for the person with ADRD to engage in meaningful occupations over time. Wood, Womack and Hooper (2009) found that the lack of opportunities for prolonged engagement exacerbates excess disability among people diagnosed with ADRD, thereby potentially accelerating the decline in functional abilities. A decline in functional abilities, in turn, increases the likelihood of developing secondary, reversible impairments, called excess disability discussed earlier. As with the other domains of the LELQ model, there exists an immediate here-and-now impact related to the use and disuse of retained capacities. As a result, this model theorizes that increased engagement in meaningful occupations maximizes optimal functioning of remaining abilities

(Wood, 2011). This model predicts that prolonged engagement in meaningful occupations will in turn slow the progression of ADRD, thereby preserving remaining abilities longer and maximizing functional competence. Sustained occupational engagement bolsters use of remaining functional capacities, as well as emotional well-being, the third and final QoL domain.

Emotional Well-being and Ill-being.

The third and final QoL domain is emotional well-being and ill-being, and, like the other QoL domains, is contingent upon the conditions of the lived environment. Lawton (2001) argues that assessing emotional well-being among people with ADRD in long-term care is often overlooked, and as a result, is an important quality of life indicator to assess. An environment that facilitated sustained participation in meaningful occupations promotes positive emotional well-being. Thus, emotional well-being is metric of sustained engagement, and is critical to promote a sustained quality of life for individual as theorized by the LELQ model (Wood, 2011). Emotional well-being is demonstrated through a positive apparent affect including expressed interest, pleasure in activities, happiness, and joy in activities and in interactions (Lawton, 1997). In comparison, the experience of ill-being is a result of, and reinforced by, an unsupportive and disengaging lived environment with minimal opportunity for meaningful engagement. In turn, a disengaging lived environment leads to the disuse of retained capacities, concurrently causing a decline in emotional well-being as demonstrated by agitation, sadness, depression, and hostility (Wood, 2011).

Long-term Outcomes: Environmental Channeling and Awakening

The LELQ model theorizes that the lived environment and QoL domains interact instantaneously as well as over-time. The long-term effects of an occupationally deadening and enlivening lived environment impacts the prevalence and quality of occupational engagement, use or disuse of retained capacities and the existence of well-being and ill-being. Figure 3 depicts the long-term impact of reoccurring occupationally deadening or enlivening activity situations over time. The solid line is representative of the gradual decline inherent to the progression of the disease. However, the rate of progression of the disease, depicted by vertical arrows, and quality of life of individuals are directly related to environmental channeling or awakening, shown respectively as a spiral above or below the solid natural disease progression line. The spiral lines above and below the solid line represent the reoccurrence of occupationally enlivening or deadening activity situations over time (Figure 3).
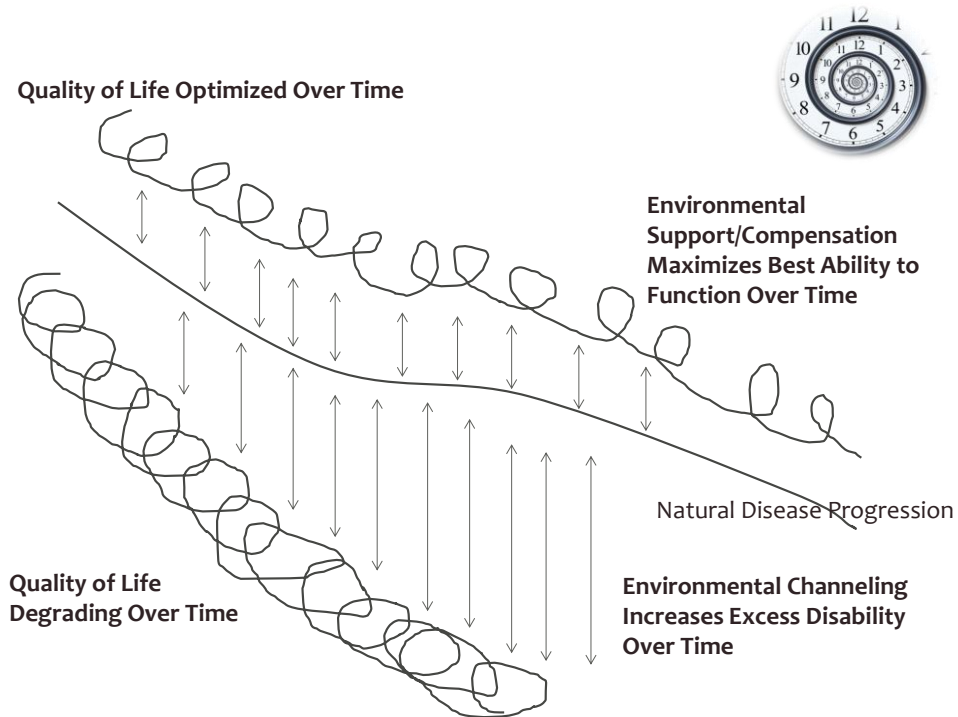
Figure 3: The LELQ model over time in relationship to the progression of ADRD

Environmental channeling results from ongoing and prolonged exposure to occupationally deadening activity situations. If these individuals with ADRD are not provided the opportunity to engage over time, what ensues is the disuse of retained capacities, leading to a decline in emotional well-being, which can in turn play a role in exacerbating excess disability and thereby potentially accelerate decline in functional abilities. As shown in the model, environmental channeling leads to increased degradation of quality of life over time indicated by the rapid downward spiral, ultimately causing excess disability, shown by vertical arrows pointing down (Figure 3). Thus, the phenomenon of environmental channeling elevates the significance and gravity the role the environment plays in long-term ADRD care.

In comparison, *environmental awakening* is the long-term impact of positive engaging environmental press over time, ultimately elevating quality of life and affect of individuals with ADRD. The LELQ model predicts that, over time, the transaction and interaction of all the positive elements of the domains can result in individuals with ADRD to "awaken", demonstrated by increased engagement in a meaningful task or occupation, which in turn has the potential to slow functional decline through the sustained use of retained capacities (Wood, 2011). Within the model, environmental awakening slows the progression of the disease, depicted by the vertical arrows demonstrating increased environmental supports that best maximize the ability of the individual to function over time. Thus, the existence of an occupationally enlivening environment is paramount to promoting health and quality of life for individuals with ADRD.

In sum, the LELQ model provides a conceptual model of practice that serves to assess the conditions and opportunities within a long-term care facility in order to identify potential environmental barriers and supports to occupational engagement for the individual with ADRD.

It is integral to understand, in detail, how environmental conditions directly impact the level of engagement and quality of life for individuals residing within long-term care.

Purpose

This study had two aims. One, it sought to understand how expert occupational therapy practitioners in long-term care think, characterize, and implement environmental interventions that effectively promote a positive lived environment and enhance quality of life for residents with ADRD. This information will inform analysis of how the LELQ conceptual model of practice can be employed by occupational therapy practitioners to better support an enlivening lived environment tailored to the needs and wants of the individual. Second, this project aimed to understand how current, best-practice environmental interventions fall within the parameters of the lived environment domain of the model. Focusing on the LELQ provided a perceived appropriate lens to examine, identify, and evaluate environmental-based interventions and their efficacy in promoting best-practice strategies for residents of long-term ADRD facilities. Four research questions were asked:

1. What is the nature of physical environmental interventions used by expert occupational therapy practitioners in long-term care facilities?

2. What is the nature of social environmental interventions used by expert occupational therapy practitioners in long-term care facilities?

3. How do the expert occupational therapists individualize environmental (physical and social) interventions to meet the needs and wants of residents diagnosed with ADRD in long-term care facilities?

4.   What, if any, are key best practice recommendations from expert occupational

therapists to modify the LELQ model to better support a positive lived

environment?

CHAPTER TWO: METHODS

Research Approach

Through the use of a naturalistic inquiry, action research approach allows people to collaborate and interact to make sense of phenomena (Stringer & Genat, 2004). The emphasis on collaboration stems from the overarching goal of action research. Action research is concerned with understanding the subjective construction of meaning in order to enact social change. This drive to understand the subjective experience of reality equates to a drive to understand the central meaning of phenomena. An interest in investigating meaning is central to a naturalistic research inquiry. Undertaking a naturalistic and qualitative inquiry provides the mechanism to uncover the meanings implicit in the acts and behaviors of interacting and involved individuals. In sum, an action research methodology was systematically used in a democratic, participatory, empowering, and life-enhancing fashion to uphold and promote quality of life in people with ADRD (Stringer & Genat, 2003).

Action research within health care research is an instrumental methodology for bringing life to, and inserting theory into the scope of practice of rehabilitation facilities (Meyers, 2000b). Action research is carried out by a team encompassing a professional or academic research team and members of an institution, organization, or profession committed to a common goal of enacting change through active participation and collaboration (Greenwood & Levin, 1998). Thus, as mentioned prior, action research is democratic in nature, requiring both the academic research team and committed stakeholders to define problems or areas to be examine, cogenerate knowledge and findings, and take action by identifying entry points and mechanisms to implement findings at the institutional level (Greenwood & Levin, 1998; Meyers, 2000a; Stringer & Genat, 2003). It is not the aim of action research to identify or critique implemented practices

and systems, but rather, as the name suggests, to enact change through the commitment and collaboration of the research and stakeholder team (Myers, 2000a). Thus, stakeholders involved in action research are co-collaborators of the research team. Within health care research, action research provides a mechanism for practitioners to systematically implement needed solutions to identified problems, and actively observe and take part in implementation processes and outcomes (Meyers, 2000b). Glanz (2002) advocates that implementation of theory into practice requires that those who participate in constructing and developing the theory must be those who will ultimately practice it as well.

Participatory Action Research Paradigm.

The collaborative nature inherent in action research fits well with a participatory action paradigm. Participatory inquiry stems from the fundamental perception of a reality in which humans are a part of a larger holistic experience from which they cannot completely and objectively remove themselves (Heron & Reason, 1997). However, characteristic to this inquiry is the belief that humans must engage in self-reflexive behavior in order to observe, analyze, and understand a phenomenon. That is, only through self-reflection can objective analysis be attempted, with the caveat that unadulterated objectivity is impossible (Heron & Reason, 1997). Therefore, this methodology of inquiry is an interaction between subjective experiences and systematic objectivity through self-reflection. Thus, at the heart of participatory inquiry research is the ability to self-reflect or the ability to recognize and understand one's own position in relation to the phenomena being examined. Also fundamental is the recognition that because reality is the interaction between the subjective and objective of a holistic human experience, inherent interaction with the environment and collaboration with others is intrinsic to understanding complex realities. Only through engaging in examination of the interplay between

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the objective and subjective can true understanding of a phenomenon or experience be unearthed and revealed. The focus on the holistic human experience and relationships with others and reality in order to construct knowledge is indicative of an inquiry methodology that is transactional in nature (Heron & Reason, 1997). Empirical data are based on the unconstrained experience, however ceases to be empirical when the experience becomes constrained, defined, or tampered with. In sum, any attempt to direct or influence the observed phenomena defeats the overall aim of this paradigm and instead understanding the raw and true nature of the phenomena is the ultimate goal.

Given the emphasis on what the experience of knowledge is, how it is acquired, and how the nature of the human experience is influenced by others and reality, participatory inquiry requires an extended epistemology to evaluate, understand, and unravel the examined phenomena (Heron & Reason, 1997). In other words, a lot of attention is dedicated to understanding the nature of the observed human experience and how it translates to knowledge construction. Finally, Heron and Reason (1997) argue that an emphasis on critical subjectivity is required to examine all prisms of the definition of reality within this paradigm. Thus, an extended epistemology is needed to guide the examination of knowledge, reality, and experience in order to allow a response or action to come to fruition.

The subjective component of this paradigm is represented within the epistemology, characterized by four ways of knowing that frame analysis (Heron & Reason, 1997). The four ways of knowing include experiential, presentational, propositional, and practical. *Experiential knowing* refers to direct face-to-face meetings and interactions in order to frame knowing within a humanistic and empathetic quality. *Presentational knowing* refers to the forms of imagery that contribute to the experience of life and shapes our interpretation of it. Examples include verbal,

musical, vocal, graphic, and plastic elements (Heron & Reason, 1997*). Propositional knowing* represents conceptual knowing and mastery of language through description and expression of people, processes, things, or places. *Practical knowing* refers to competence in skill by way of knowing how to do something. It is practical knowing that allows the three other ways of knowing to interact and build upon each other until the action occurs. Practical knowing is representative of the three ways of knowing materializing into purposeful actions. Thus, it is imperative that action does not merely incorporate elements of the three prior ways of knowing, but that it is fundamentally grounded in and arises from these three ways of knowing. Thus, only when this grounding process of all four ways of knowing is achieved can the process of action be put into place through a symbiotic research methodology.

Participants

Employing extreme case and chain case sampling method (Creswell, 2007), this study identified six expert occupational therapy practitioners working in long-term care institutions that were committed to answering research questions within the context of evaluating, improving, and identifying methods of implementing the LELQ model within their current scope of practice. Extreme case sampling is used when a study aims to learn from exceptional occurrence of the phenomena being examined (Creswell, 2007). We then identified practitioners that fit established sampling criteria to pinpoint other practitioners for involvement in this study. Called a chain case sampling method (Creswell, 2007), we identified two participants who provided recommendations for other practitioners that met the participant criteria established. In turn, the academic research team requested continuing help from these two practitioners in identifying subsequent practitioners. We employed this chain case sampling method until we satisfied our recruitment goal of six expert occupational therapy practitioners.

To be included in this study, practitioners had to demonstrate leadership and specialization in the field of occupation-centered ADRD research and practice through authorship on related publications, presentation of credible continuing education on the topic, or recommendation by established leaders in occupational therapy dementia care. Exclusion criteria were that practitioners have less than five years of direct clinical experience working with people with ADRD.

The six expert practitioners that were recruited represented a wide range of practice settings and respective roles. Table 1 provides demographic information on each expert practitioner.

Table 1

Participant Demographic Information

Participant	Current Practice Location	Degree	Date of Cert.	Current Role	Associated Node with Current Role	Past Work Settings	Experience with ADRD
MM	Westminster, CO	BS in OT, OTR	1984	OT in post-acute rehab and long-term care	1 to 1 Consult	Acute pediatric care NICU School-based care	Since 2001
MH	Minneapolis, MN	BS in OT, OTR/L	1996	Clinical specialist Business owner for adapted activities	Business Mentor Consult Program Development	Sub-acute Assisted living Hospital	Over 15 years
MVS	Raleigh, NC	BS in OT, OTR/L	1977	Long term care/sub-acute rehab program director	1 to 1 Mentor	Skilled nursing facility Acute Mental health	29 years
KW	Cornelius, NC	BS in OT, OTR/L, DCCT	1989	Founder and president of dementia-specific consulting/education organization	Business Consult Program Development Physical Environment	Home health Nursing homes Assisted living Hospital	At least 18 years
SH	Mobile, AL	BS in OT, OTR/L	1996	Works for Dementia Care Specialists	Mentor Consult	Hand therapy Assisted living Home health Skilled nursing facility	16 years
AC	Salem, NC	MS in OT, OTR/L	2003	Works at a continuing care retirement community with a dementia wing being built onto it	1 to 1 Consult	Continuing care retirement community	Approx. 10 years

Data Collection

On five separate occasions, data collection involved two individual interviews and three focus group discussions over the phone accompanied by a presentation led by the project team. All individual interviews and focus group discussions included one or more members of the academic research team and the recruited participant(s). The academic research team included the Principal Investigator and three M.S. thesis students, including myself, who were pursuing research on improving long-term care for people with ADRD within the context of the LELQ

model. Individual interviews and focus group discussion were audio-recorded and transcribed for analysis purposes. With the exception of the first individual interview, participants accessed a remote shared desktop feature to follow presentation slides during the three focus group discussions and the second individual interview. See Figure 4 for a schematic of the interview and data collection process. See Appendix A for a list of interview questions for each individual interview and the three focus group discussions.

