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STAFF PRECEPTIONS OF QUALITY INTERACTIONS IN DEMENTIA CARE

by

Rebecka A. Schultz

A thesis submitted in partial fulfillment  
of the requirements for the degree

of

MASTER OF SCIENCE

in

Human Development and Family Studies

Approved:

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Elizabeth B. Fauth, Ph.D.  
Major Professor

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Travis E. Dorsch, Ph.D.  
Committee Member

---

Josh R. Novak, Ph.D.  
Committee Member

---

Richard S. Inouye, Ph.D.  
Vice Provost for Graduate Studies

UTAH STATE UNIVERSITY  
Logan, Utah

2019

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## ABSTRACT

## Staff Perceptions of Quality Interactions in Dementia Care

by

Rebecka A. Schultz, Master of Science

Utah State University, 2019

Major Professor: Dr. Elizabeth B. Fauth  
Department: Human Development and Family Studies

The number of people with dementia world-wide is steadily growing. Due to the burden of caring for a person with dementia, caregivers of persons with this degenerative neurocognitive disorder may place their loved on in residential care. In these residential memory care settings, Certified Nursing Assistants (CNAs) have the greatest opportunity for fulfilling the psychological and social needs of those for whom they care. However, recent research indicates that a majority of residents' days are spent with little to no social interactions. This is troubling due to the fact that psychological and social well-being has been tied to having a higher quality of life. The goal is that by finding out what makes an interaction between staff and residents with dementia of high or low quality, future researchers can develop better training material for CNAs to educate them on the importance and "how to" of high-quality interactions.

In the present study researchers took a phenomenological hermeneutic approach to create an understanding of how CNAs perceive interactions with residents with dementia.

Researchers interviewed 11 participants (1 male, 10 females; 1 Hispanic or Latino, 11 White; ages ranging from 18-41 years) who work as CNAs with persons with dementia. They were asked what verbal and nonverbal behaviors they considered to be valuable in facilitating high-quality interactions. Upon analysis of participants' responses, very few observable verbal and nonverbal behaviors were actually discussed. What was more apparent was that attitudes and internal behaviors participants considered important drove the use of good verbal and nonverbal communication. Five themes were uncovered. They were: Observable Verbal and Nonverbal Behaviors, Valuing Personhood, Get on Their [Cognitive and Reality] Level, Be a Friend, and Compassion.

(81 pages)

## PUBLIC ABSTRACT

## Staff Perceptions of Quality Interactions in Dementia Care

Rebecka A. Schultz

The national aging trend suggests that population of those aged 65 and older will reach 83.7 million by the year 2050. With increasing age comes the growing possibility of one getting some form of dementia. The Alzheimer's Association expects the number of American's with dementia to triple from the reported 5 million cases in 2014 by 2050. With a rise in this cognitively impaired population there is reason to look closely at the needs of persons with dementia living in residential facilities and whether or not they are being met. The main focus of residential facilities is to provide aid with physical needs. However, research shows that all people also have social and psychological needs that need to be met to have the highest quality of life possible. Other research shows that residents with dementia spend a majority of their days with little to no social interactions. This study aims to uncover what verbal and nonverbal behaviors, if any, Certified Nursing Assistants (CNAs) in residential care facilities find to be important when interacting with persons with dementia.

This study includes the analysis of 11 interviews of CNAs from local facilities and home health companies. Analysis of their responses uncovered very few observable verbal and nonverbal behaviors were actually discussed. What was more apparent was that attitudes and internal behaviors participants considered important drove the use of good verbal and nonverbal communication. Five themes were uncovered. They were: Observable Verbal and Nonverbal Behaviors, Valuing Personhood, Get on Their

[Cognitive and Reality] Level, Be a Friend, and Compassion. Excerpts from the interviews are included for examples of how these themes presented themselves.

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Rebecka A. Schultz



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## CHAPTER I

### INTRODUCTION

There is a national and global trend of an increasing number and proportion of the population aged 65+ (Ortman, Velkoff, & Hogan, 2014; US National Institute on Aging, 2011). These increases are attributed to two main factors; the first is the advances in medical care and treatments that extend average life expectancy (Salsman et al., 2013), and the second is the aging of the Baby Boomer generation (those born between 1946 and 1964) – a larger than normal birth cohort that is now 65 and over. As of 2011, Japan was leading the world in average life expectancy, at 83 years, and it is expected that this number will continue to increase (US National Institute on Aging, 2011). This aging of the population is cause for concern, due to the fact that advanced age is the greatest risk factor for dementia, such as Alzheimer's disease (Alzheimer's Association, 2015).