The first individual interview involved the academic research team and each individual practitioner. Practitioners were asked a series of questions related to the nature of their practice as well as stories that highlighted best and non-optimal practice strategies and outcomes based on their personal experiences and expertise within their ADRD long-term care setting (Figure 4). The first individual interviews helped address research questions 1 and 2 related to the nature of physical and social environmental intervention participants employ in practice, as well as research question 3 related to how participants individualized environmental interventions. I conducted one of the six individual interviews with the participants. Other members of the academic research team conducted the remaining interviews. Focus groups 1-3 comprised of two small group sessions, with each interview session including the academic research team and three practitioners (Figure 4). Focus group 1 included a presentation of the LELQ model by the academic research team, with the aim to stimulate discussion and questions surrounding the LELQ model, its various components, and potential applications in practice. Based on input from practitioners in the prior session, Focus group 2 involved an open-ended analysis, evaluation and critique of the LELQ model with the entire project team (academic research team and participants). During this focus group, we began to work towards identifying areas of potential revision of the LELQ model, specifically focusing on identifying how the model could be

implemented in practice. Focus group 2 helped provide data to answer research question 4

related to potential revisions and elaborations to the LELQ model. Focus group 3 included a

thorough discussion on what assessments and interventions correlate to the various LELQ

domains, and helped fully answer research questions 1 and 2. Table 2 includes a list of which

participants were in each small group discussion for focus group sessions 1-3. In the final

individual interview, each practitioner was asked to apply the LELQ model to their practice to

assess if application of the LELQ model yields a new perspective on how best to treat people

with ADRD relative to different interventions and outcome measures (Figure 4). The final

individual interview helped provide clarification needed to better answer all research questions.

See Appendix A and B for individual interview and focus group discussion outlines.

Table 2

Breakdown of Participants for Focus Groups 1-3

Focus Group 1	Focus Group 2	Focus Group 3
Group A (11/07/12): SH, KW, AC	Group A:(12/04/12): M V-S, KW, AC	Group A (01/18/13): AC, MM, KW
Group B (11/09/12): MM, M V-S, MH	Group B (12/07/12): MH, SH, MM	Group B (01/31/13): MH, M V-S, SH

Session Number and Interactions with the Research Team

Analysis of the Interaction

Goal Outcomes of Data Collection and Analysis

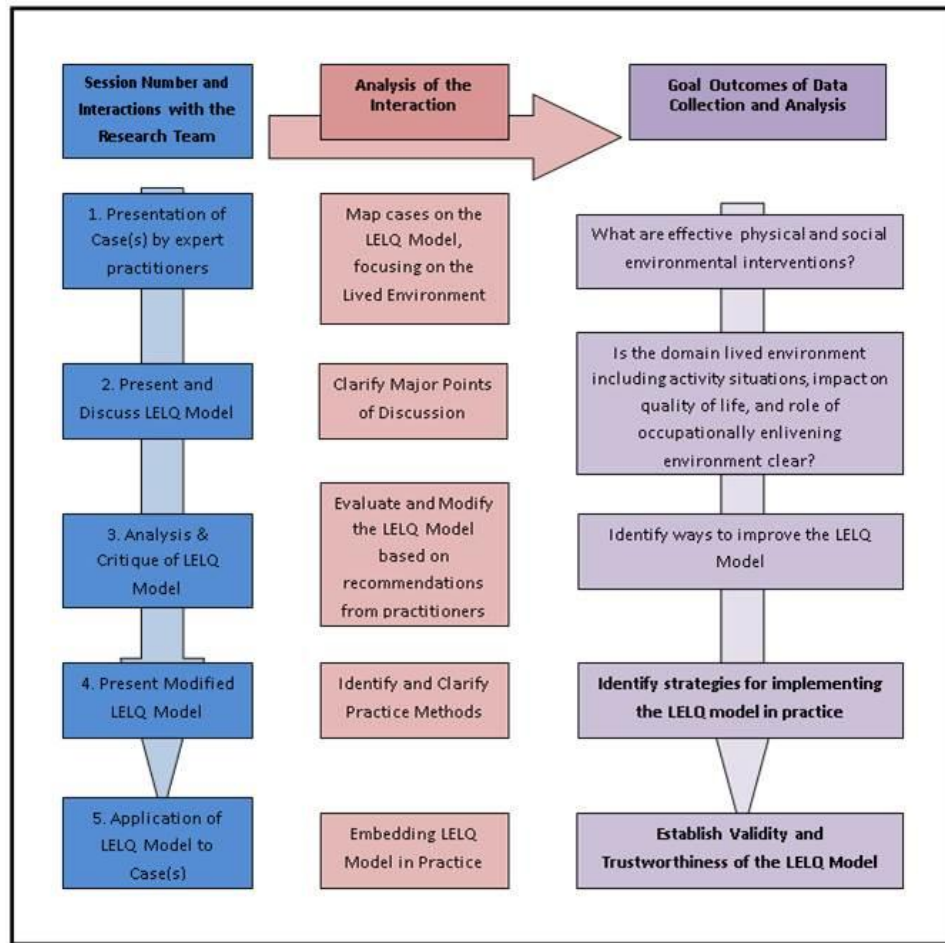| Session	Analysis	Goal Outcome
1. Presentation of Case(s) by expert practitioners	Map cases on the LELQ Model, focusing on the Lived Environment	What are effective physical and social environmental interventions?
2. Present and Discuss LELQ Model	Clarify Major Points of Discussion	Is the domain lived environment including activity situations, impact on quality of life, and role of occupationally enlivening environment clear?
3. Analysis & Critique of LELQ Model	Evaluate and Modify the LELQ Model based on recommendations from practitioners	Identify ways to improve the LELQ Model
4. Present Modified LELQ Model	Identify and Clarify Practice Methods	Identify strategies for implementing the LELQ model in practice
5. Application of LELQ Model to Case(s)	Embedding LELQ Model in Practice	Establish Validity and Trustworthiness of the LELQ Model

Figure 4: Schematic of interview process, including the goal of the five interview and discussion sessions, analysis, and expected outcomes with expert practitioners to evaluate and implement the LELQ model within practice.

Data Analysis

In order to answer research questions, qualitative analyses and inquiries were selected to dove-tail with an action research methodology and participatory inquiry paradigm. Data analysis was carried out in an iterative fashion in order to maximize the opportunity to identify and characterize themes. First, transcribed interviews were imported to the qualitative software Nvivo, (Version 10) and were conducted no later than two weeks after each interview or focus group. Data analysis was carried out in four incremental stages, with ongoing analysis, refining, and pruning occurring before moving onto the next stage. See Appendices for a complete list of all parent and child codes created.

During the first stage, opening individual interviews were read by each member of the academic research team in order to begin initial stages of code identification and to spur discussion on how best to approach data analysis. Over the course of three meetings in fall 2012, we identified preliminary deductive codes that correlated to my research questions and helped organize background information on the participants. In relation to this study, preliminary deductive codes included physical and social environmental interventions, as well as more general codes including activity approach, practitioner practice area and job description, and year practitioner became certified. By the time all the opening individual interviews were done, inductive codes began to take shape through individual coding of deductive codes and weekly meetings with the research team. In fact, weekly team meetings became a place of vetting, sharing and refining codes. In addition, discussions related to preliminary coding informed the interview questions for the focus groups. Termed "peer checking," weekly meetings and ongoing conversations with the academic research team provided the opportunity for thorough and

iterative data analysis. In addition, any methodological decisions related to data collection and analysis was documented in a log.

The second stage of data analysis, affectionately known as the 'dog days of coding', involved preliminary inductive coding characterized by emergence of themes and patterns of meaning within the data. The second stage characterized coding on the first focus groups. Preliminary discussions led to the application of inductive codes that spanned the OT process, with codes including assessment, intervention, and outcome related to physical and social interventions in addition to the identification of codes that emerged from the data to that point. Yet, after a few weeks of trying to fit the data to these codes, it was clear that the nuanced discussion and input of participants did not lend itself to clear cut boxes related to the OT process. During a weekly meeting in late October 2012, it was suggested that codes needed to correlate to the domains and main concepts and terms of the LELQ model rather than the OT process. Aha, a breakthrough indeed! After looking at a swatch of data to test our theory, it was clear that, at least for the data collected until that point, codes related to the LELQ model better fit the complex discourse of the participants. At this point, I went back and recoded all the data under the new coding scheme. Those codes included the caregiving microsystem, (including physical and social interventions, systems level interventions), person with dementia (including occupational history and profile, preferences and needs, and retrained capacities), environmental press (occupationally enlivening and deadening), and environmental awakening and channeling. This was a huge breakthrough and these codes emerged as the backbone from which I began to answer research questions 1-3.

It was also during this stage that I began my first attempt at trying to understand how each practitioner thought about and implemented environmental interventions. In preparation for

Focus Group 2, each member of the research team submitted a summary of overarching themes and areas of importance to the participants as it related to a positive lived environment, with the other students providing summaries related to time use and quality of life. I drafted these memos by rereading the transcripts of each opening individual interview and the Focus Group 1 transcripts, and then jotted down my initial reactions. From there, I examined the references coded under each code related to the lived environment and began to develop preliminary understanding of what practitioners thought was important and why. For instance, participant SH places a lot of emphasis on implementing change at the systems level as a social intervention that was of importance to her. It was during my preparation for Focus Group 2 that additional inductive codes began to take shape, specifically related to the significance of making the environment 'home-like' in order to promote familiarity, the role of educating staff and others on promoting a positive lived environment, and the importance of intervening at the administrative level to impart change on a much bigger scale. During this stage, each transcript was read at least three times in completion in order to best identify preliminary inductive codes. From there, preliminary inductive codes were established and transcripts were reread and coded under the new code. At this point in the data analysis stage, I began to see the end of the dog days of coding, and then ushered in the 'bronze era' of coding.

The bronze era of coding, or the third stage, was characterized by rampant growth and expansions of codes all facilitated by a little blood, sweat, and tears, metaphorically speaking that is! By January 2013, fresh from a Christmas break, we approached coding with fresh eyes. It was during a retreat with the academic research team that we rolled our sleeves up and really looked at all the codes we created in order to identify areas of overlap and disagreement. As a team, we went through each code that we had created on our own and made our case for keeping, refining,

or discontinuing it, employing the constant comparison method. It was during this retreat that the path for moving forward with data analysis began to take shape. Per advisement from our advisor, we made the commitment to write research memos after each coding session as a way to identify potential themes in the data, emerging questions we had, and as preparation for the third and final focus group sessions. In addition, an audit trail was completed using NVivo (Version 10) software protocols to promote transparency in decisions made relative to data analysis. To prepare for Focus Group 3, we focused on identifying areas of confirmation and disconfirmation of the LELQ model, noting areas of agreement, clarifications or questions that participants had related to the language or concepts of the LELQ model. I focused on concepts and questions related to the lived environment. Preparing for the third Focus Group laid the necessary groundwork that would help me address research question 4.

With spring comes growth and hope, as did the final or 'Golden era' of coding and data analysis. In Spring 2013, with the third focus groups under our belt, I was ready and prepared to nail down all the thoughts, ideas, notions and 'inklings' and really solidify codes that would best serve to answer my research questions. These notions of mine had been bouncing in my head for months now, causing me occasional sleepless nights. I was ready to make bold decisions that I could back-up in the data. Holing myself up in a coffee shop for virtually three days straight, I gave an Oscar winning performance, metaphorically speaking again of course, as a disheveled, bloodshot, cranky, caffeine-ingesting graduate student and only emerged when key themes were crafted, relationships defined, and the story of environmental interventions began to take shape. I then used thematic analysis to determine environmental interventions, distinguishing characteristics of each to answer research questions 1-2. Thematic analysis is characterized by Gibson and Brown (2009) as an analytic process designed to define and understand

commonalities, relationships and differences within a data set. Once I was able to determine

environmental interventions, I then began to group them together based on shared characteristics,

making note of any relationships or subgroups that existed. To answer research question 3, I

analyzed data spanning the identified clusters of environmental interventions determined during

thematic analysis to assess how participants individualize environmental interventions. To

answer research question 4, thematic analysis served as methodological foundation to determine

confirmation and disconfirmation of the LELQ model, specifically related to the lived

environment domain.

In sum, I used thematic analysis as a dominant data analysis process to fully answer

research questions. I did this in a couple of ways. First, established codes were mapped onto the

LELQ model to determine commonalities and discrepancies. Second, relationships between

codes were solidified using word frequency, taxonomy, and matrix qualitative inquiries to allow

relationships between codes to emerge. I then started drawing a schematic to help organize

themes and relationships which really helped me to visually see how physical and social

interventions are implemented and the arena in which they take place. I put my schematic on

paper so to speak, and was excited to get feedback from the other research team members at the

next weekly meeting. I then began work on writing my results, building from the schematic

developed and refined.

By the time the last individual interviews were conducted, I had completed a preliminary

version of my results section. Armed with the schematic that showcased my conceptualization of

physical and social interventions (research question 1-2) and ways in which participants

individualize them (research question 3), I presented my preliminary results to each expert

practitioner to gain their feedback and to make necessary revisions to my schematic and results

as needed. By and large participants were in agreement with my results, but provided insightful and nuanced feedback on how to better craft my schematic and results section to accurately represent their perceptions, and could better answer my four research questions.

In order to promote trustworthiness and credibility of data, the academic research team actively employed these strategies: prolonged engagement, member checking, triangulation of methods and researchers, and peer checking. Prolonged engagement was achieved by conducting two individual interviews of each participant and facilitating and leading three focus groups over the course of eight months. During this time, the research team established rapport and trust with participants, further contributing to a deep and sophisticated understanding of interview questions used to answer research questions. During interviews and focus groups, the research team worked with the practitioners to ensure that findings and analysis were consistent with their own interpretations. Called member checking in the qualitative research field (Creswell, 2007), this was achieved by summarizing and confirming perspectives during interviews or focus groups, as well as presenting findings drawn from former discussions and allowing participants to comment on conclusions drawn. In addition, triangulation of methods and researchers was employed throughout the data collection and analysis process (Creswell, 2007). Triangulation of methods was achieved by shuffling around participants for each of the focus groups as well as having each member of the research team serve as the discussion facilitator at least twice over the course of individual and focus group interviews. This was done to ensure variety in questions asked and perspectives heard. Triangulation of researchers was achieved by having all member of the research team engaged in data analysis and formulation of codes. In addition, three of the four members of the research team coded all transcripts independently and then discussed and resolved discrepancies in coding in weekly meetings to achieve peer checking. In sum, analyses

focused on addressing research questions proposed employing a wide variety of qualitative

inquiry tools.

CHAPTER THREE: RESULTS

Environmental Interventions within the Caregiving Microsystem

The nature of physical and social interventions employed by participants represented a vast and dynamic list that infiltrated all aspects of care. Figure 5 illustrates, from the perspectives of the expert practitioners in this study, the type and variety of both physical and social environmental interventions employed, how they implemented identified environmental interventions, and how they individualized interventions to meet the resident's needs. Results reflect strong confirmation of the LELQ model, specifically related to the lived environment domains including the *caregiving microsystem* and *person with dementia*. As a whole, participants reported that they created positive and engaging lived environments by promoting a best fit between the different elements of the *caregiving microsystem* and *person with dementia* to individualize and maximize efficacy of targeted interventions. Beyond strong confirmation, participants also reported that they positioned themselves intentionally in ways that maximized the overlap between the two lived environment domains. Furthermore, to implement physical and social environmental interventions, participants described how they operated within seven different roles, which made it possible for them to be effective agents of change at a systems level.

Environmental Interventions within Caregiving Microsystem

Physical Interventions

Social Interventions

Stepping into the resident's world

Adapt lay-out of facility

Facility

Common Areas

Proximal environment set-up to elicit engagement

Personal Room/Space

Minimize safety hazards

Make environment 'home-like'

Maximize opportunity for social engagement

Reduce task oriented mindset of frontline caregivers

Administration

Obtain administrative buy-in

Build trust & rapport with treatment team

Staff & Frontline caregivers

Cater message to different audiences

Family

Be family-centered

Resident

Promote choice & autonomy

Physical elements of care spectrum

Social elements of care spectrum

Collaborator

Educator

Advocate

Ambassadors of Care

Consultant

One-to-one interventionist

Paradigm shifter

Personal Responsibility Taker

Figure 5: Environmental Interventions within the Caregiving Microsystem (Alvord, 2013).

Depicted as a sun in the bottom of Figure 5, the different roles characteristic of *ambassadors of care* radiate out, influencing the implementation of physical and social interventions identified. The arrows stemming from the sun point to the open door at the top of Figure 5. These arrows represent the symbiotic relationship between being an *ambassador of care* and *stepping into the resident's world*. That is, the open door signifies that through the various roles that the practitioners employed when implementing environmental interventions, it is by *stepping into the resident's world* that environmental interventions are maximized and individualized to boost engagement and quality of life. *Stepping into the resident's world*

requires developing a deep connection and understanding of the person in order to fully individualize interventions.

At the core of Figure 5, major types of physical and social interventions are 'mapped' on the physical and social *care spectrum*. Physical and social *care spectrums* were identified to highlight how participants implemented physical and social interventions including who they worked with and in what spaces they implemented interventions. As shown in Figure 5, the physical and social environmental interventions span the *care spectrum*, further signifying the depth and breadth in which participants reported having implemented and individualized environmental interventions.

Guided by Figure 5, findings related to the process of implementing environmental interventions and the nature and characteristics of identified interventions are next presented. First, the diverse roles that the participants reported occupying in order to best implement environmental interventions are described and also related to research question 4 (application to the LELQ model). Next, discussion on how the practitioners implemented and individualized environmental interventions, characterize findings that pertain to research question 3. To answer research questions 1-2, major themes and characteristics of physical and social environmental interventions identified are described in detail using rich description and relevant quotations.

The Role of Occupational Therapist in Implementing Environmental Interventions-Ambassadors of Care

Co-analysis revealed that participants viewed themselves as the cornerstone of individualizing treatment that could yield positive quality of life outcomes for the resident. In a sense, participants reported that they both intentionally and subconsciously operated as if they are *ambassadors of care*, meaning that they operate as if they are representing the health and quality

of life of residents on their case load. Thus, these participants adopted multiple roles in which they carried out their mission as ambassadors. This is not an explicit recognition, but rather reflects the worldview from which these practitioners operate.

The expert practitioners in this study described ways in which they morph and mold their roles as the mechanism to successfully implement interventions. That is, within practice, the participants purposefully position themselves in seven different roles in order to maximize effectiveness of their intervention and carry out their mission *as ambassadors of care*. These roles included: collaborator, consultant, educator, advocator, one-to-one interventionist, paradigm shifter, and personal responsibility taker. Conscious adoption of a particular role was not always necessary to implement environmental interventions. Often participants described how they could adopt more than one of these roles concurrently and also pivot from one role to another in order to best determine and unearth needed information to better individualize the intervention to meet a resident's needs. That is, participants reported that at times they consciously adopted and adapted these roles, and at times they didn't realize until reflecting back on a particular situation that they had in fact been operating under one or multiple roles. Table 3 provides definition of each role and 2-3 examples from the data. Even though participants reported that they practiced within multiple roles, each role has unique distinguishable qualities as highlighted by the data.

Table 3

Participant Roles in Implementing Environmental Interventions

Role Name	Description	Examples
Collaborator	The occupational therapist's role is collaborative in nature in order to improve care of the person with ADRD. This could involve collaboration with family, treatment team, and/or administration. Role is collaborative in that the occupational therapist is approaching relationship as an equal partnership.	"I find the caregivers are awesome; once they see that what you have to offer really works and makes sense, they're very willing to learn, and it usually makes their job more enjoyable and they are able to get through the tasks much easier. It's a constant buying-in." (MM, Focus Group 3, January 18, 2013). "We [occupational therapist and activities department] kind of would coordinate together, so that if I had some thoughts about of how they might best respond, or maybe they need some more verbal cues than somebody…[then we] could incorporate [it] when they are doing activities" (MH, First Individual Interview, September 28, 2012).
Consultant/Advisor	The occupational therapist serves in a consultation capacity in order to elevate quality of care and/or quality of life of resident. As a consult, the occupational therapist provides specific actionable recommendations. Consultation or advisement could involve staff, family, or other occupational therapists. This is different than education as this role deals with providing specific recommendations to improve the care of the resident.	"The role of a therapist often is to identify a medical necessity, a reason to intervene with this person even before we get to the point of doing the assessment" (KW, Focus Group 2, December 4, 2012) "I recommend that he maybe have an escort, or have someone maybe come remind him of meals because he was relying on living on Ensure® and chips, and if they had someone come remind them to come to meals [then] they would probably come down. But that they needed that reminder so a lot of [my role] was recommendations. A list of recommendations and then it got e-mailed out." (MH, First Individual Interview, September 28, 2012). "What it looks like is you go in and try to get an understanding, number one, what is this customer's goal? They identified something that they feel is lacking. And we help them create goals around the function, safety, help, and well-being of persons with ADRD, and that is usually what they are looking for, they just don't know how to accomplish that. So, on a day to day basis, I might be doing anything from going out and spending three days at the facility working with the leadership team, and what we do is first start with the leadership team, and our goal is to train them on how to work with their front-line care partners. The people that are doing the day-to-day work"

		(SH, First Individual Interview, October 10, 2012).
Educator	The occupational therapist plays a role in education in many capacities in order to elevate quality of care and/or quality of life of resident. This could be education of staff, family, students, other disciplines, or administrators. Education can be both formal and informal. When informal, usually involving staff in order to build rapport, or to change paradigm of care in a casual manner.	"…just a few days ago I spoke at a care providers convention in Minnesota, so lots of the audience was some activity professions and some nursing assistants and some nurses and we were talking about activities and kind of what we're talking about here, creating , that each moment can be a moment of engagement and especially incorporating front line staff" (MH, Focus Group 1, November 9, 2012) "And then to train the staff to say this is how much you need to press this person in order to elicit engagement for them to really get engaged, and some people more than others" (MM, Focus Group 3, January 18, 2013).
Advocate	Role of the occupational therapist is an advocate for the resident in order to elevate quality of care and/or quality of life of resident. Advocacy could be acting on behalf of people with ADRD to change quality of care.	"So, I think it's really knowing, as the dementia practitioner… and advocate for persons with Alzheimer's, how do I need to communicate differently to get buy-in from people at all different levels?" (KW, Focus Group 3, January 31, 2013). "But, in order for that to happen, it requires all of us to change our beliefs and to lift these spirits and these individuals up instead of pulling them down. And, it is my mission to create a dementia-capable society. Whether that society be families who have this perspective and some basic skills or the society be health professionals who are ready and able to evaluate, treat, support, and guide, or it be businesses. I would love to see one day a business like an airline or a store has decided to train their staff on how to communicate and interact with people with Alzheimer's so people with Alzheimer's can be a part of our society and not feel as though they don't fit." (KW First Individual Interview, October 10, 2012) "So I think it's really knowing, as the dementia practitioner… and advocate for persons with Alzheimer's…how do I need to communicate differently to get buy-in from people at all different levels?" (MV-S, Focus Group 3, December 2, 2013)
One-to-one	Role of the occupational therapist is	"We look at where they're seated in that place, if they stop hearing, where their visual field is, what their level of

| Interventionist | direct one to one assessment and intervention with the resident | engagement needs to be in order to benefit from participation to have participation. Kind of looking at those factors to make sure that we're optimizing what's available to them and we're setting up [the environment] as easy as possible" (MM, Focus Group 3, January 18, 2013)

"What are those pieces? Are there photo albums? Are there photos of certain people? One woman who used to knit, we just made her yarn and needs a lot more visible on her table in her room. Assessing the environment and what things are in their own individual space, or bring things in that family could do so that starting at that basic level where an occupational therapist can really make an impact, today and reimbursable and I guess the other question would be how do you make that measurable and I guess that where that engagement scale and things like that." (MH, Focus Group 3, January 31, 2013)

"So for example, it's summertime and we've got a wonderful enclosed courtyard, and the group activity for the day is to do some gardening. Well, I can be there as a part of the activity with the person that I'm working with, and I'm modeling for the staff and within the whole group setting how they're interacting. So, it's not necessarily one on one, I'm within the whole group. I'm working with caregivers, but it's kind of benefiting their interactions with a lot of other residents as well, not necessarily not just the one person that's on the caseload" (AC, Focus Group 3, January 18, 2013) |
| Paradigm Shifter | Role of occupational therapist is to change the paradigm of care, working to implement changes at the systems level within the caregiving microsystem to ultimately elevate quality of life of residents. This could include working from the bottom-up or top-bottom to change paradigm of care. | "I do think that it can be difficult sometimes when you are in a system where people are comfortable with the way things are going even though we as occupational therapists can look at that system and go, 'Gosh this system could be so much better,' but trying to, I think part of what that occupational therapist would need to be is that they are going to have to somehow help facilitate this paradigm shift for everyone which is a huge undertaking and not that it can't be done but that I think it would be helpful to have steps to operationalize it so that slowly this system could start to change and then ways of helping everyone in the system why it is a benefit to start looking at things like this." (SH, Focus Group 3, January 31, 2013)

"I become very impatient with universities and employers. I become impatient with that group because I want to say, "How can you think we can't and shouldn't be doing more?" This is an epidemic facing our country and we have to be preparing our staff and our students with specialized skills..." (KW, Individual Interview, October 12, 2012). |

Personal Responsibility Taker	Role of occupational therapist is taking personal responsibility in the care of the person with ADRD in order to elevate quality of life. This could be direct interactions with the resident or working with other members of the treatment team and administration to ultimately elevate the quality of life of residents. The practitioner uses first-person language, and as a result is going out of their way to consciously take responsibility for the care of residents.	"I've done it where I literally I have been the lone ranger. I'm the only one on my therapy team in my whole facility that cares about this or sees why it works. I've been in other settings where we finally did get the whole facility on board..." (SH, Individual Interview, October 10, 2012) "… I think part of the uphill climb is helping us as therapists, including myself when I first started, trying to get out of my medical model mind, and into how these other models may have a more social component [that] actually still relate to my practice, and actually now drive my practice." (AC, Focus Group 1, November 7, 2012) "…I would have to do a lot of thinking on how to become very fluent in that language, first in my presentation and then in my teaching to occupational therapists and translating that teaching into documentation that would be deemed skilled and reimbursable. (MV-S Focus Group 3, January 31, 2013)						

Table 4

Matrix Analysis of Role Overlap

	Personal responsibility Taker	Advocate	Collabo-ator	Consultant	Educator	One-to-One Interventionist	Paradigm Shifter
Personal responsibility	36	6	2	2	2	3	11
Advocate	6	12	0	1	2	0	4
Collaborator	2	0	18	3	0	4	0
Consultant	2	1	3	21	1	3	1
Educator	2	2	0	1	36	0	3
One-to-One Interventionist	3	0	4	3	0	26	1
Paradigm Shifter	11	4	0	1	3	1	18

Table 4 provides the results of a matrix analysis of role prevalence and overlap. The most prominent roles were *educator* and *personal responsibility taker* with 36 references for each role coded, marked by blue circles in Table 4. Aside from these two roles, there exists a range of the references coded across all the roles, indicative that participants reported working in multiple myriad capacities to implement environmental interventions.

In addition, Table 4 showcases the degree of overlap between roles. That is, for each of the seven roles, the number of references that overlapped with the other roles was documented. A red circle on Table 4 indicates the most prominent overlap between roles. The biggest degree of overlap was *paradigm shifter* and *personal responsibility taker*, with 11 references overlapping between these two roles. This level of overlap underscores the extent to which the practitioners feel a sense of personal investment or obligation to undertake a large-scale systems change within their facility. This speaks to the importance of integrity and passion in challenging traditional models of long-term care.

LELQ Model Implications

The significance of the occupational therapist in operating under different roles to implement environmental interventions helped me answer research question 4. If you recall, research question 4 aims to identify key best practices that could aid in the modification or elaboration of the LELQ model to better support a positive lived environment. My results support the inclusion or further elaboration on the role of the occupational therapist in implementing environmental interventions. Although participants resonated with the lived environment domain of the LELQ model, the potential power and influence of different roles utilized by practitioners to implement environmental interventions is not addressed explicitly in the model. Results thus support expanded discussion on the significance of the occupational therapist in implementing

environmental interventions. At this time it is unclear at this time if certain roles best correlate more than others in implementation of the LELQ model. Further, it is unclear whether or not practitioners need to become *ambassadors of care* to fully implement the LELQ model within practice.

Stepping into Resident's World: Developing a Deep Connection and Understanding of Who the Resident is: Providing Care in Context

If the occupational therapist is the cornerstone of implementing environmental interventions within the caregiving microsystem, then *stepping into the resident's world* is the mechanism in which interventions are individualized and maximized. As a result, this section will answer research question 3. In the first stages of analysis, I was struck by a sense of urgency from the practitioners in implementing environmental interventions, specifically related to elevating the expectations of care or changing the caregiving culture. I found myself asking, from where exactly is this sense of urgency originating? Did it stem from a desire to do a good job or to advance their careers? No, not necessarily, at least from my analysis. Then it hit me. This sense of urgency appeared to stems from a deep and profound sense of empathy and desire to improve resident lives.

> "And I think when we see that person, when I saw Ms. B kiss my hand and put it on her cheek and interact. That's all it takes for me to say it's worth it because I, in my head, especially then, money is not what truly I think drives a therapist, it's the changes that I think we can help and facilitate for the person. Taking someone from being pretty much in bed all the time, or asleep all day falling out of a chair, being able to interact a little bit in activities and being awake, be alert, be engages. I mean to me, it is that heart where you want to see people thrive and you are willing to go that extra mile." (SH, First Individual Interview, October 10, 2012).

Participants reported that they obtained an intimate knowledge and understanding of residents and how they live in order to cater environmental interventions to meet the specific

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needs of each resident. "I know them, they know me" (MM, First Individual Interview, October 12, 2012). Practitioners aimed to put themselves in the shoes of residents, "Well-being wise, how does she see herself? Does she feel helpless? Does she feel in control some of the decisions about her healthcare, does she have the cognitive ability to make some of those decisions?" (SH, First Individual Interview, October 10, 2012). They internalized the daily experience of residents and as a result, expressed a need to gain the trust of residents in order to better individualize environmental interventions. One participant illustrated the need to be immersed in the lives and living space of residents, recommending that "have to be looking at and knowing as much as possible about that actual environment where the person will be engaging every day." (KW, Focus Group 2, December 4, 2012). Practitioners reported that they *step into the resident's world*, and in doing so reported that they develop a deep connection and understanding of who the resident is, suggesting that there is a high degree of empathy prevalent in their practice. In essence, acquiring this intimate connection to the person, their environment and their life allowed participants to provide care in context, serving as instruments in which to best individualize care. Although most commonly recognized in nursing literature, care in context refers to a broad term in which care for an individual is provided within an environment that is most conducive to their health and well-being (Corner & Bailey, 2001). Thus, participants provide care in context by developing a deep connection with the resident in efforts to individualize, and in turn maximize environmental interventions to best provide care.

Further, the majority of participants reported that a single look can provide clues on what to do with the resident and how best to intervene. Consensus among the participants was that they view the person as a whole entity, not discrete parts that are compartmentalized and treated, by "Opening the eyes to looking at the whole person" (MM, Focus Group 2, December 7, 2012),

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to "know this person and understand more about what engages them" (SH, Focus Group 2, December 7, 2012).

As it relates to environmental interventions specifically, practitioners repeated that they use this intimate knowledge and empathy for the resident to individualize environmental interventions to best maximize their effectiveness. Acquiring a deep understanding of the person involved creating a comprehensive occupational profile, understanding preferences and needs through communication with family members, and spending time with the resident in their room in their own space. 'Meeting them at their level' is how one participant communicated it (AC, Focus Group 1, November 7, 2012). This quote displays a willingness to step into the experience of the resident without deliberately understanding they are doing so. *Stepping into the resident's world* is not an explicit goal dictated by any of the practitioners; rather it is a concept that I identified as the way in which environmental interventions are individualized.

Care Spectrum: Physical and Social Elements

Elements of the *care spectrum* became evident when attempting to understand the boundaries of how the practitioners reported that they implement physical and social interventions, where they take place, and who is involved. Referring back to Figure 5, I define physical elements of the *care spectrum* as the proximal physical or built environmental elements characteristic to the resident's life within the LTC facility. The physical elements of the *care spectrum* range from the facility as a whole to the common areas such as the hallways, dining and activity room, to the resident's room and personal space. The social elements of the *care spectrum* represent people in their respective professional or personal capacities, who are common aspects of the residents' lives. The social elements of the *care spectrum* range from the administration, staff and frontline caregivers, family and friends, and resident. Physical and

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social interventions can be implemented within one or multiple elements of the *care spectrum*. The brackets around each physical or social intervention identified in Figure 5 indicate where on the *care spectrum* the interventions are taking place. In sum, the *care spectrum* provides a three-dimensional interpretation of the nature of physical and social environmental interventions, and where these interventions are implemented. Identifying the *care spectrum* allowed me to better understand, define, and identify physical and social environmental interventions employed by practitioners within LTC facilities.