Although the pathology of various kinds of dementia differ greatly, the symptoms and outcomes are very similar. Dementia is a neurocognitive condition that affects one's executive function, ability to learn and retain memories, language skills, and social cognition, among other cognitive functions (American Psychological Association, 2013). There are multiple kinds of dementia. They include dementia with Lewey bodies (DLB), vascular dementia, Parkinson's disease dementia, Creutzfeldt-Jakob disease, Frontotemporal lobar degeneration (FTLD), normal pressure hydrocephalus, mixed dementia, and Alzheimer's disease, with the latter accounting for 60-80% of dementia cases (Alzheimer's Association, 2015).

There is, at present, no cure for any form of dementia. Persons with dementia can be prescribed medication to help with some of their symptoms, such as psychosis or agitation, but no medication, to date, prevents, slows, or stops the underlying neurodegenerative processes. The rate of progression of dementia differs on a case by case basis and also depends on the cause of dementia. Those specifically with Alzheimer's typically live between four to eight years after diagnosis, but some may live as long as twenty years after diagnosis (Alzheimer's Association, 2018). Without a cure, the next best option for people facing dementia is providing assistance with their physical and emotional needs to help them maintain the highest possible quality of life until their end of life.

Due to the complications of caring for someone with advanced cognitive decline, along with managing other age-related conditions, persons with dementia are sometimes institutionalized. In a study conducted by Caffrey, Harris-Kojetin, Rome, and Sengupta (2012), almost half of residents in a residential care facility were officially diagnosed with Alzheimer's or another form of dementia. A majority of the care given to persons with dementia in residential facilities is given by direct care providers, typically certified nursing assistants (CNAs; Willemse et al., 2015). A survey conducted by the Alzheimer's Association (2015) reported that CNAs received around 75 hours of total training for their position, and very little of this time was spent on dementia-specific care. The main focus of CNA training is to teach individuals to provide and care for clients' medical and physical needs. While this role is necessary, little priority is given to training CNAs on the emotional and social needs of the residents. Research has shown that persons with dementia that have closer personal relationships (and therefore high-

quality interactions) with their family caregivers show slower cognitive decline and also exhibit fewer behavioral problems (Norton et al., 2009). While this finding has not been replicated with paid caregivers, the findings suggest that care-related social and emotional support may be extremely important for the care receiver.

Because CNAs and other direct care providers in nursing homes and assisted living facilities provide most of the hands-on care for residents, they also have the most opportunity for interactions with residents. That said, most social interactions between staff and residents in residential dementia care are very brief (Machiels, Metzelthin, Hamers, & Zwakhalen, 2017) and fairly infrequent. Ward, Vass Aggarwal, Garfield, and Cybyk (2008) found that residents spend most of their days without social interaction. More than 80% of the time the residents are *not engaged* in an activity or interaction, they maintain a neutral affect, however, in more than 90% of their time spent *actively* engaged they displayed positive affect (Beerens et al., 2018). This comparison suggests that despite difficulty in communication, persons with dementia benefit from interactions and engaging activities.

Ultimately, a goal in increasing quality of life for persons with dementia in residential care will involve increasing the frequency and quality with which they interact with staff, yet these kinds of interventions will require understanding exactly what a quality staff/resident interaction looks like. Existing measures of “interaction quality” are available in the social sciences, but inadequate for this task for various reasons. Many were created for the purpose of assessing quality interactions between parents or teacher and children (Gibson-Davis & Gassman-Pines, 2010; Perlman et al., 2016). Due to the fact that a child is developing cognitively and a person with dementia is experiencing

cognitive decline, these measures are not appropriate for capturing the quality of staff-resident interactions. Other interaction measures focus on the doctor-patient dyad (Gorawara-Bhat, Cook, & Sachs, 2007), which is also inadequate for assessing observations between CNAs and persons with dementia. Physician-patient interactions serve a different purpose (exchange of topic-specific information), and both persons in the interaction are cognitively intact.

One measure used in dementia care titled the Quality Interaction Schedule (QUIS) assesses quality interactions between staff and residents with dementia (Dean, Proudfoot, & Lindesay, 1993), but it does not specify what actions make an interaction of high or low quality. This measure simply asks “Was it a positive, negative, or neutral interaction?” Ultimately to assess whether an intervention can improve quality of interactions, one needs increments of higher vs lower quality, rather than categorical positive, neutral, and negative assignments. According to this measure, there is no distinction between a high-quality positive interaction and a positive interaction that is of lower quality.