Physical Environmental Interventions

The nature of physical environmental interventions that participants repeatedly described using ranged from adapting sensory qualities of everyday objects to designing and adapting the layout of buildings and wings in order to elevate the quality of life of residents. Four main categories of physical interventions were identified: set-up the proximal environment to elicit engagement, adapt environment to be more 'home-like', design or adapt the layout of the facility, and minimize safety hazards. Identified physical interventions contained, as expected, tangible and concrete characteristics that can be implemented within any LTC setting. Yet, what gave depth to major categories of physical interventions was a shared fundamental understanding among participants that these physical interventions facilitated engagement.

Further, these interventions that the participants described are alike in that they all contribute to an implicit positive *caregiving microsystem* that can go unnoticed to an untrained eye. That is, the nature of many identified interventions aimed to promote a sense of ease and accessibility in a way that would allowed a resident to inherently engage in the task or activity at hand. These physical interventions were often not discretely implemented, but rather are carried out in a fashion that spontaneously evoked engagement. Participants reported that these

interventions removed obstacles and barriers to potentially spark interest and engagement in the resident; the fuel in the fire of boosting the quality of life for these people. For example, word frequency analysis revealed that among the data that were coded under physical interventions, the five most frequent words for physical interventions were environments, people, things, think, and know. These findings suggest that physical interventions employed by participants extend beyond discrete modifications to objects or spaces, representing complex reasoning to support people in the environment they reside in. That is, the five most frequent words extend beyond consideration of physical elements of the *care spectrum*, and instead represent a dynamic process in which much consideration is given to not only 'things', but also to 'people' and how this relates to what practitioners 'think' and 'know'. Thus, these interventions are not haphazardly implemented, but instead are purposefully selected to promote engagement and a sense of ease, comfort, and well-being. Results presented in this section will answer my first research question: What is the nature of physical environmental interventions used by expert occupational therapy practitioners?

Proximal Environment Set-up to Support Engagement

Analysis revealed that participants modified or set-up the proximal environment to support engagement and therefore elevate quality of life for residents. The *proximal environment* is defined as immediate physical surroundings with which the residents can interact; it includes physical space and its characteristics, furniture and objects that yield sensory qualities. Participations recounted many ways in which they set-up the proximal environment to, in effect, create an environmental press that could cue or elicit engaged behavior in a meaningful activity or capacity. For instance, practitioners used objects that encouraged or elicited a distinct response unique to that object. Examples included setting out a toothbrush, razor, or a puzzle. All

three of these objects are alike in that typically, only one activity and response is associated with each object. One participant described how the simple act of providing the resident with an orange not only gave her the needed cue to peel it, but was specifically selected as a tool that would hold her attention. "In the morning we set her up with things she could do that would hold her attention a little longer. So if we got her started on peeling an orange she could peel the orange and spend some time at it and pull it apart, [which] kept her at the table a little longer and … engaged. …then of course she would eat it too…" (MH, First Individual Interview, September 28, 2012). In this instance, an orange was transformed into a physical intervention that elicited a specific engaged response.

Participants also repeated that they encouraged an engaged response by specifically placing objects within the resident's line of vision, further maximizing the opportunity for the resident to identify and engage. In describing an instance in which one participant was instructing administrators on how best to design the layout of the facility to discourage exiting by residents, she recommended that it is important "to design [the facility so that] even the objects in the environment will draw them to a central space that is actually away from the secured door" (MV-S, Focus Group 3, January 31, 3013).

Participants also actively minimized excess environmental stimuli within the proximal environment to support engagement by eliminating any foreign or unfamiliar noises, reducing 'clutter' in visual field, and reducing number of options in line of vision. Examples provided by participants included reduce clothing options in closet or food options on a food tray. "She had an enormous amount of clothing...so we adapted the environment where she would not have as many clothes" (Focus Group 2, December 4, 2012).

In addition, participants added contrast to proximal environment or tools and objects to promote increased recognition and engagement while also promoting safe mobility and interaction with the environment. Examples include adding contrast to plate and/or tray or adding contrast tape or colors to adaptive equipment. For example, one participant put a dark color shower chair in a white tile shower and added contrast color tape to grab bars. Participants also created visual aids through labels or signage on a wheel chair or in a room that provided explicit, specific directions or pictures to further promote engagement in specific activities. For example, participants reported that they would clearly label personal drawers to trigger residents to engage with objects or activities within the drawers.

Promote 'Home-like' Qualities of Caregiving Microsystem

Another prominent theme that emerged within physical interventions employed by participants involved creating a *caregiving microsystem* that resembled or is reminiscent of the person's prior private home in order to elicit increased engagement in an activity or to evoke a sense of ease within the person. The desired outcome was that residents would feel invested in the space to the extent that they felt compelled to contribute to their environment or at the very minimum, interact with it. For example, one participant described that by making the environment more home-like, the resident spontaneously asked for a broom so that she could keep her room and personal space tidy. In effect, the resident felt invested in her space, and as a result, desired to contribute to keeping it clean and tidy. In order to make the environment more 'home-like,' discussion often centered on fitting the person to their environment.

In general, participants recommend avoiding "drab colors" and" institutional fixtures" (such as office or medical equipment) or "stark hallway[s]" (SH, Focus Group 3, January 31, 2013, AC, First Individual Interview, October 4, 2012) and instead reported that they used

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furniture and colors that you would typically see in a person's home. In addition, participants spoke of providing access to the outdoors similar to a backyard or garden. Within common areas, participants recommend that dining and social areas be set-up and decorated like different rooms in a house such as a dining room and living room. Participants recommended eliminating food trays and instead, when possible, served food family style in order to promote interaction between residents. "So, when you walked in the front door of one of these neighborhoods, you were greeted by a kitchen, a dining room, and a living room. So yes, very homelike…" (KW, Focus Group 1, November 7, 2012).

Examples of making the environment more 'home-like' spanned the physical elements of the *care spectrum*. One participant spoke of setting-up the facility not only to represent a home-like quality, but also expanded the analogy to emulate a community and neighborhoods. Within individual rooms, participants added familiar personal artifacts such as pictures, photo albums, or favorite personal items to promote familiarity, sense of security, and evoke engagement. Further, one participant would try and make resident rooms exact replicas of their bedrooms in their former private homes by setting up the furniture and hanging pictures similar to the resident's prior home.

One participant even changed her physical appearance to emulate a familiar scene common to the resident's home during the 1950's. In trying to encourage the resident to transfer independently, the participant changed her appearance and imitated characteristics of a 1950's wife, "I mean literally, make sure the lipstick is on and the big smile so he is really looking at my face, because the more words I used the less success" (SH Individual Interview, October 10, 2012). In this case, the participant inserted herself as part of the intervention by making her appearance and behavior more familiar or more like the home in which the resident used to live

as a way to evoke engagement. Although a solitary example, this quote demonstrates the extent

to which practitioners were willing to go in order to promote engagement, in this case, to make

the resident feel as if he was home with his wife, and she was cooking breakfast.

Design or Adapt Layout of Facility

Another distinct type of physical intervention that participants reported was designing or

adapting the layout of LTC facilities to promote engagement and socialization with staff and

other residents. Participants provided examples in which the built environment of the LTC

facility was specifically designed or modified to increase engagement and interaction among

residents. One participant reported that she converted an existing building to "be more conducive

to facilitating function for persons with dementia" (MH, Focus Group 2, December 7, 2012).

Designed to promote increased interaction between residents and staff, participants reported that

they centralized common areas, decreased the amount of open space to discourage wandering,

and promoted familiarity of spaces. One participant described how she aided in designing the

layout of a brand-new facility specifically for people with ADRD.

> "If you imagine kind of like a wheel where in the center where the hubcap might be, that
> was the community activity space. So, we had a bistro, we had a gazebo, we had a church,
> a store, that was all in the center. And then, the spokes of the wheel were the
> neighborhoods. And there'd be about twenty or twenty-five resident rooms in each
> neighborhood, the central hub was in the kitchen. So, even the nursing station was right
> off the kitchen and it hardly looked like a nursing station" (SH, Focus Group 3, January
> 31, 2013).

Thus, the layout of rooms, hallways, common areas were specifically designed to

promote increased likelihood of interaction and thereby engagement with others. For example,

one participant described a facility that was set-up to " invite you to come out of your room and

go to a shared space that will have a variety of opportunities for people" further indicating that "I

have been doing a lot of reading on how the physical environment can influence behaviors" (SH, Focus Group 3, January 31, 2013).

Minimize Safety Hazards

There was consensus among participants that minimizing safety hazards through environmental interventions was critically important. However, there was not an abundance of elaborate discussion related to this theme. Discussion surrounding this theme was often discussed as a collective unit, such as to carry out activities 'safely.' This isn't to suggest that participants discounted the importance of eliminating safety hazards, but rather that it is a fundamental basic part of their job that does not require detailed explanation.

Practitioners actively aimed to eliminate safety hazards across the physical *care spectrum* as a specific physical environmental intervention. Four instances referenced eliminating safety hazards within the physical environment, and was referred to in terms of eliminating potential obstacles or safety risks so that residents and therapists could focus on the task at hand. For instance, one participant illustrated this point, indicating that "adaptations or things that could be put into place to improve their safety or to improve getting them in and out of the chair…more of the just physical things" (MH, First Individual Interview, September 28, 2012). Minimizing safety hazards was also referred to in terms of needed staff training.

Participants also discussed eliminating safety hazards in terms of ensuring that residents could manage medication to prevent over or under-dosing. In addition, participants minimized safety hazards by having residents use adaptive equipment to increase safety related to functional mobility. Participants also recommended increasing safety precautions as cognitive abilities, including judgment and impulse-control, declined in the resident. Finally, some participants

reported that they practiced functional scenarios with residents and staff to promote safety within

the resident's room and facility.

Social Environmental Interventions

Participants reported using a wide range of social interventions that spanned the *care*

spectrum (Figure 5). In fact, participants relied upon social interventions more than physical

interventions, suggesting that they perceived them as key in promoting engagement for residents.

Social environmental interventions clustered around seven themes: Catering messages to

different audiences to elevate expectations of care, obtaining administrative buy-in, reducing task

oriented mindset of frontline caregivers by promoting an occupation-centric worldview,

maximizing opportunity for social engagement, building trust and rapport with treatment teams,

being family-centered, and promoting choice and autonomy. Of those, catering messages to

different audiences to elevate expectations of care was a reoccurring means in which other

interventions were, in part, carried out. For example, in some instances, participants would

minimize their supervisory role and instead adopted a more casual, friendly, or even humorous

tone when trying to relate to frontline caregivers in efforts gain their trust. This is an example of

how catering message to different audiences was used to maximize another identified social

intervention, building rapport and trust with treatment team.

In addition, word frequency analysis revealed the top five most frequent words of data

coded as social interventions were know, persons, works, staff, and care. That is, word frequency

analysis revealed that when intervening within the social environment, practitioners indicated

that it is the people, or 'persons' and 'staff' that they must work with in order to do what 'works'

to ultimately elevate standards of 'care'. All these words represent a vast myriad of concepts, and

aptly characterizes the intricacy and richness of social interventions identified. Further, these words represent multiple social elements of care spectrum, further emphasizing the vastness in which participants conceptualized social environmental interventions.

What also became clear in analysis was that practitioners adopted social interventions across the *care spectrum* to ultimately influence the caregiving culture. That is, there were examples where practitioners aimed to influence change at the systems level, focusing efforts on a top-down approach. Participants reported instances where they persuaded administration to mandate changes to policies and procedures to support engagement and quality of life of residents. Participants also reported using a bottom-up or grassroots approach to implement social environmental interventions. There were instances where interventions were focused on changing hearts and minds of frontline caregivers in efforts to ultimately persuade top-level administrators to adapt particular policies.

What was a common characteristic evident in each of the social intervention themes identified was the belief held by participants that the role of the occupational therapist was central to implementing large-scale culture change within the facility. There exist unique qualities characteristic to each of the seven themes identified, however each theme has the potential to overlap or compliment other social interventions identified as well.

Catering Message to Different Audiences to Elevate Expectations of Care

This theme was identified as a prominent social intervention employed by practitioners in order to elevate expectations of care for the resident, and was a common method evident within many of the other social interventions identified as well. This theme is characterized by examples in which practitioners reported changing their verbiage, tone, or approach depending on the audience with which they were engaging. These changes were undertaken to elevate expectations

of care and, thereby, improve residents' quality of life. The desired result is that all members of

treatment team or family feel compelled to engage the resident and elevate his/her quality of life

as part of their personal and professional responsibility. Catering message to different audiences

spanned the *care spectrum*, with many examples clustering around persuading frontline

caregivers and other staff. This strategy was used, at least in part, in many of the other social

intervention themes identified. Figure 5 conveys the prominence of this theme through one-

directional arrows pointing to the other social interventions where catering the message was used

as a means to an end. It is evident that the practitioners appeared conscious of pivoting their

message to achieve a desirable outcome for the resident.

> "I almost feel like I'm a chameleon in the way I approach it based upon who I'm
> speaking with. So I'm always thinking about what's in it for me in the back of my mind.
> So if I'm talking to an executive director, administrator, or owner, I certainly have to pull
> in some conversation around their paying points, which might be revenue or census or
> risk mitigation. If I'm talking to a nurse and I have to really be thinking about how this
> approach can benefit quality outcomes that are surveys. If I'm talking to a direct care
> provider, certainly I would want to say, tell me the toughest resident with dementia that
> you're serving and let me … model for you how this approach will help and make your
> job easier and more rewarding. So, I think it's really knowing, as the dementia
> practitioner in this, and advocate for persons with Alzheimer's, how do I need to
> communicate differently to get buy-in from people at all different levels?" (KW, Focus
> Group 3, January 18, 2013).

This quote eloquently conveys the significance this practitioner placed on being able to cater her

message in order to persuade others to deliver higher standard of care.

Another way practitioners described that they catered their message was by knowing and

patiently communicating knowledge of ADRD including abilities and skills, and level of

engagement characteristic to each stage of the disease, as a way to package their message and

persuade others to revise current care practices. Patience in communicating this information was

important in persuading others. In one example, one participant described that by taking the time

to patiently describe current best knowledge of the stages and symptoms of ADRD to staff she

oversaw, she catered her message from being one of dictation to that of open communication and inquiry. In catering her message, this participant was ultimately able to turn a knowledge exchange into an opportunity to promote ability-focused care. "A speech therapist and I, when we do training on [different stages of] dementia…we have actually gone through the trouble of trying to break it down…for teaching purposes [including] mild dementia, moderate and severe dementia…[and] potential remaining capacities in each level of dementia. So we go through each level of [including] perhaps… what might be difficult in each stage, but we spend equal amount of time talking about what is remaining" (MV-S, Focus Group 1, November 9, 2012).

Practitioners also catered their message by being cognizant of professional boundaries. This is accomplished by respecting the expertise of other disciplines and communicating in a manner that did not encroach or dictate orders to persons in other disciplines. One participant illustrated this example, indicating that, "And the other thing is how we coordinate with activity staff so that they don't feel like we're stepping on their toes…" (MM, Focus Group 1, November 9, 2012).

Gaining Administrative Buy-in to Change Caregiving Culture

A prominent social intervention that participants reported employing pertained to gaining administrative buy-in in order to change a pessimistic caregiving culture to an optimistic caregiving culture. Practitioners obtained administrative buy-in by working from the bottom up through influencing frontline caregivers to ultimately persuade administration. Or they gained administrative buy-in by persuading high level administrators, reflecting a top-down approach.

In order to obtain administrative buy-in from the bottom-up, practitioners worked with other frontline caregivers, including certified nursing assistants (CNAs) and discipline leaders to slowly build momentum for a particular change in care to ultimately gain the attention and buy-in

from administrators. "Am I going to be able to change the practice of turning on the TV, or the radio…every time a CNA comes into the room? Those are the things I look at. How do I get buy-in, and how do I help?" (SH First Individual Interview, October 10, 2012). Further, when participants were in a position to hire, they specifically hired individuals who emulated desired caregiving culture mentality, as a way to build credibility and get the attention of top administrators. A passage that best illustrates working from the bottom-up to enact wide-spread system change in the caregiving culture is best illustrated by Participant SH, who eloquently stated:

> "I had to back up and learn to work within a system and this was a slow process but we starting doing, the DoN [Director of Nursing] grudgingly gave me 15 minutes once a month to get in front of staff. I had to do some kind of education with the staff once a month, and what they (DoN) did was they did it on payday so basically they held their paychecks captive so they had to come to this education piece, and then they could get their checks. So as part of that she gave me 15 minutes and we would do a little snip-it, our whole team, on dementia and what it looked like, and I cannot tell you the ripple that [it] started to have…Literally administrative people came, secretaries came, the housekeepers started to come. It was a big deal, because people were starting to understand. You saw understanding starting to happen. I knew this was a great success when about a year later, this housekeeper, there was this one in particular. First I had seen her scream at people before, because that's just her personality. But two things happened and I thought, 'Oh my god we are making a difference!' So this was in how the housekeeper interacted. So instead of yelling at this lady for walking out of her room barefoot, she said 'Oh my goodness, this floor is so slippery, let me walk back with you and we will get your shoes.' And she didn't even know I was around, I was hiding around the corner trying to catch up on my documentation. The second time was she came to me and she said 'For Ms. So and So, I have been mopping up urine around her trash can for the last 3 days, I don't know if that is a process of dementia.' But what it said to me was, it could be, and it made her think. Or it could be an infection, but we all needed to be having eyes on [the resident] and so I [said], 'Let's get what you just said, and [what] we are doing, [and] make sure that gets in the chart"(SH, Individual Interview, October 10, 2012).

Practitioners gained administrative buy-in from the top-down in a variety of ways, one of which involved catering their message through matching verbiage, tone, or approach in way that appealed to the financial and management interests of administrators. That is, one way practitioners aimed to change the caregiving culture was by presenting key recommendations of change in a formal meeting or presentation that emphasized economic incentives, potential monetary gains, reimbursement potential, risk mitigation, and /or long-term invest potential of recommendations. "Somehow we need to sell it to the executives, the people who make the decisions that it really is worth putting your money toward this, putting the time and support into supporting this culture and all your staff, for all organizations," (Focus Group 1, November 9, 2012). Another strategy reported by practitioners included incorporating industry buzz-words, such as 'person-centered' or 'individualized-care' within meetings as a way to demonstrate relevancy and expediency of desired changes. What was most striking was how practitioners felt compelled to enact change not only within their own department, but to tackle facility-wide change via obtaining administrative buy-in.

Built Trust and Rapport with Treatment Team

Another prominent theme pertained to the significance that practitioners reportedly placed on building working relationships with all members of the treatment team, especially frontline caregivers, as a powerful social intervention to elevate the quality of care for residents with ADRD. Often times, practitioners viewed themselves as central figures of the treatment team. Thus, building trust and rapport with the treatment team stemmed from an innate belief that it was their responsibility to teach others an occupation-centric mindset.

With respect to working with frontline caregivers, it was clear that practitioners understood the impact frontline caregivers could have on the quality of life for residents. As a

result, a lot of emphasis was placed on building rapport with individuals who potentially had the greatest impact on the resident's day-to-day life. Given the amount of time frontline caregivers spend with residents, the participants reported that they targeted this subgroup when trying to build trust and rapport. Thus, participants reported that a desired outcome in building trust and rapport was that the occupational therapist emerged as a confidant and a person of trust and expertise that others can consult in. In turn, by earning trust, one participant reported that it was her goal to expand her circle of influence to other departments or even administration.

Practitioners built trust in a variety of ways. Participants indicated that they asked for input from other members of the treatment team on how to best care for the resident, which allowed staff to feel their opinions were valued. "So, it's building a strong relationship with those team members, gaining their feedback about the client, and really looking at the environment in which this person will be living in order to make the best recommendations" (KW, Focus Group 2, January 18, 2013).

In addition, participants reported that they aimed to understand how the treatment team perceived individual deficits to better understand how they could provide information in a supportive and safe manner. For instance, one participant reported that by understanding how a frontline caregiver perceived the abilities and deficits of a resident, she was better able to serve as an information source for this frontline caregiver, which allowed her to establish rapport with this caregiver. Thus, understanding perceptions of abilities and deficits served as an entry point for building rapport with frontline caregivers.

Building rapport with members of the treatment team was often associated as the pathway to ultimately build trust. For instance, one participant stated in efforts to earn their trust, "I think having a good rapport with front-line staff [is important] before you introduce something

new" (MH, Focus Group 2, December 7, 2012). Participants recognized that building personal relationships with the treatment team is an effective way to build a casual and friendly rapport, aptly stated by one participant who said that "…I think just forming a relationship and I think with nursing assistants, at least in my experience, is getting to know them. So you're kind of on their side." (MV-S, Focus Group 1, November 9, 2012). Practitioners would also try to understand where other members of the treatment team were coming from in relation to the pressures and time constraints that may prevent them from practicing best care strategies. "They want to do what's right for them, for the patient, but sometimes the time constraint is the devil, and it's not set-up so that the program can run that way…" (MM, Focus Group 2, December 7, 2012). Sympathizing with frontline caregivers on their job responsibilities was a strategy participants reported that they used to build trust. In addition, practitioners mentioned that they approached working relationships with frontline caregivers as collaboration, and thus avoided harsh tones or words.   Further, participants used 'we' language when discussing positive outcome to administration as a way to recognize involvement of other members of the treatment team to ultimately build trust.

Involve Family as Members of Treatment Team

Without exception, the participants conveyed that they regarded family members not merely informants or passive bystanders, but rather as active members of the treatment team. As a result, consideration and incorporation of family members in treatment was a powerful social environmental intervention practiced among participants. First practitioners articulated the belief that family members need to be active contributors to the care of their family member. Thus, in order to establish this expectation, practitioners described how they involved family members

immediately in the treatment process after residents were admitted in order to, "… really reel them in early on treatment and have them be very key people in the process."

On the other hand, participants also reported that it was important to avoid making assumptions about what the family was willing to do. Integral to the success of involving family members was avoiding making assumptions about their ability to contribute to treatment in a meaningful way, "You don't know what that family is willing to do. You don't what the resources are" (MV-S First Individual Interview, October 12, 2012). Thus, there was a belief held by a few participants that family members can and will do what they can to improve the life of their loved one. This translates into an assumption help by participants that family members should be involved in the life and treatment of their beloved.

In addition, some participants also reported that family members were a main source of 'fitting the occupational puzzle' (KW, Focus Group 1, November 7, 2012) together for the resident. Participants thereby reported that they actively involved family members in gathering personal information and artifacts that helped define characteristics and important events unique to their loved one. Further, participants reported that they promoted the use of co-occupations with family members as an effective strategy to facilitate engagement. For example, one practitioner involved a husband and wife in the co-occupation of card-making to encourage the husband to engage in a task. "…One couple I had, she would make cards. She was very independent herself, and she enjoyed making, re-using cards, and making them into new cards to sell at the gift shop, and he could very easily cut out part of the card that she needed done, and he enjoyed doing it" (SH, Focus Group 2, December 7, 2012).

In addition, family members were also considered within the realm of treatment. Although this was not expressed across all the participants, two participants considered the

emotional state of the family when crafting interventions for the resident, understanding that the circumstances that find their family member in a LTC was a difficult time both for the resident and family. By expanding the scope of treatment to the larger family members, practitioners were better able to treat the resident; the ultimate goal in the mind's eye of the occupational therapy practitioner. "I almost think of emotional well-being or ill-being as it relates to families and the care staff as well. So many times, and this is well researched, families are going through the stages of grief, [and] they have real illness associated with being a caregiver to somebody with Alzheimer's" (KW, Focus Group 1, November 9, 2012).

Maximize Opportunities for Social Engagement with Other Residents, Treatment Team and Staff

Practitioners additionally described ways in which they set-up the social contexts of activity situations to promote social interaction to help minimize social isolation of residents. Maximizing these opportunities occurred in a variety of situations ranging from setting up daily group activities, positioning residents in high traffic areas to promote ongoing interaction with other residents, encouraging staff to interact with resident in the hallways, and recommending direct engagement by a part of daily treatment plan for frontline caregivers. In describing a need to maximize opportunity for social engagement, one participant described why she encouraged staff to stop and interact with residents, stating that, "They don't necessarily see people unless they come out for lunch or come out for an activity, and I think that piece is what you have to been concerned [about]. Are they too isolated?" (MH First Individual Interview, September 28, 2012).

In another example, one participant reported that she implemented an intervention specifically designed to stimulate engagement between residents and staff. She was instrumental

in creating an outdoor festival where residents and staff would team-up to participate in a variety of engaging activities, and reported that

> "…participating in a festivity that's going on, getting engaged in summer games where they go outside and do games with staff and other residents, and they're able to socialize appropriately and follow the rules with one direction or whatever it happens to be, but they have a sense that they are engaged and participating in their surroundings, even if the surroundings are a memory care unit" (MH, Focus Group 2, December 7, 2012).

Thus, the specific aim of this social intervention was to maximize social participation with staff and to increase awareness and familiarity of the resident's surroundings. This is a powerful example of how practitioners reported that they designed interventions to maximize engagement and participation between residents and staff.

The practitioners also provided multiple examples of how they would encourage social engagement of residents. Examples used include: facilitation of spirited greetings; engaging residents in conversations related to favorite activities/objects, family members, or friends; engaging in small-talk, or embracing, approaching, and touching residents on the shoulder.

Reduce Task-oriented Mindset of Frontline Caregivers: Promoting an Occupation-centric Worldview

A prominent social intervention used by practitioners clustered around changing hearts and minds of staff and frontline caregivers. The practitioners' description of their work strongly suggested that they clearly valued the role of frontline caregivers and understood their impact on the quality of life of residents. The practitioners accordingly aimed to reduce a discrete task-oriented mindset of frontline caregivers by promoting an occupation-centric worldview to ultimately decrease their workload. An occupation-centric worldview adopted by participants, stems from the belief that by nature, humans are occupational beings that inherently need to

engage in meaningful occupations in order to thrive (Yerxa et al., 1989). Participants reported that they go beyond dictating recommendations to the frontline caregivers, and instead try to convey the importance of getting to know the resident, 'taking the time' to know who they were and what was important to ultimately foster engagement in meaningful activities. In turn, by adopting an occupation-centric worldview, participants reported that frontline caregivers realized that their job more enjoyable as the residents were happier and therefore more cooperative. "And they see the things that we're doing with them is working for the resident too…so they can move easier and they're more engaged in their life, which makes their work easier and more pleasant." (AC, Focus Group 3, January 18, 2013). In advocating or believing in the importance of promoting occupation as the primary means to boost quality of life, practitioners bestowed a message of passion, commitment, and conviction to frontline caregiver. In obtaining buy-in from frontline-caregivers, participants in turn were effective in reducing the task-oriented mindset of these caregivers. Reducing the task-oriented mindset of caregivers inherently led to elevated expectations of care. Participants went on to say that by elevating expectations of care, they had some success in improving the quality of life for the residents.

Promote Choice and Autonomy throughout the Day

Participants provided multiple examples in which they modified the social environment in ways that aimed to maximize residents' choice, autonomy, or sense of control over their environment. This was often accomplished in simple and straightforward modifications to the resident's food choice or daily schedule that yielded positive outcomes, such as increased engagement in the task at hand. For example, in discussion related to how she modified the social environment so that the resident could eat when and where he wanted, one participant commented that, "It might be okay if we carry the sandwich down the hall and eat it down there.

Instead of 'we've got to sit at the table for 25 minutes and do it all at once.' So we kind of just made some modifications to how she ate so that she was still getting her nutrition even though it was more somewhat on the go…" (MH, First Individual Interview, September 28, 2012). This quote illustrates that providing residents with choices on when, where, and how they engaged in tasks, the practitioner was able to promote choice and autonomy throughout the day. Although this theme has characteristics of a physical intervention, in enabling choice of all aspects of the task, i.e. when, where, and how, is what characterizes this example as a social intervention. The practitioner maximized opportunities for the resident to make decisions about all aspects of the task within the environment, thereby promoting a sense of autonomy and control.

Relationship of Different Roles to Physical and Social Interventions

I used matrix analyses to examine the relationship between physical and social interventions and the roles of expert practitioners in implementing these interventions (Table 5, next page). Analysis revealed that physical interventions were most commonly associated with the role of a one-on-one interventionist by a large margin. With the exception of adapting/designing the layout of the facility, my findings show that many physical interventions were implemented by the occupational therapists themselves. In comparison, social interventions were associated with multiple roles used by the practitioner. This evidence suggests that social interventions employed by practitioners often require the practitioner to operate within one or more roles. This could stem from the fact that implementing social interventions often spanned the entire *care spectrum* and thereby required that the practitioner be intentional in their message or point of views they were trying to convey. This stance was done by pivoting between clear and distinguishable roles that the practitioners used at their disposal in order to maximize the

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effectiveness of social interventions. My findings related to the role and significance of social environmental interventions retains implications for expanding the current scope of occupational therapy practice with respect to environmental interventions.

Table 5

Role Affiliation with Physical and Social Interventions

	Role: Personal Responsibility Taker	Role-Advocate	Role-Collaborator	Role-Consultant	Role-Educator	Role: One-to-One Interventionist	Role: Paradigm Shifter
Physical: Adapt layout facility	0	0	0	1	0	0	0
Physical: Eliminate Safety Hazards	0	0	1	1	0	4	0
Physical: Home	0	0	0	2	0	4	0
Physical: Personal artifacts familiar	0	0	0	0	0	1	0
Physical: Minimize distraction	0	0	2	0	0	2	0
Physical: Proximal engagement	0	0	0	2	0	11	0
Physical: Contrast	0	0	0	0	0	4	0
Social: Family centered	3	0	8	7	3	5	0
Social: Administrative buy-in	5	6	0	1	2	0	5
Social: Build trust treatment team	3	1	5	3	7	1	3
Social: Cater message different audiences	13	6	1	6	9	1	11
Social-Maximize social engagement	3	1	2	2	9	1	4
Social: Promote choice autonomy	1	0	0	1	4	1	0
Social: Reduce task oriented mindset	11	1	1	7	27	6	8

CHAPTER FOUR: DISCUSSION

My research suggests strong confirmation of the LELQ model. Specifically, participants maximized the fit between the *caregiving microsystem* and *person with dementia* domains in order to facilitate an engaging environmental press across multiple *activities situations*. Therefore, my findings confirm that a positive lived environment through an optimistic caregiving culture is perceived to be conducive to an elevated quality of life. Further, I found that the nature of identified physical and social environmental interventions represented a vast, complex, and myriad list that spanned the *care spectrum* within the *caregiving microsystem*. Practitioners individualized these interventions by *stepping into the resident's world*, acquiring a deep and empathetic understanding of the resident to cater interventions to meet their needs, preferences, and abilities in efforts to provide care in context. In turn, efficacy of environmental interventions was best maximized when practitioners assumed various roles that empowered them to become *ambassadors of care*.

If your recall, physical environmental interventions identified included: adapt or design the layout of the facility, minimize safety hazards, make the environment 'home-like', and set-up the proximal environment to support engagement. Social environmental interventions identified included: involving all major players of the *caregiving microsystem* including the administration, frontline caregivers, and the residents themselves. Figure 5 presented in the results section provided a visual schematic displaying the complexity in how expert practitioners conceptualized, individualized, and ultimately implemented these interventions.

With the results in mind, my findings suggest three primary take home messages. First, by adopting roles that exemplify characteristics of *ambassadors of care*, occupational therapists possess the capacity to serve as formal and informal leaders in implementing comprehensive

environmental interventions. Second, occupational therapists hold the ability to serve as change agents within practice, identified as the gold standard of *ambassadors of care*. Third, my findings suggest that practitioners can and should expand the scope of therapeutic use of self to intervene within and as part of the social environment to ultimately initiate large-scale systems change within respective LTC facilities. Collectively, my findings suggest that occupational therapists can be powerful drivers of change, capable of yielding positive outcomes for individuals with ADRD who reside within LTC facilities. As it relates to the LELQ model, my findings suggest that an optimistic culture of care is necessary in order to fully facilitate environmental interventions that permit practitioners to become *ambassadors of care* and change agents.

Implications for Future Best Practice: Becoming Ambassadors of Care

If you recall from Chapter 3, participants reported that they purposefully positioned themselves in seven different roles in order to maximize effectiveness of their interventions to carry out their mission as *ambassadors of care (*Figure 5). These roles included: collaborator, consultant, educator, advocator, one-to-one interventionist, paradigm shifter, and personal responsibility taker. My findings suggest that by adopting various roles, practitioners exemplified formal or informal leadership qualities, serving as *ambassadors of care* to maximize the depth and breadth of environmental interventions used. Therefore, I advocate that occupational therapists retain the ability to serve as formal and informal leaders, driving change within the LTC *caregiving microsystem* to better serve residents with ADRD.