In sum, in order to assess the quality of interactions between staff and persons with dementia, it is necessary for there to be a measure that is specific to dementia care, and one that rates interactions as higher to lower quality on some kind of incremental scale. Before researchers or clinicians are ready to tackle creating such an assessment, however, what constitutes a quality interaction needs to be defined. Specific behaviors from staff need to be identified as higher or lower quality. I suggest that a good place to start is to ask the CNAs, themselves, to articulate what they think makes for higher or lower interactions. This is simply due to the fact that CNAs have the most one-on-one

interaction opportunity with residents. It is easy to infer that residents need to have positive interactions with them regularly so the social aspect of their quality of life may be met. Ergo, the purpose of the present study is to discover what current CNAs consider to be important components and specific verbal and non-verbal behaviors, of a quality interaction with persons with dementia.

## CHAPTER II

### LITERATURE REVIEW

#### **An Aging Population**

In 2012 there were an estimated 43.1 million persons over the age 65 in the United States, however by the year 2050, the numbers are expected to nearly double and reach 83.7 million (Orton, Vlekoff, & Hogan, 2014). Population aging is not specific to the United States; worldwide we are seeing similar trends (Tom et al., 2015). Contributors to this increase in the older population include a longer life expectancy – which is a result of modern medicine/medical technology – and the aging Baby Boomers, which was a larger than normal birth cohort that has now reached old age (US National Institute on Aging, 2011). One of the important consequences of this population trend is the increase in incidence of dementia, as older age is a risk factor for developing Alzheimer's disease and other dementias (Tom et al., 2015). In 2014 there were an estimated 5.2 million Americans living with Alzheimer's disease, 5 million being over age 65. By the year 2050, it is expected that the number of persons over 65 living with dementia will triple (Alzheimer's Association, 2014).

#### **Dementia and Alzheimer's Disease**

Dementia is a term for different neurocognitive disorders that result in significant and progressive decreases in cognitive functioning (American Psychiatric Association, 2013). Progression is slow and symptoms start with difficulties in completing more complex tasks - such as managing medications, as well as short-term memory problems, language difficulties, and disorientation to time and place. As the underlying disease

progresses, one's ability to recognize loved ones, and to perform simple tasks – like dressing or bathing independently – are also severely impaired (Alzheimer's Association, 2014). There are multiple types of dementia including Alzheimer's disease, Lewy bodies dementia, and vascular dementia (Alzheimer's Association, 2014), however Alzheimer's disease makes up an estimated 80% of all dementia cases (American Psychiatric Association, 2013).

### **Quality of Life for Persons with Dementia**

Quality of life is the multidimensional perception of one's life covering social, psychological, and physical aspects of overall well-being (Brod, Stewart, Sands, & Walton, 1999). Subdomains of this construct include physical health, values, life expectations, goals, and maintaining an individual's culture (Buckley et al., 2012). Quality of life is relevant to all lives whether an individual is cognitively impaired or not. Persons with dementia have the same requirements for a high quality of life as non-demented individuals. People in early or moderate stages of dementia are capable of determining and self-reporting their own quality of life (Brod et al., 1999). However, for adults who cannot communicate verbally – such as those in the later stages of dementia – objective measures such should be used to evaluate quality of life.

### **Social Aspects of Quality of Life**

According to Maslow's hierarchy of needs (Maslow, 1970), once a person's physical needs are met (i.e., food and drink, shelter, safety, and security) he or she is able to focus on satisfying psychological needs (Scholzel-Dornbos, Meeuwssen, & Rikkert, 2010). It is natural for humans to seek out affection, but this does not need to be satisfied



with romantic love (Taormina & Gao, 2013); rather these needs can be met with various forms of interpersonal relationships (Scholzel-Dornbos et al., 2010). These assumptions pertain to persons with dementia, as well as other populations. It is a logical assumption that when these psychological needs are met there are less instances of problem behaviors. In a study conducted by Hoogendijk and colleagues (2014), cognitively stable, frail, older adults in residential settings reported on their met and unmet needs. They claimed that their unmet needs were mainly psychosocial. Likely, this is similar for persons with dementia. Research has shown that when a caregiver and person with dementia have closer perceived relationships – or psychological needs that are being fulfilled – the person with dementia adjusts to institutionalization better later on; when there is a poor perceived relationship, persons with dementia showed more behavioral problems (Norton et al., 2009). Also, those with closer relationships with their caregivers experienced cognitive decline at a slower rate than those with less close relationships. This study was designed to focus on the relationships primarily between family caregivers and persons with dementia, it demonstrates the effects of having positive relationships and, consequently, high quality interactions with those who care for them on a regular basis.

In a long-term care facility, the direct care provider staff have the most individual contact with the residents (Willemse et al., 2015). Direct care providers in these facilities are, by definition, hired to care for the physical and medical needs of residents. They help them with activities of daily living (ADLs) such as getting dressed, moving from one place to another, using the bathroom, and so on. All of these tasks involve verbal and non-verbal interaction between staff and resident; however the typical two-way

interaction process is impacted by dementia. Communication involving persons with dementia is challenging due to the combination of cognitive decline in both processing and logic, as well as in verbal communication skills (Machiels et al., 2017). However, when language is limited, it is still possible for persons to communicate, though not in the same manner as one who has no communicative impairment. A qualitative study identified that some residents express needs through variations in their tone of voice even though their vocabulary is limited to only a few words (Ward et al., 2008); others display aggressive behaviors when their psychological and social needs are not being satisfied (Nicholls, Chang, Johnson, & Edenborough, 2013). Some may adapt their communication to primarily nonverbal methods (Ellis & Astel, 2017).

Because of communicative limitations in persons with dementia, interactions between staff and persons with dementia are reported as brief and occur primarily during daily care routines (Machiels et al., 2017). Residents with dementia in long-term care facilities spend most of their days with little to no interactions (Ward et al., 2008). In fact, on any given day persons with dementia in residential care are in direct communication with others for an average of 10% of the day, and only 2.5 % of the day is spent in direct contact with their direct care providers. Both positive and negative verbal interactions appear to be uncommon in residential care settings; neutral interactions seem to be the most prevalent.

These findings are problematic given that high levels of positive social engagement are also associated with well-being and a higher quality of life (Hajek et al., 2017; Kolanowski, Bossen, Hill, Guzman-Velez, & Litaker, 2012). To maintain quality of life, we know that residents require attention, belonging, and human touch. According

to a study conducted by Beerens et al. (2018), persons with dementia who were not actively engaged in an activity or interaction expressed neutral affect – which is neither positive nor negative expression of emotion - 82.6% of the time. In contrast, when actively engaged, those same persons showed positive affect 96% of the time. Although language and communicating with others may be impaired, there is evidence that those with late-stage dementia still possess sensory and perceptual awareness, even after the loss of language ability (Clare, 2010). In other words, despite language impairment, persons with dementia are aware of others, and likely are aware when they are not having their social needs met. Meeting these needs for persons with dementia will help improve their quality of life. According to the findings from Norton and colleagues (2009), it would be fair to assume that having social needs met also decreases the instances of problematic behaviors for persons with dementia. When psychological needs are met, there is the possibility that CNAs' required duties will become easier to complete.

### **Existing Quality Communication and Interaction Measures**

The existing literature provides evidence that high quality, positive, social interactions between direct care providers and residents with dementia, even those residents with limited verbal and cognitive capacity, are essential in maintaining positive affect and overall quality of life.. Therefore, it is important to identify what makes a high-quality staff interaction in this context.

**Measuring verbal communication.** Communication includes both verbal and non-verbal behaviors. Verbal interactions have been studied within medical care settings most commonly via the Roter's Interaction Analysis System (RIAS). This assessment

technique evaluates verbal communication between physicians and patients (Roter & Larson, 2002). Interactions are recorded and verbal utterances are coded and classified as a specific type of statement (e.g. data gathering, rapport building, and procedural talk). The RIAS has been used in wide variety of patient-physician settings including oncology (Ong et al., 1998), obstetrics (Washington Cole & Roter, 2016), and pediatrics (October, Dizon, & Roter, 2018). An adapted version of the RIAS has been used to categorize interactions as either instrumental communication or social communication (Caris-Verhallen et al., 1999). While this measure captures the context or type of interactions observed, it does not address the quality of the interactions. Dean and colleagues (1993) developed the Quality of Interactions Schedule (QUIS) to study social interactions in older adult residential settings. Interactions are observed and coded to fit into one of five different categories which are: positive social (PS), positive care (PC), neutral (Ne) negative protective (NP), and negative restrictive (NR). While this measure addresses quality (and does so outside of the physician/patient interaction), it does so by asking “Was the interaction a good one?” and does not give examples or specific behaviors that make up higher quality vs. lower quality interactions. Making eye contact with no facial expression that lasts less than a second is considered “Positive Social” according to the QUIS. However, so is a two-minute interaction with a smile, calling the resident by name, and patting them on the shoulder. Clearly there is difference in the quality of these interactions, but according to the QUIS they would both be labeled as “Positive Social”. This is not a clear indicator of the quality of the interaction since there can be varying degrees of positive interaction.

**Measuring nonverbal communication.** Communication is more than exchanging verbal utterances. A majority of the information people share with others is given through non-verbal communication such as facial expression, eye contact, tone, movement, and physical touch (Kozłowska & Doboszynska, 2012). In fact, nonverbal behaviors are perceived as more important to patient satisfaction than interactions dominated by verbal delivery (Timmerman, Uhrenfeldt, & Birklund, 2016; Dijkstra, Albada, Cronauer, Ausems, & van Dulmen, 2013).