Ambassadors of Care as Informal and Formal Leaders

Becoming an *ambassador of care* is not a top-down, tidy or sequential effort as demonstrated in the results. Rather, becoming an *ambassador of care* required persistent and nuanced efforts to pivot between different roles across the social and physical *care spectrum* in *formal and informal leadership capacities* to implement environmental interventions within LTC facilities (Figure 5). At the minimum, occupational therapists must serve as formal or informal leaders to be *ambassadors of care*. Therefore, it is important to understand characteristics of formal and informal leaders recognized within occupational therapy literature in order to better specify qualities needed to become *ambassadors of care*. Drawing from study findings, I define a *formal leader* as an individual who is officially recognized as a leader of a group, and has specific job responsibilities and tasks associated with carrying objectives of the larger organization. I define an *informal leader* as an individual who is officially designated as a titled leader of a group, but rather is recognized by peers as a source of credible information and inspiration. Formal leaders can retain the qualities of informal leaders. My findings suggest that practitioners do not need to be formal leaders to grow into *ambassadors of care* or initiate wide-sweeping positive change within the *caregiving microsystem*.

In examining the literature, it is clear that the work of other scholars support increased formal leadership among occupational therapists to carry out best practice for clients. Scholars are promoting expanded leadership in a call for occupational therapists to assume formal positions of leadership in order to elevate standards of care (Gaitskell & Morley, 2008), and to ensure longevity, relevancy, and competiveness of the field (Clark, 2011). Further, scholars believe that occupational therapists are well suited to serve as formal leaders.

For instance, Rodger (2012) advocated that the unique philosophies and characteristics that occupational therapists possess, namely the occupational lens that practitioners embrace, make them well suited to assume formal leadership roles across a spectrum of global contexts and practice settings. She further implied that it is the professional responsibility of occupational therapists to pursue leadership opportunities, "no matter how big or small," in order to advance her argument that occupational therapists possess unique leadership qualities. Rodger (2012) reflected my study findings, in that she placed emphasis on celebrating and sharing the occupational lens as a powerful tool to improve practice and expand influence of care to other disciplines and contexts. Rodger (2012) explicitly called occupational therapists to actively use their unique occupational perspective to their advantage to pursue leadership opportunities. She recommended occupational therapists assume these leadership roles practicing a number of principles that are familiar to many practitioners, some of which included: understanding self via self-reflection to use personal strengths to advantage, leading through collaboration alongside others, building the skills and capacity of future practitioners, 'seeing yourself as a leader', and integration of scholarship in practice.

Within the context of this article, Rodger (2012) demonstrated characteristics of roles identified in this study including paradigm shifter, collaborator, advocate, personal responsibility taker, and educator as involving other disciplines and members of the treatment team in order to operationalize an occupational centric viewpoint within practice: a key social environmental intervention employed by participants. By calling for expanded leadership spanning global settings, Rodger is challenging current practice, and thereby her findings reflect a paradigm shifter as well as advocate. Her call for practitioners to step up and assume leadership roles reflect personal responsibility taker. The strategies she recommended to assume leadership roles

reflect collaborator, educator, and personal responsibility taker roles. Collectively, this article is one example in which the roles and some social environmental interventions characteristic to *ambassadors of care* is evident in the literature. Let me use another example to illustrate.

In Florence Clark's 2011 Presidential Address, she called occupational therapists to exert leadership roles, stating that "We must resist staying silent when our voices need to be heard to ensure better service" (Clark, 2011, p. 618). In addition, Clark (2011) reflected study findings, recommending that occupational therapists serve as leaders through striving for personal excellence within respective practice settings. In her address, she argues that individuals who strive for personal excellence are advancing the 'competitive edge" of the field (Clark, 2011, p. 618). The tone and rhetoric of her address mirrored characteristics of the advocate, paradigm shifter, and personal responsibility taker roles that participants adopted when implementing environmental interventions within their respective LTC facilities. The central point of her article was to elevate and strive for best care, and thereby reflected the advocate role. By calling for personal excellence, she was asking practitioners to take responsibility, and go beyond the expected norm to deliver a higher quality of care, which will reflect positively on the field and change the paradigm of care. Therefore, this article further advances my argument that it is important for practitioners to adopt these roles in order to assume formal leadership roles within practice.

Yet, my results suggest that practitioners do not need to assume specific or titled positions of formal leadership in order to be *ambassadors of care*. In fact, all practitioners served as informal leaders to implement environmental interventions that spanned the physical and social *care spectrum*. Therefore, my findings suggest that practitioners need to exemplify informal leadership qualities in order to be *ambassadors of care*. By positioning themselves in various

roles, practitioners inherently viewed themselves as informal leaders capable of promoting a "just right fit" between the *caregiving microsystem* and *person with dementia* domains. That is, they made it their responsibility to provide best practice environmental interventions, whether it was by educating a frontline caregiver, collaborating with family, or advocating to the administration to change the layout of the facility. These findings are echoed in the literature as well.

One study found that 'first-line supervisors,' defined as individuals in formally recognized roles that serve as the bridge between staff and administration, failed to address the needs of the supervisor or the supervisee (Sweeney, Webley & Treacher, 2001). The authors go on to say that individuals who garnered respect from peers in an informal leadership capacity are important players to include in small or large-scale organizational development or change. This study suggests that individuals who serve in formal leadership roles may be insufficient in fully implementing organization-level change. In addition, as one study suggests, effective change leadership that stimulated organizational change required adoption of various roles, operational know-how, and strong interpersonal skills (Graetz, 2004). That is, it was the qualities that practitioners possessed that were important rather than the titles. As it relates to this study, practitioners adopted different roles depending on the circumstances, and took it upon themselves to serve in informal leadership capacities to promote best practice relative to environmental interventions to drive change.

Therefore, I conclude that future best practice within LTC facilities for people with ADRD involves practitioners operating in various roles through formal and informal leadership capacities to become *ambassadors of care*. Yet, as my results suggest, large-scale systems change is often required in order to transform the caregiving paradigm to best serve LTC residents with ADRD. Therefore, subsequent discussion will address how practitioners can and

should pursue serving as large-scale change agents; the gold standard of being *ambassadors of care*.

Ambassadors of Care as Change Agents: The Gold Standard

My results suggest that by serving as formal and informal leaders by means of being *ambassadors of care*, practitioners can serve as *change agents* within LTC facilities capable of driving large-scale systems change. Through the adoption of roles, practitioners who serve in formal and informal leadership capacities who aim to implement large-scale systems change are change agents, the gold standard of *ambassadors of care*. Drawing from my study findings and related literature, I define *change agents* as individuals who drive large-scale organizational change within an institution or help members of an organization adapt to organizational change. A review of occupational therapy literature revealed that researchers do not explicitly and consistently use 'change agent' terminology within best practice recommendations. This suggests that, to date, there is a gap in the literature related to an unequivocal call for occupational therapists to serve as change agents or catalysts to large-scale systems change. Research introduced in the preceding section discusses how practitioners served in various informal and leadership capacities, but fell short of explicitly calling for large-scale systems change that yield positive outcomes for clients. What my research suggests is that by becoming *ambassadors of care*, practitioners are capable of becoming powerful change agents. Thus, the gold standard of being an *ambassador of care* is serving as a change agent via formal or informal leadership roles.

In order to advance my argument, I first need to define distinguishing characteristics of change agents evident in the literature and explore whether these characteristics overlap or confirm my study findings. As mentioned prior, occupational therapy-specific literature related to change agents was limited, and research I did find did not sufficiently address change agents as

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individuals. When I broadened by review of the research, it is clear that individual change agents are most commonly linked to organizational development literature. One study in particular stood out to me and is relevant in this discussion. In a study by Coskun and Krdzalic (2009), these two authors aimed to understand distinguishing characteristics of individuals who served as change agents in organizational development and change. The authors found that individual change agents were able to transform the worldview of stakeholders such as high-level administrators, while at the same time also support lower-level management to yield positive organizational change. That is, the change agent was the catalyst and the nexus by which large-scale change was facilitated, and represented a dynamic give-and-take between working directly with administrators and personnel. This study went on to define key abilities that individual change agents possess, some of which included: exceptional analytical, listening, teaching, communication, and mediating skills, as well as a keen understanding of end goals and the activities that need to occur to achieve end goals.

This study reflects my findings in a couple of ways. Characteristics of change agents defined by Coskun & Krdzalic (2008) mirrored the roles and social environmental interventions participants used to implement environmental interventions. Possessing key analytical, mediating, listening, and communication skills correlate to catering message to different audiences and building rapport and trust; key social environmental interventions employed by participants. In relating my study findings to this article, what really stood out to me was that participants carried out specific activities, in this case environmental interventions, by intentionally serving in various roles in informal or formal leadership capacities in order to achieve end goals. In the case of this research study, those end goals included implementing a suite of comprehensive environmental interventions to change or improve the caregiving culture

to yield positive quality of life outcomes for residents. Thus, it is clear that participants operated as the gold standard of *ambassadors of care*, implementing environmental interventions to ultimately yield large-scale systems change.

Consequently, my study findings suggest that practitioners are capable of serving as change agents to yield systems level change within LTC practice for people with ADRD. However, the gap in the literature related to occupational therapy-specific change agents suggests that future efforts need to explicate mechanisms in which the various roles defined in this study can be operationalized in order to do so. Further, the level of expertise of participants involved in this study suggests that future research needs to explore whether less experienced practitioners, through application of the LELQ model, can serve as effective change agents. In fact, there is research to suggest that even the most vigilant practitioner's efforts can be thwarted if the practice setting is resistant or unaccommodating of practices that deviate from standard protocols. This warrants discussion on potential challenges individuals may face in the context of practice.

Barriers to Becoming an Ambassador of Care

Given the rosy and somewhat idealistic recommendation that practitioners should and want to become *ambassadors of care* by pursuing formal or informal leadership roles to ultimately become change agents, there are significant contextual barriers to adopting these recommendations. As discussed earlier, given that the symbiotic relationship between being a leader and the social environment, it is logical to assume that the practice context or setting, i.e. the social environment, can tamper or empower individual practitioners to pursue a leadership pathway.

Townsend, Langille, and Ripley (2003) proposed that resistance to implementing best client-centered practice resulted from juggling tensions between practitioners' desires to collaborate *with* clients, and pressures to adopt or modify practices to meet setting expectations. To illustrate this point, Townsend et al. proposed an image of practitioners forced to 'work against the grain;' that is, their desires to collaborate with clients were viewed as a horizontal phenomenon existing in tension with the vertical hierarchical control of program managers. To work against this grain in the hopes of carrying out individualized care, practitioners had to navigate between conflicting personal and practice expectations. Townsend et al. further proposed that professional tensions were generated by practitioners' lack of power to "fully implement client-centered practice beyond goal setting with individuals" (p. 24). These institutional barriers raise the question: How could the results of this study help practitioners begin to reframe contextual barriers in a way that provides a path forward? The next section aims to address this very question.

Expanding Therapeutic Use of Self

I propose that practitioners tackle institutional barriers in practice by expanding *therapeutic use of self* to include being *ambassadors of care* who intervene within and as part of the social environment to yield systems level changes. My findings suggest that practitioners looked beyond the scope of using therapeutic use of self to exclusively direct one-to-one interventions with clients. Rather, they expanded their scope of therapeutic use of self to include all aspects of the physical and social elements of the *care spectrum* to address institutional barriers that impart large-scale systems changes within the caregiving microsystem.

Before I make my argument, it is important to first discuss how occupational therapy practitioners have defined scope, meaning and applications of therapeutic use of self within the

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literature. In a 2009 study that identified practitioner attitudes and experiences of therapeutic use of self, Taylor et al found that, as a whole, practitioners felt they were inadequately trained on how best to use therapeutic use of self in practice, despite reporting that using therapeutic use of self was of high value to their practice. In addition, this study found that those who placed increased value on using therapeutic use of self or had additional training on the subject had positive feelings for clients and were more likely to express concern about clients. Within this article, authors discuss the varied literature on defining and describing therapeutic use of self, indicating that there is currently no single approach in conceptualizing or defining what therapeutic use of self is within occupational therapy practice, or why practitioners value it. The authors concluded that additional research is needed to explore what qualities constitute therapeutic use of self to foster a therapeutic relationship with clients.

Results from this study suggest that additional research needs to address mechanisms and characteristics of therapeutic use of self to ground loose theoretical concepts to actionable recommendations and guidelines for practitioners. Further, actionable recommendations need to address how practitioners could use therapeutic use of self to benefit clients' needs specific to different practice settings, such as LTC facilities. In addition, research needs to address how practitioners could use therapeutic use of self to combat institutional barriers that bear negative consequences for clients as well. With this article in mind, my findings suggest that the current use of therapeutic use of self by practitioners is insufficient in addressing the comprehensive environmental intervention area needs characteristic to LTC care for people with ADRD. My research provides a potential path forward to begin to conceptualize practice-specific therapeutic use of self to foster improved care of clients and large-scale systems change.

My findings suggest it is important to intervene within the social environment in order to expand therapeutic use of self in order to address institutional barriers to best practice. My findings suggest that social environmental interventions can be a mechanism by which practitioners exert leadership roles, thereby enabling them to become *ambassadors of care*. In sum, there is an inherent symbiotic relationship to social interventions, suggesting that *ambassadors of care* should expand therapeutic use of self to intervene within the social environment to maximize depth and breadth of environmental interventions implemented.

I further assert that intervening within the social environmental could provide a way for practitioners to reframe potential contextual barriers as interventions aimed to target specific needs across the *care spectrum*. What my results suggest is that these practitioners did not conceptualize institutional barriers as nebulous problems in which they had no control or influence over. Rather, through adoption of various roles and expansion of therapeutic use of self, they compartmentalized and packaged their interventions in a way that reframed institutional barriers as interventions areas. If you recall from Chapter 3, a social intervention employed by practitioners was gaining administrative buy-in using both top-down and bottom-up strategies to do so. This is one intervention area that participants developed systematic strategies to implement systems-level change. The bottom line is that practitioners tackled institutional barriers, refusing to "receive" practice (Townsend et al., 1996), and instead used various roles including paradigm shifter and advocate to systematically expand their scope of therapeutic use of self to implement a social environmental intervention that changed the culture of care and aimed to improve the quality of life of residents.

My findings also suggest that participants inserted themselves as part of the social environmental intervention, pivoting between roles in order to carry out key interventions.

Therefore, I'm advocating that occupational therapists view themselves not simply as the engineer of environmental interventions, but rather that they operate as if they are a part of the social intervention itself, working in multiple roles to yield large-scale systems changes to benefit the resident. If you recall from Figure 5 in Chapter 3, the different roles characteristic to being an *ambassador of care* suggest that participants, in effect, recognized themselves as an integral part of the social LTC environment when implementing both physical and social environmental interventions. The decisions they made and the way they implemented environmental interventions suggest that being an *ambassador of care* involves practitioners perceiving themselves as part of the intervention itself. That is, participants extended their therapeutic use of self to include being an integral element of the intervention itself.

My findings remind me of Reed (1986), who eloquently describes *medium* and *methods* occupational therapists use in practice to deliver therapeutic impact. Reed defines *medium* as "an intervening mechanism through which a force acts or an effect is produced. In therapy, the medium is the means by which the therapeutic effect is transmitted" (p. 597). She goes onto define *methods* as "the manner of performing an act or operation: a procedure or technique. In therapy, the methods constitute the "steps, sequence, or approach used to activate the therapeutic effect of a medium" (p. 597). In considering these two definitions, I advocate that practitioners working in LTC facilities with people with ADRD need to insert themselves as both the means and method in order to activate and transmit the therapeutic effect of environmental interventions to ultimately yield large-scale systems change. If you recall from Chapter 3, one participant served as a 'chameleon,' catering her message of changing the caregiving culture within a LTC facility depending on who she was talking to. Whether it was nursing, administrators, frontline caregivers, or family, this participant morphed her language and approach in order to deliver her

message (p. 60). In this example, this participant was the medium, operating as an *ambassador of care* to transmit the therapeutic effect. Further, by catering her message, she implemented a specific social intervention that served as the method, or the procedure or approach used to activate the therapeutic effect of the medium. Separate, her techniques are insufficient in her transforming into the intervention itself. However together, she became the medium and methods of the intervention in order to become the therapeutic effect herself. In this case, this practitioner actively understood that she *was* the environmental intervention needed to tackle the pessimistic caregiving culture. My results exemplify that practitioners, through adoption of multiple roles and expansion of therapeutic use of self, are serving as the means and methods of environmental interventions. As *ambassadors of care*, these practitioners inserted themselves as the axel in which environmental interventions are carried out in order to yield large-scale change. Therefore, I advocate that the definition and scope of therapeutic use of self needs to expand to include the practitioner as part of the intervention, capable of becoming the medium and method in which therapeutic effects is transmitted and activated.