Many studies of nonverbal communication and dementia examine nonverbal cues used by a person with dementia when his or her verbal communication is impaired (e.g., Ellis & Astell, 2017; Nygaard, 2010; Kuehlmeier, Schuler, Kolb, Borasio, & Jox, 2015). However, little research attention has been given to the non-verbal communication of direct care providers in their interactions with persons with dementia.

When identifying quality, some nonverbal behaviors worth investigating include direction of eye gaze, affirmative nodding of the head, smiling, body positioning (Dijkstra et al., 2013) and affective and instrumental touching (Caris-Verhallen, Kerkstra, & Bensing, 1999). Affective touch includes physical contact that is not required for the completion of caregiving tasks, such as holding a resident's hand for comfort. Instrumental touch involves contact that is necessary for a caregiving task such as transferring a resident from their wheelchair to the bed.

In settings outside of dementia-care, the quality of non-verbal interactions has largely been studied in the context of parenting. Grelsky-Uchtmas (2015) used an observational measure to evaluate parental responses to a child's incongruent communication (i.e., displaying negative nonverbal cues with positive verbal cues).

Parents and children were each given an Etch-A-Sketch, each was assigned to one knob, and were instructed to play together. The first ten minutes of the interaction were recorded. The issue with using such an approach is that this interaction is staged and likely does not occur in everyday life. Also, the later stages of dementia can leave one with the inability to say more than a couple of words. It would be inappropriate to use a measure that judged the quality of an interaction based on the person with dementia's lack of ability to communicate.

Another measure used for the assessment of nonverbal communication is the Parental Embodied Mentalizing (PEM) used to evaluate the ability of a parent to understand the needs of his/her child (Shai & Belsky, 2017). This measure uses the parent-child dyad as the unit of analysis and assesses the internal nonverbal behaviors of the parents based on what the parents say to their child or about their child while being interviewed. The three main areas assessed by the PEM include: parental reflection functioning, insightfulness, and mind-mindedness. Parental reflective functioning includes parents' ability to anticipate and predict their own and their child's mental status. Insightfulness looks at the parent's capacity to acknowledge possible reasons for the child's behavior and understanding the child's perspective. Mind-mindedness measures parents' ability to see their child as an individual with feelings and concerns "rather than an entity with physical needs that must be met" (Shai & Belsky, 2017, p. 192). While this approach is appropriate for parent-child dyads, the approach could be readily adapted to the staff-resident with dementia dyad. For such a scale to successfully measure the quality of staff-resident interactions, staff members would need to know about the person with dementia's background and history, their likes and dislikes, among

other things. in order to effectively predict behaviors and understand the underlying reasons for certain behaviors.

**Measuring quality interactions.** There are also multiple measures available to assess the quality of an interaction overall; not just the verbal or non-verbal components, however these, too, are not in the context of dementia care. That said, some of the components included in these measures might be adapted for use in a dementia care setting. One such measure which examines teacher-student dyads is the Classroom Assessment Scoring System (CLASS; Perlman et al., 2016). This instrument consists of three domains: Emotional Support, Classroom Organization, and Instructional Support. These three domains – each with their own dimensions – have been found to be a valid and reliable measure for assessing the quality of interactions between teachers and students (Cadima, Leal, & Burchinal, 2010). There are multiple versions of the CLASS assessment, each more applicable to various ages of students (Virtanen et al., 2018).

The Emotional Support domain includes scores for Negative Climate, Positive Climate, Teacher Sensitivity, and Regard for Student Perspective (Perlman et al., 2016), all of which might be adapted to fit the context of staff-resident interactions. However, instructional-focused domains of Classroom Organization (including Instructional Learning Formats) and Instructional Support (including Concept Development) are not adaptable to dementia care and the day-to-day lives of residents.

Other measures assess the quality of interactions between parents and their children. Gibson-Davis and Gassman-Pines (2010), used the Two Bag Task to assess the quality of mother-child interactions. In videotaped interactions mothers were instructed to play with the items in two separate bags with their child; first the book, then the Play-Doh and

cookie cutters. Mothers were then scored based on their ability to engage the child, negative regard expressed toward the child, intrusiveness, parental stimulation of cognitive development, and negativity expressed by the child towards his/her mother. Similarly, the Mutually Responsive Orientation scale (MRO) assesses a parent's communication, cooperation, and emotional ambiance during an observed interaction (Briener, Jarry-Boileau, & Lacharité, 2014). While aspects of both approaches offer insight into determining quality interactions outside of the parent-child context, both measures also include aspects related to promoting cognitive development and learning. This is not appropriate for persons with neurodegenerative diseases due to the cognitive decline associated with these diseases.

In yet another type of dyad, Galliher, Welsh, Rostosky, and Kawaguchi (2004) conducted a qualitative study analyzing the interaction and relationship quality of romantic couples in late adolescence. Couples were given a prompt to encourage a discussion while being videotaped for 15 minutes. Participants then watched the recording of themselves and rated their own behavior and their partner's behaviors. Behaviors were rated on a 5-point Likert scale and included supportive, conflictual, humorous, and frustrated. Again, while these four behaviors may be important to note in staff/resident interactions, the approach would be ineffective between staff and persons with dementia. This version of a self-report measure is dependent on a long conversation and participant reciprocity which is not often present in a staff-resident relationship due to cognitive decline.

Rather than look at social interactions from a between-persons perspective, Bernstein, Zawadzki, Juth, Benfield, and Smyth (2018) decided to look at the benefits of



quality interactions from a within-persons perspective. This was accomplished by giving participants a small device that prompted them to record how social interactions – positive or negative – affect them throughout the day. This would be difficult for a person with dementia to do. They may not remember having interactions, how to use the device, or adequately record their response. Also, the participants in this study recorded how they felt after an interaction, not what was good or bad about the interaction itself. In many cases, there is a lack of exchange in an interaction with a staff member and a person with dementia and this could make it difficult for staff to rate how the interaction made them feel or how it affected their day.

Backenstrass and colleagues (2007) used the German measure the Kategoriensystem für Partnerschaftliche Interaktion (KPI; “Coding System for Marital/Family Interaction”) to evaluate the quality of interactions between married couples where one member of the partnership is experiencing depression. Participants are video recorded for 15 minutes while they engage in a problem-solving interaction. Observers then code verbal and nonverbal behaviors as positive, negative, or neutral. Positive verbal behaviors include but are not limited to: self-disclosure, suggesting a positive solution, and agreement. Neutral verbal behaviors were actions such as reiterating the problem without offering a solution. Negative verbal behaviors include criticism, suggesting a negative solution, and disagreement. Nonverbal behaviors – positive, negative, and neutral – were first determined by facial expression of the speaker. If their face was not visible to observers, they relied on tone of voice, and then other body cues. This measure is used to assess a problem-solving situation and is intended for a more intimate dyad. Despite the fact that reciprocity found in such a relationship is far

less common in a staff-resident dyad, yet aspects of this scale could be borrowed and adapted for dyads outside of the married couple.

Although it is clear that none of the scales above could be used in the same manner they are for assessing staff interactions with persons with dementia, each measure has indicators of quality interactions that may be applicable in dementia care situations. The trouble is adapting most of these scales to better fit dementia care. Despite the fact that many of their observational approaches do not translate well to persons with dementia, I identified some approaches that may be effective.

The Nonverbal Dimensions in Doctor-Elderly Patient Transaction (NDEPT; Gorawara-Bhat et al., 2007) more closely captures the desired dynamic than the previously mentioned measures. Consultations between physicians and older patients are recorded and nonverbal cues are defined as either kinesic (stance, eye-gaze, gestures, etc.) or dynamic (position of furniture, distance between physician and patient, etc.). NDEPT would have to be expanded to evaluate everyday interactions for persons with dementia, and not just conversations about medical care, however the approach is likely appropriate for our context. Similarly, the setting of the study conducted by Caris-Verhallen and colleagues (1999) using the adapted version of the RIAS also closely resembles the setting in which staff and persons with dementia interact. In this approach dyads are videotaped and coders document the duration of each type of nonverbal behavior (eye gaze, nodding, forward leaning, affective touch, and instrumental touch) in the first ten minutes. The issue with this approach is that interactions between staff and residents are often brief. If observing and coding for a full ten minutes and the actual

interaction is complete in two minutes, the frequency of these components would be low even if the interaction was of very high quality.

## **Summary**

After examining various existing measures, I did not identify a single approach that could be used in its current form, or with small adaptations, for assessing the quality of interactions between staff and persons with dementia in residential care facilities. There were, therefore, two possible approaches to take moving forward. The first was to extract components of existing scales that might be compatible with dementia care. The second was to build an entirely new measure. In both approaches, the decision for what to include as high or low quality would be “top down”, relying on the research expertise of myself and others. Instead, for the current study, I decided to take a step back even further and find out what CNAs consider to be components of a quality interaction. For there to be any degree of validity to a new or highly adapted existing measure, the persons being observed – namely staff – should also recognize that what researchers determine as high quality and what is indeed reasonable in dementia care. By taking a “bottom up” approach, staff input can be at the base of the measure. Because CNAs have the most opportunity for one-on-one interactions with residents, it is not far-reaching to assume that residents with dementia need to experience high-quality interactions with CNAs so not to jeopardize the social aspect of their quality of life. Therefore, the goal of this study was to establish what is included in a quality staff-resident interaction by collaborating with local CNAs. Doing so held the potential to lay a foundation for future work to design and assess an appropriate scale.