Discussion related to how participants intervened within the caregiving microsystem begs the question *why* they chose to adopt various roles to do so. Given the substantive degree to which practitioners adopted various roles in order to implement environmental interventions across the *care spectrum* suggests that participants were fundamentally concerned with intervening at the systems level. That is, participants reported using a vast and complex list of environmental interventions to the extent that they were always aiming, to some degree, to reform, change, or modify the culture of care to ultimately improve positive outcomes for residents. Thus, by being part of the interventions, participants expanded the scope of *therapeutic use of self* to inherently impact large-scale systems changes within the LTC facility.

Implications for the LELQ Model: The Importance of an Optimistic Caregiving Culture

The nature of the physical and social environmental interventions used by practitioners suggests that, in sum, participants were trying to implement or maintain an optimistic caregiving culture. If you recall from the LELQ model, an optimistic caregiving culture is one in which reoccurring daily activity situations are occupationally enlivening in the moment and over time. Thus, as theorized by the LELQ model and confirmed by participants, setting up the environment to maximize engagement was the mechanism of change to improve the quality of life of residents.

Promoting an optimistic caregiving culture via engagement reflects a core principle characteristic to the field of occupational therapy that humans by virtue are wired to engage (Yerxa et al., 1989). Although this is seemingly an obvious assumption that occupational therapists promote occupation in real-life contexts, the reality of many practice settings makes it difficult for many therapists to keep this in the forefront of their practice (Baum, 2000). In fact, Chisholm & Shreiber (2000) found that in traditional rehabilitation settings where medical models reign supreme, practitioners have struggled to promote occupation-based practice, and instead frequently focused on remediating and restoring body functions and structures. What my findings suggest is that these practitioners deviated from the pressure to focus purely on remediating and restoring and instead promoted occupation-based practice through environmental interventions that specifically paralleled an optimistic caregiving culture as defined by the LELQ model (Wood, 2011).

Therefore, my findings suggest that practitioners aiming to implement comprehensive environmental interventions within the caregiving microsystem must exemplify qualities of an optimistic caregiving culture. That is, it is insufficient to implement environmental interventions

that do not actively promote an optimistic caregiving culture as defined by the LELQ model. This suggests that practitioners can examine and evaluate environmental interventions through the lens of the LELQ model. Therefore, examining the presence of optimistic and pessimistic caregiving cultures as defined by Wood (2011) could potentially serve as guidelines for practitioners to systematically evaluate the potential or presence of occupationally enlivening or deadening activity situations within the larger caregiving microsystem.

Implications and Next Steps in the Theory Building Process

Given that my findings extended within the application stages of the theory building process, my research findings began to address how practitioners would implement the LELQ model in practice. Therefore, next steps in this research process need to involve creating a process model to aid practitioners with recommendations and steps in how best to implement the LELQ model within practice as it relates to my research questions. See Appendix D for a list of findings and implications for the LELQ model broken down by research question. With that overarching recommendation in mind, I've identified three areas of potential future research: 1) further exploration of whether to include the identified concepts of *ambassadors of care* and *stepping into the resident's' world* into the LELQ model that best align with the theory building process, 2) identification of assessments and outcome measures that best reflect concepts of the LELQ model and findings from this study, and 3) consideration of how or whether this model could be readily understood and adopted by less experienced practitioners.

First, it is important to determine how practitioners would address institutional and other barriers to implementation of the LELQ model. Future research questions could include: How do practitioners operationalize the introduced concept of *stepping into the resident's world*? How do

they further operationalize the different roles characteristic to *ambassadors of care*? Are certain roles more important than others when serving as an *ambassador of care*?

In addition, the operationalization stage of the theory build process necessitates grounding theoretical concepts into specific and operational concepts that can readily be implemented in practice. Thus, future research needs to fully address how practitioners are assessing the domains of the *caregiving microsystem* and *person with dementia* including formal and informal assessments that correlate to these domains. In addition, future research needs to address potential outcome measures for both physical and social environmental interventions. In addition, given the significance of social environmental interventions in implementation of a comprehensive environmental intervention plan, future research needs to address reimbursement potentials of social environmental interventions. Further, I'm left wondering if there is any reimbursement potential for acquiring this deep intimate knowledge of residents, defined as *stepping into the resident's world*.

In addition, given that an extreme case sampling criteria was used for this study, I am left with questions related to how results would have been different if participants represented various levels of experience. The strong confirmation and resonation of LELQ concepts with participants could be, in part, due to the vast depth of participant knowledge and experience in the area of long-term care for ADRD residents. Thus, future research needs to tap whether or not this model, including environmental interventions identified, could readily be understood and implemented for entry-level practitioners or practitioners looking to enter LTC treatment for ADRD residents.

Study Limitations

There were several study limitations. First, in employing extreme and chain case sampling to recruit participants, study findings reflect views from highly experienced expert practitioners within the field of LTC. As a result, we cannot assume that study results related to strong confirmation of the LELQ model shared among participants is representative of perspectives collectively held by LTC occupational therapy practitioners working with residents with ADRD.

In addition, when employing an action research methodology, it is important to involve participants in the initial stages of designing the study to uphold the democratic and participatory principles inherent to action research (Meyer, 200b). Yet, the nature of this study did not permit participants to be involved in the initial design stages of this study. When the academic research team decided to employ an action research methodology, decisions related to the design and structure of the study had already taken shape. We did due diligence to ask for input from participants on the study design. However, there was a degree of inflexibility inherent within the study design as key decisions had already been made prior to involvement from participants.

Finally, this study did not complete the application phase of the theory building process. Although the primary aim of this study was the confirmation and disconfirmation stages of the theory building process, it was our hope to undertake the application phase as well. If you recall, the application phase of the theory building process involves applying the theory, in its most updated version, within practice (Lynham, 2002). Initially it was our hopes to have practitioners apply the LELQ model within practice, with the last individual interviews dedicated to gaining their perspectives of barriers and supports to application within practice. This was not possible given time constraints of academic research team and viability of implementing the LELQ model

within the diverse participant practice settings. Instead we asked participants in the last individual interview to theorize potential barriers and supports in implementing the LELQ model within their respective practice settings. Although this discussion greatly helped us understand how the LELQ model could be applied in practice, it was insufficient to fully meeting objectives characteristic to the application phase of the theory building process.

Conclusion

As characteristic to an iterative and authentic qualitative research process, my results were splendidly outside what I expected to find. In further mulling over the richness in the results of this study, I am struck with three overarching conclusions.

First, given the complexity of processes associated with implementation of environmental interventions identified, my findings suggest that occupational therapists need to intervene across all components of the physical and social *care spectrum* to implement a complete package of environmental interventions within a LTC facility. That is, it is insufficient to intervene only in a one-to-one interventionist capacity, but rather best practice necessitates that the practitioner implement a wide suite of physical and social environmental interventions that span the *care spectrum*. I'm advocating that environmental interventions within LTC need to expand beyond discrete interventions that fail to go beyond simple physical modifications. Instead, I advocate that LTC practitioners implement multiple physical and social interventions that span *the care spectrum* in such a way that enables them to transform into *ambassadors of care*.

Second, practitioners need to serve as change agents within practice, the gold standard of being *ambassadors of care*, in order to develop an environmental intervention protocol that facilitates large-scale systems change. I conclude that it insufficient to conceptualize

environmental interventions in discrete terms only. Rather, intervening within the environment requires that the LTC practitioner maintain a systems level view of care where both the physical and social elements of the caregiving microsystem are addressed over time that yields direct positive benefits to LTC residents with ADRD.

Finally, occupational therapists need to embrace formal and informal leadership roles to serve as change agents, and expand the scope of therapeutic use of self to conceptualize institutional barriers as targeted environmental intervention areas. In addition, occupational therapists implementing environmental interventions within LTC facilities for people with ADRD need to perceive themselves as part of the environmental intervention itself, capable of addressing large-scale systems change. Collectively, by serving as *ambassadors of care*, practitioners possess the ability to initiate and lead sweeping physical and social environmental interventions to benefit LTC residents with ADRD. It is by serving as powerful drivers of change that LTC residents with ADRD can belong to in an environment that fosters engagement and promotes an elevated quality of life.

CHAPTER FIVE: REFLECTIONS AND MY FUTURE BEST PRACTICE

A key aspect of action-based research is exercising reflexivity throughout the research process in order to assess the evolution of beliefs, assumptions and implications related to how this study will shape my future practice; toward these ends, I employed the voice-centered relational method of data analysis (Brown & Gilligan, 1992). Of that method, I used aspects of the 'reader-response' element of the voice-centered relational method of data analysis to reflect on the research process and study findings. The 'reader response' element refers to a process in which the researcher examines how her background, history, and experiences shape the narrative of study findings, listening for "how she is responding emotionally and intellectually" to participant perspectives (Mauthner & Doucet, 2003, p. 419). This is done by reading the entire research text at least three times and identifying emotions, reactions, and assumptions that correspond to the data and what I wrote. The authors recommend that the researcher create a worksheet in which the text of the study is in one column and specific emotions, thoughts or assumptions related to the text are written in a separate column. Although I did not create a formalized worksheet, I read over my study three times and made notes on a printed version of any emotions, assumptions, and thoughts that arose, paying particular attention to how they evolved over the course of the study. By employing the 'reader-response' method, Mauthner and Doucet (2003) argue that the reader is better able to locate our social, emotional, and intellectual influences, allowing researchers "to retain some grasp over the blurred boundary between the respondent's narrative and our interpretation" (p. 419). Employing this method of reflexivity, I will discuss assumption, beliefs, and values I had at the start and at conclusion of this project, with considerable discussion allotted to the evolution of my beliefs and assumptions, and final discussion related to future best practice.

When I started this journey in pursuit of becoming occupational therapists, I arrived at Colorado State University with a deeply passionate desire to do meaningful research that aimed to improve the health, functioning, and quality of life for individuals. Fresh from changing careers in natural resource management, I yearned to do research that had the greatest potential for providing direct measurable benefits to clients. Thus, I started this project with a deeply held conviction that research needs to demonstrate explicit link to practice. As a result, I immediately gravitated towards Dr. Wood's research as it met all my criteria, providing me with the opportunity to influence practice.

In preliminary meetings, I quickly realized that I knew very little about the topic I had decided to undertake. Panic set it. I had a weak grasp of what a theoretical model of practice was, the prognosis and characteristics of stages of the disease, what a long-term care facility even was, and what exactly occupational therapists do with people with ADRD. In reflecting back, I held the assumption that people with ADRD, at least in the later stages of the disease, lose all capability to engage or express emotion. Further, I held the assumption that people 'sentenced' to living in long-term care facilities would inevitably experience a lower quality of life in comparison to those who had the means and support to stay at home. Further, I held the assumption that working within a long-term care facility would be neither desirable nor challenging. Boy, these assumptions are tough to admit!

Yet, it was participating in the first individual interviews in fall 2013 that my beliefs and assumptions really began to change. This is interesting as even in reading all the literature and proposing my thesis project, concepts still felt detached and somewhat alien to me, even when I initially proposed this study. I understood the elements of the LELQ model, but I couldn't quite understand how it could translate to practice. It was during the individual interview with

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participant SH that my previously held assumptions began to break apart. In that interview she spoke in such eloquent and nuanced terms about how she actively tried to implement large-scale systems change which directly yielded positive impacts for residents. The passion in her voice and the convictions she held about being an advocate really inspired me. Further, it was during her interview that I first got the itch to explore how the LELQ model could facilitate large-scale systems change. Being a right brained thinker who thinks in abstract and holistic terms, for some reason her interview really made sense to me.

During the data analysis process, I struggled with how to make sense of the countless examples of rich description. I wanted to make sense of the data in order to understand the details. This was a difficult concept for me. The assumption that I had was that if I could make sense of the data upfront, by drawing conclusions and defining relationships, then the details and discrete examples would be clearer. Well, this type of thinking is completely opposite of what I needed to do. I had to learn patience, to be comfortable grappling with the data in their rawest form. I struggled with making conclusions too soon as it was the only way I knew how to move forward. With patient guidance from Dr. Wood, she assured us that we needed to avoid making conclusions too early. She greatly helped reduce my anxiety when I felt like I needed or should be 'making sense' of the data. Thus, my thinking has evolved to trust the research process, even if I feel uncomfortable. This was a new concept and although at the time it was hard, I believe this process allowed me to develop inductive reasoning skills in a way that I had never done before.

With a love for deductive reasoning established, suffice to say that I adored the data analysis process when I could make sense of these raw data. It was in spring 2013 that I was able to put all the different components together to create a story of how occupational therapists

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implement and individualize environmental interventions. It was during this stage in the coding

that the significance of the occupational therapist in facilitating environmental interventions

really came forward. This 'aha!' moment really stemmed from the realization that occupational

therapists obtain a deep understanding of who the resident is, beyond compiling basic

occupational profile information. It is through this deep understanding that the magic of

environmental interventions take place. Further it was during this stage that I was struggling with

how environmental interventions are employed by participants. It was pointed out by one of my

team members that I needed to separate the 'how' and 'what' of environmental interventions. It

was during this discussion that the different roles and Figure 5 began to take shape, and all the

cards fell into place, so to speak. It was during this stage of the research process that my beliefs

and assumptions really began to take shape into what they are today.

This research project has changed my beliefs and assumptions dramatically in a way that

will forever impact my future best practice. First, I am struck by the power of the occupational

therapist in being a driver as well as the medium and means to enhance the quality of life for

residents and quality of care within LTC facilities. Prior to this project, I never viewed

occupational therapists as the centerpiece of care capable of being such powerful change agents.

This has dramatically shaped how I view myself as a future best practitioner. I will take it upon

myself to adopt the varied roles in efforts to become on *ambassador of care*. Of those roles,

personal responsibility taker, advocate and paradigm shifter really resonate with me. Stemming

from that point, I will aim to insert social environmental interventions throughout my practice in

order to develop a comprehensive environmental intervention plan. As I enter the workforce, I

will use self-reflection to ensure that I am adopting these roles. This process has also taught me

the valuable lesson of being an advocate for my field. As a result, I will aim to be involved in

state and national discussions related to promoting best care adopting an occupational lens to do so. Further, my future best practice entails acquiring an intimate knowledge of clients. It is my vision that I will be able to tell, with a single look or facial expression, specific needs, desires and preferences of clients as the way to step into their world and individualize care. In closing, this has been an invaluable personal and professional experience that has inevitably shaped how I perceive myself in future practice and the goals and principles that I aim to achieve.

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APPENDIX A: INITIAL INTERVIEW GUIDE

Introduction
Thank you!:
   Thank you for agreeing to be a part of our study. We appreciate your time and look forward to your contribution. During this interview, if you have any questions or need clarification on anything, please do not hesitate to stop me and ask. Before I start the interview, there are just a few items I want to quickly go over.

Overview of Study:
   In this first interview, we are interested in how your experience and expertise translates to your everyday practice.
   We regard you and all other participants as co-researchers in our study. What we mean by co-researcher is that we are not researchers studying you, but rather we are working alongside you towards a shared goal of improving care and quality of life for individuals with dementia.
   Thus, your role in this project is just as, if not more important, than our role. Accordingly, we invite you to participate in submitting a manuscript of the results as an author, if you are interested and willing. Do you have any questions so far about this study?

Logistics of Interview:
   This interview should last approximately 90 minutes. Your answers will be confidential and will only be shared with other members of the research team, except for the 3 group forums where answers will be shared between participants who are co-researchers in the process.
   You may end the interview at any point, and you are not required to answer any question you do not want to. I have a number of questions to ask you, so I may summarize your answer in order to clarify your point. Also, due to time constraints, we may need to move along in the interview in order to ensure that I address all questions. However, please feel free to let me know if you do not want to move on and have more to say because your answers are valuable to our study.

Overview of Interview Questions:
   Before we begin, I want to explain the general structure of the interview. There are 3 main parts. First, I will ask questions your background as a practitioner. Then the questions will be based upon what kind of things you do as a practitioner, specifically in your particular work as an occupational therapist with people with dementia in long-term care. Then I will want you to tell stories, specifically one satisfying story in your experience where everything came together and also one that was not so gratifying. I will ask you clarifying questions throughout the interview. We'll conclude with two brief wrap-up questions.

Background Information

• When did you become certified as an occupational therapist?

• Can you share the areas of practice you have worked in since then?

• Where do you work now? How long have you worked in this capacity?

- What is your role in this work? That is, do you work in direct one-on-one interventions with clients, in program development, management, and/or in your own business?

- How many years of experience do you have working where your caseload or role is predominantly working with people with dementia in long-term care?