## **Research Questions**

Using a qualitative approach, my research questions were:

1. What particular verbal behaviors (if any) do staff consider necessary in quality interactions with residents with dementia?
2. What nonverbal behaviors (if any) do staff consider necessary in quality interactions with residents with dementia?

## CHAPTER III

### METHODS

#### **Data Collection**

The present study took a hermeneutic phenomenological approach. This purpose of choosing this approach is to understand what direct care providers consider to be a high- and low-quality interactions with persons with dementia, considering both verbal and non-verbal behaviors.

Often in the hermeneutical approach, researchers explain their own personal history. Explaining my history regarding staff-resident interactions allowed me to be reflective and, therefore, be more aware of my own potential biases. I worked as a recreational therapy aide for just over a year. In that time, I informally observed staff interacting with residents at varying levels of quality. Some things I perceived to be of importance for high-quality interactions include: being at the level of the resident, eye contact, smiling, appropriate touch such as a hand on their shoulder or holding their hand in comfort, and words of affirmation or encouragement. Whether or not these things were of importance to participants was, of course, unknown. However, by being aware of how I value these aspects of interactions, I have been better able to set aside personal bias and avoid swaying participants to give me similar answers. That being said, the interviews were sometimes more of a discussion instead of a formal interviewer-interviewee situation. In this format it is possible that my acknowledgement and affirmation of their experiences means that my personal views and experiences are not independent of these interviewee responses.

## **Recruitment and Sampling**

A purposive sample of direct care providers was selected. There are some requirements that participants met in order to be eligible to take part in this study. The first is that participants were at the time of recruitment working as a CNA. Second, they were actively working with persons with dementia in a residential facility. Third, they had to work hours between 6 am and 6 pm because CNAs who work the night shift will not have the same opportunity for interactions with residents as those who work during the day when residents are awake. Fourth, CNAs had to be fluent in English. This is a requirement so that English-speaking researchers could gather information and conduct coding analysis. All participants met these requirements except for two. One participant is currently working as a CNA for home healthcare and hospice rather than a residential facility. She did have previous experience as a CNA in such a facility. Another participant who also works for home healthcare and hospice has never been employed at a residential facility. However, both of these participants happen to have clients that currently live in residential facilities. They go to these facilities to care for their clients despite being employed through another company. Because of their experience in residential facilities paired with findings that a majority of their interactions occurred during caregiving tasks, their interviews were recorded, transcribed, and analyzed as well.

## **Sample**

The final sample included 11 individuals from three care facilities and one home health and hospice service. All of the facilities had a memory care unit. However, only

some participants worked strictly with residents in the memory care units. Most worked in assisted living with residents who happened to have dementia. Participants were 91% female with an average age of 21.7 years. Five participants worked as a CNA for less than one year, five for one to three years, and one for 14+ years. In this sample, 91% self-described as White and the remaining identified as Latino or Hispanic. When asked about their level of education, 54.5% reported having attended some college, 36.4% said they completed an associate's degree, and 9.1% has completed a graduate degree.

Pseudonyms are applied to all results and discussion.

Table 1  
*Demographics of Study Sample*

Factor	Participants	%
Gender		
Male	1	9.1
Female	10	90.9
Race		
White	10	90.9
Latino or Hispanic	1	9.1
Education Level		
Some college	6	54.5
Associate's	4	36.4
Graduate degree	1	9.1
Time as a CNA		
Less than one year	5	45.5
One to three years	5	45.5
10 or more years	1	9.1

## Procedures

Administrators of local skilled nursing facilities, assisted living facilities, and memory care facilities were contacted by the research team. Administrators from two local facilities allowed the research team to post flyers in places easily seen by CNAs as

well as to hand them out during a staff meeting. Potential participants were then instructed by research team members to reach out if they wanted to participate. The administrators from the third facility (who also own the home health and hospice for which two participants worked) did not allow the research team to attend a staff meeting, but sent emails to all potential eligible employees. They were notified of the study as well as given the contact information for the research team.

It is suggested that there should be between five and twenty-five interviews completed in a phenomenological study (Mason, 2010). Sample size of the current study was determined by interviewing participants until theoretical saturation occurred, meaning no more new themes emerged with more interviews. In a study conducted by Guest, Bunce, and Johnson (2006), they completed 60 interviews with their participants. They reported that 94% of the 36 themes uncovered were found in the first six interviews and 97% were found within the first twelve. Homogeneity of the sample has the potential to impact saturation. The primary researcher believed the likelihood of age, race/ethnicity, and gender being very similar across participants seemed high, meaning there are higher levels of homogeneity. The nursing community is overwhelmingly dominated by women (Bernstein, 2013) and a large majority of the Utah population identifies as White (United States Census Bureau, 2017). Because a CNA is the lowest nursing position available, most participants were expected to be in their early to mid-twenties). Based on the demographic information of participants, the research team found support of their assumptions. A total of 11 interviews were conducted. Most identified as female (10 participants); one participant identified as Hispanic or Latino



while all others identified as White; and nine participants were between the ages 18-22 (the other two participants were between the ages of 35- 45).