- How did you discover you wanted to work with people with dementia, or how did you come to working with people with dementia?

Nature of Work Questions

Thank you, the next session of the interview pertains to your perspectives on the practice of occupational therapy with people with dementia.

- What do you believe it is most important for occupational therapists to assess or evaluate when they are working with people with dementia?
    - Potential Probe: Do you typically focus on an individual or a group of people with dementia?
- What do you believe it is most important for occupational therapists to assess or evaluate related to the social and physical environments in which people with dementia live?
- Describe how you go about your work.
    - System's Level Potential Probes:
        - Who do you typically work with? (Client, family, staff, rehab team etc.)?

        - How do you prioritize what you do?

    Individual Potential Probes:

        - In your experience, what are typical interventions you have found to be effective?

        - What is your thought process behind deciding which interventions are effective?

    - What are you hoping to achieve on behalf of people with dementia?

        - Potential Probes:

            - What are positive outcomes of your practice? (short term and long term)

            - Tell us how you know you've achieved what you've wanted to in your particular role as an occupational therapist?

            - Do you use or recommend any specific outcome measures?

- What do you believe causes or brings about positive outcomes in your practice? Researchers often refer to this as "mechanisms of action." In other words, what drives success in going from point A to point B in terms of positive outcomes? What is the vehicle of change that you find has the greatest influence?

- Potential probe:
  - Of everything that you do, what has the greatest impact?
  - What do you believe most powerfully drives change?
  - Why do you think this has such an impact?

Story Questions

Okay, now we are moving into the story part of the interview.

Tell us a story about a time when, in your particular role, everything came together. In other words, things turned out as good as they possibly can.

- Potential probe: *ask clarifying questions about story, possibly related to each of our domains (i.e. "so it really seems like you focused on training caregivers in that situation; why did you find that important?").*
  - Person-centered care
  - Activity situations – "just-right fit"
  - Environmental press – deadening or enlivening
  - Time-use – occupational engagement/disengagement
  - Retained capacities
  - Emotional wellbeing

Tell us a story about time where it didn't come together.

- Potential probe: *ask clarifying questions about story, possibly related to each of our domains (i.e. "you mention the person you worked with was really distressed, can you expand on the reasons for that distress in your story?").

Wrap-up

If you could give a 30 second sound bite on what you believe is absolutely most important in your work with people with dementia, what would it be?

Is there anything else we haven't covered that you feel is important to tell us about your practice with people who have dementia?

Conclusion

Another Thank You!: Thank you again for taking the time to answer these questions.

Next steps:

This interview will be followed by three focus groups with all other participants and one final individual interview to be scheduled at a later time.

The next step of our study is scheduling a focus group with you and the rest of the participants of the study. What are a few of the best times during the week where you would be available for about an hour and a half to participate in a focus group? Will you have access to a computer at that time? We will send an email with times available for the focus group after we have conducted the remainder of our initial interviews. The email will also contain more information about the focus group session. Please contact us about any questions or concerns before then if needed."

Outline for Focus Group 1

Your Initial Honest Impressions of the LELQ Model

Questions to spur discussion after presentation of the LELQ Model

- Are there ways in which your beliefs about best OT practice in long term care for residents with dementia are reflected in the LELQ Model?
  - If so, what stands out to you as most compelling and/or congruent?
  - If not, where are the greatest discrepancies or areas incongruence?
- What do you see as the LELQ Model's strengths
- What do you see as the LELQ Model's limitations and/or gaps?
- Did you find the LELQ Model reasonably clear and easy to understand?
- Do you think the LELQ Model might be useful to you or other occupational therapists in guiding practice?
  - Why or why not?

Outline for Focus Group 2

Plan for the Second Focus Group

1) Your further thoughts on the LELQ Model
2) Case presentation to further illustrate the model
3) Follow up discussion on areas of confirmation/disconfirmation
4) Ideas for final focus group focused on practice implications

Outline for Focus Group Three

Plan for the Third Focus Group

1) Big picture discussion of the LELQ model's implications for assessment, intervention and outcome measures
2) More detailed discussion based on review of the focus groups
   1) Assessment approaches & measures
   2) Interventions
   3) Outcome measures
3) Supports and barriers to implementation
4) Recommendations for final individual interviews

Final Interview Outline

Plan for the Final Interview

I. Our reflections on what we heard you tell us (member checking):
   I. Areas of confirmation and elaboration of the LELQ Model
II. Your reflections:
   I. Have these discussions of the LELQ Model benefitted or influenced you or your practice and, if so, how?
   II. How do you imagine other occupational therapists might apply the LELQ Model or find it useful?
   III. Your thoughts about future engagement in the project

APPENDIX C: COMPLETE LISTS OF ALL LIVED ENVIORNMENT CODES

Label of Lived Environment Codes/Nodes	Number of References	Definition
LE-CM-Assessments	19	Formal or informal assessments of the caregiving microsystem that identify barriers or supports to the physical or social environment.
LE-CM-Physical	43	Aspects of the caregiving microsystem that relate to physical structures, changes to the physical environment, or how the physical environment contributed to positive or negative outcomes within a long-term care facility. Can relate to assessment, intervention, or outcome of the physical environment.
LE-CM-Social	80	Aspects of the caregiving microsystem in which characteristics, properties, or changes to the social environment lead to positive or negative outcomes for people with dementia. Social microsystems include interactions and qualities of the relationship between the patient, family, therapist, frontline caregivers, other residents, and the facility, or administrators in influencing outcomes of care.
LE-CM-Social_Physical	93	LE-CM-Social and LE-CM-Physical codes combined. Instances where there was duplication, NVivo will not count both examples. As a result, there are fewer references in this section than if you look at social and physical separately.
LE-CM-Physical-Adapt_layout_facility	4	Examples in which the lay-out of patients' room or the facility were modified or built to promote an engaging positive lived environment.
LE-CM-Physical-contrast	3	Add contrast to build environment or tools/objects to promote increased recognition and engagement while also promoting safer mobility and interaction with environment.
LE-CM-Physical-Eliminate_safety_hazards	8	Examples within the caregiving microsystem in which the OT eliminated safety hazards within the physical environment. This could include clutter or access to doors that could lead to exiting behaviors.
LE-CM-Physical-Home	15	Caregiving microsystems in which the goal or purpose is to create an environment that resembles or is reminiscent of the person's prior private home in order to elicit increased engagement in an activity or promote a sense of well-being by reminding the person of familiar objects so that they can feel safe and relaxed. Often discussed in terms of a desired outcome-to make a person's environment 'fit' the person by making it more home-like.
LE-CM-Personal_artificats_familiar	3	Examples in which the OT adds personal objects/artifacts/memorabilia to patient's room to promote recognition and familiarity of space and people.
LE-CM-Physical-Minimize_distraction	3	Examples in which the physical environment is modified or designed to minimize environmental stimuli including reducing auditory, visual, or tactile stimuli that could distract or overwhelm the patient.
LE-CM-Physical-Objects-Visible	16	Examples in which the proximal environment including objects, activities, or external visual aids or signage is modified or created in order to cue or illicit engaged behavior or response in a meaningful activity. Examples could include reducing the amount of items on a food tray, placing toothbrush and comb at edge of sink

LE-CM-Social_familiy_centered	32	Instances in which the practitioner involves the patient's family in gathering occupational profile information or their current preferences and needs, are involved in implementing interventions, or in discharge planning. This can be a positive or negative experience.
LE-CM-Social_Structure-Routine	1	Examples in which the OT provides structure, stability to daily routine in attempt to minimize negative behaviors and promote a positive lived environment for the patient.
LE-CM-Social-Administrative-buy-in	13	Examples in which the OT expresses interest or consideration of how to get administrative buy-in to adopt a particular intervention strategy/treatment plan that has positive outcomes for the patient. Also includes examples of how OTs have obtained administrative buy-in to revise treatment protocols to benefit the health engagement, or quality of life for the patient.
LE-CM-Social-built_trust_treatment_team	27	This refs to instances in which collaboration with other disciplines is a part of the caregiving microsystem. This collaboration can be either positive or negative, but has an impact on the treatment of the individual with dementia.
LE-CM-Social-Cater_message_different_audiences	37	Examples in which the OT changes their verbiage, tone, or approach depending on the audience she is engaging that has ultimate positive outcomes for the patient.
LE-CM-Social-Maximize-social	20	Examples in which the social context of the activity situation is set-up to promote social engagement in order to avoid isolation. This could be daily group activities, encouraging staff to interact with patient.
LE-CM-Social-promote_choice_autonomy	12	Examples in which the lived environment is set-up or modified to promote choice, autonomy, or sense of control over environment. This could include choice in food selection and time/nature of meal times.
LE-CM-staff training_set-up_environment	74	Aspects of transcripts that specifically reference the involvement of staff training in influencing negative or positive aspects of care. Often coded with LE-CM-systems as changes or reference to staff training is a part of systems level caregiving microsystems.
LE-CM-systems	52	Aspects within caregiving microsystems that involves change to the system that impact outcomes of the person with dementia. Involves both positive and negative examples and characteristics of how changes to, or characteristics of the entire caregiving system from the administrators down to the patient, impacted care of the person.
LE-CM-Traditional	33	Environments that operate under a medical-model, regarded as 'traditional' LTC care practice
LE-EP-Alive	63	Lived environment, environmental press, occupationally enlivening, Refers to a short term temporal perspective or snap shot of time that is enlivening. Is more general and/or non-specific than just right fit. Must have elements of both the caregiving microsystem and PWD in transaction leading to a positive environmental press and/or positive quality of life domains.
LE-EP-Alive-just right fit	106	The optimal transactional relationship between the daily activity situation and the occupational history and profile of the PWD. Implies maximum overlap between the person with dementia and caregiving microsystem domains of the lived environment.
LE-EP-Dead	41	Refers to a short term temporal perspective or snap shot of time that is deadening. Must have elements of both the caregiving microsystem and PWD in transaction leading to a negative environmental press and/or negative quality of life domains.
LE-EP-Dead-not right fit	33	Minimal to no overlap between the caregiving microsystem and person with dementia domains of the lived environment.

LE-EP-Practitioner's Perspectives	64	Passage reflects practitioner's rationale, understanding of and/or concern related to considerations of environmental press. Can be implicit or explicit, and is more general and abstract in nature.
LELQ_Visual_representation	10	Relates to instances in which participants make a comment negative or positive related to the visual representation of concepts as it relates to the model.
LELQ-Confirmation of model domains or concepts	44	Code relates to instances in which participants confirm that the LELQ model makes sense and applies to their own practice.
LELQ-Disconfirmation-Possible recommendations to LELQ Model	24	Code relates to instances in which participants disconfirm that the LELQ model makes sense or applies to their own practice.
LE-PWD-Assessments	8	Assessments that correlate to elements of the person with dementia, including occupational profile, preferences and needs, and retained capacities.
LE-PWD-Occupational history and profile	43	Instances in which participants gathered information relevant to creating an occupational profile for residents.
LE-PWD-preferences-needs	65	Instances in which participants considered or gathered information related to resident preferences and needs to best cater care.
LE-PWD-RC-assessments	73	Assessments related to capacities a person with dementia still has
LE-PWD-transaction	20	Transaction between all elements of understanding who the person is in order to inform evaluation and treatment. The 'Gold Standard' of assessing PWD.
LE-PWD-whole person or relationship to OT	14	When a therapist knows the person so well, the OT doesn't speak in terms of who they were in the past, their preferences and needs or their capacities, they achieve a holistic sense of knowing the person as they are. Thus, this node is characterized when the therapist speaks of the person with dementia as a whole person,
LE-Role_OT_personal_responsibility	36	Instances in which the OT takes personal responsibility in the care of the person with dementia in order to elevate quality of life and ultimately of residents
LE-Role-Advocate	12	Role of OT is an advocate for the patient in order to elevate quality of care and/or quality of life of resident. Advocacy could be speaking on behalf of patient to change quality of care.
LE-Role-Collaboration	18	OT's role is collaborative in nature in order to improve care of person with dementia. This could involve collaboration with family, treatment team, administration.
LE-Role-consultation	21	The role of OT is in a consultation capacity in order to elevate quality of care and/or quality of life of resident. This is different than education as this role deals with providing specific recommendations to improve the care of the patient.
LE-Role-education	36	The OT plays a role in education in many capacities in order to elevate quality of care and/or quality of life of resident. This could be education of staff, family, students, other disciplines, or administrators.
LE-Role-One-to-One	26	Examples in which the role of the OT is direct one to one intervention with the patient through direct manipulation of the environment.
LE-Role-Paradigm_Shift	18	Instances in which the OT seeks to change the paradigm of care, working to implement changes at the systems level within the caregiving microsystem.
LE-Transformation	17	An outcome that has transformed the culture of care including staff relationships with PWD.

APPENDIX D: SUMMARY OF RESULTS AND IMPLICATIONS FOR THE LELQ MODEL

Research Question 1: What is the nature of physical environmental interventions used by expert occupational therapy practitioners in long-term care facilities?	
Findings	*Implications for the Model*
The physical environmental interventions identified by participants include: setting up the proximal environment to promote engagement, minimizing safety hazards, promote "homelike" qualities of caregiving microsystem, and design or adapt the layout of the facility. Unique to all physical environmental interventions was that participants aimed to inherently promote engagement. Physical environmental interventions identified span the physical aspects of *the care spectrum* ranging from the patient's room to the facility. Further, practitioner adopted seven different roles when implementing physical environmental interventions, with one-to-one interventionist as the most common. Further, findings suggest that multiple roles are required in order to best maximize the efficacy of physical environmental interventions.	These findings suggest that physical environmental interventions are important to promote a positive lived environment that facilitates an enlivening environmental press. Further findings confirm that an engaging environment facilitates an optimistic caregiving culture, a key mechanism of change of the LELQ model. Findings suggest that the role of the practitioner needs to be addressed and elaborated upon in the LELQ model. Further, findings suggest that multiple roles are required in order to best maximize the efficacy of physical environmental interventions.
Research Question 2: How do the expert occupational therapists individualize environmental (physical and social) interventions to meet the needs and wants of residents diagnosed with ADRD in long-term care facilities?	
Findings	*Implications for the Model*
The social environmental interventions identified by participants include: catering message to different audiences to elevate expectations of care, obtaining administrative buy-in, reducing task oriented mindset of frontline caregivers by promoting an occupation-centric worldview, maximizing opportunity for social engagement, building trust and rapport with treatment teams, being family-centered, and promoting choice and autonomy throughout the day. Social environmental interventions identified span social aspects of the care spectrum ranging from	Findings suggest that social environmental interventions influenced change at the systems level, in attempt to positively influence the caregiving culture. Findings confirm the LELQ's premise that an optimistic caregiving culture within a caregiving microsystem is required in order to best maximize engagement of residents with ADRD. Potential elaborations to the LELQ model potentially needs to make explicit the importance of implementing social environmental interventions that span the care

administrators to treatment staff, and family. Further, practitioners adopted seven different roles when implementing social environmental interventions, adopting multiple roles.	spectrum in order to promote an optimistic caregiving culture. Findings suggest that the role of the practitioner needs to be addressed and elaborated upon in the LELQ model. Further, findings suggest that multiple roles are required in order to best maximize the efficacy of physical environmental interventions.
Research Question 3: What, if any, are key best practice recommendations from expert occupational therapists to modify the LELQ model to better support a positive lived environment?	
Findings Findings suggest that practitioners individualize environmental interventions by stepping into the resident's world. That is, practitioners develop a deep and profound sense of empathy and knowing of who the resident is to cater environmental interventions to meet the specific needs of each resident.	*Implications for the Model* Findings confirm the "just right fit" mechanism to support an enlivening environmental press. Findings parallel the model's assumption that a positive environmental press is facilitated by creating a "just right fit" between the caregiving microsystem and person with dementia domains. In sum, stepping into the resident's world parallels the person with dementia domain and environmental interventions parallel the caregiving microsystem.
Research Question 4: What, if any, are key best practice recommendations from expert occupational therapists to modify the LELQ model to better support a positive lived environment?	
Findings Findings confirm the importance of an optimistic caregiving culture within a caregiving microsystem to facilitate a positive emergent environmental press. Findings suggest the significance of multiple roles practitioners adopt when implementing environmental interventions.	*Implications for the Model* These findings suggest that an optimistic caregiving culture is required to promote a positive lived environment. Potential language needs to be built in subsequent elaborations of the model to make this distinction clear. These findings support the inclusion or further elaboration on the role of the occupational therapist in implementing environmental interventions within the caregiving microsystem.