At the time of initial contact, participants were informed of the purpose of the study. They were also informed of the process of storing the collected data to assure them of confidentiality. At the time of the scheduled interview, participants were given a consent form stating their right to withdraw from the study at any time. There were a few short segments of one interview recording that were inaudible, and therefore, difficult to transcribe. That participant was contacted a second time and asked for clarification for two of the interview questions. Answers were provided via email and included with her transcript.

## **Interviews**

Semi-structured, face-to-face interviews were conducted in a neutral location of the participant's choosing. Either one or two trained interviewers were present, but if both were present only one interviewer asked questions. The goal was to utilize two interviewers at all interviews, but because of scheduling conflicts only one interviewer was present for three of the 11 interviews. The duration of the interviews were approximately 45 minutes and participants received an incentive of \$15 for their time. ZOOM software was used to record the audio of the interviews and were saved as MP3 files for transcription. All MP3 files were saved under a pseudonym to aid in maintaining confidentiality of participants.

Questions regarding the length of time they have worked as a CNA, verbal and nonverbal behaviors they employ in interactions with residents, and matters of social support were asked of participants, with prompting and supplementary questions added

for follow-up and clarity as needed. I note that the current thesis, as well as one other, is part of a larger study, and not all of the questions directly informed the current research questions. Nonetheless I included all of the questions included in the interview. Some questions asked included “Why did you choose to work as a CNA as opposed to another career?”, “What verbal behaviors lead to high-quality interactions with residents with dementia?”, “What nonverbal behaviors lead to high-quality interactions with residents with dementia?”, and : Imagine a co-worker who seems to have the best interactions with residents with dementia. Describe what this person does that makes it go well.” (See Appendix A and B for a full list of questions).

Researchers assumed some of the participants’ responses might include examples of nonverbal behaviors or gestures they use in their job. Because these nonverbal behaviors cannot be captured in an audio recording, the primary interviewer, or secondary interviewer if present, took field notes while the other acted as the primary interviewer. Of note, there was little to no need for referring to the field notes during analysis. MP3 audio files of the interviews were transcribed with use of Otter.ai and cleaned by members of the research team. Completed transcriptions were saved as Word documents for later analysis. Each MP3 file was promptly deleted after it was checked for accuracy. Transcriptions were then uploaded to Dedoose software for data management and analysis.

### **Data Analysis**

The purpose of phenomenological research is to understand a particular phenomenon – in this case, staff-resident interactions – from the point of view of participants as a collective group. Once data were recorded and transcribed, in vivo and

values coding were used to uncover themes in each interview. Initially it was planned to use only in vivo coding. However, as analysis progressed, it was found that while participants were giving very similar answers (resulting in very similar codes for every interview), there was a difference in the attitude behind their responses. For example, two participants mentioned the need to play into the residents' realities when they are interacting. One participant described it as being a better option to "go along" with him/her instead of correcting the resident because correcting caused residents distress and confusion that could be prevented. She was concerned for the well-being of those for whom she cared. The other participant mentioned "going along" with residents because it was easier to get things done that way than argue with them. Due to the difference in values and attitudes, values coding was also employed in the analysis of the data.

All interviews were initially coded by the primary researcher. An outside, experienced qualitative researcher reviewed the codes applied. This secondary coder had a Ph.D. and expertise in qualitative analysis, but was mostly unfamiliar with the background and content of the study, offering an opportunity for a more objective perspective to balance out the potential biases of the first coder, who had past experiences working in the field. Yardley (2000) argued that having two coders in agreement does not necessarily mean that there is a certain level of objectiveness or accuracy – only that two people have come to an agreement about one possible interpretation of the presented data. The purpose of this secondary coder, then, was to apply and add codes the primary researcher may have missed. Since the second researcher did not have a background in dementia care they were able to offer a different perspective than that of the primary researcher. However, no new codes or themes emerged as a result of the secondary

coders work. The second researcher expressed agreement with the codes generated by the primary researcher saying the existing codes were relevant to the data. Due to this agreement and the secondary researcher not creating new codes, they acted more in the role of a critical friend. When the second wave of coding was completed, the primary researcher used code to identify themes describing quality staff-resident interactions from the perspective of said staff.

### **Trustworthiness**

The validity, or believability, of a qualitative study is often described as trustworthiness. The three main areas of concern regarding trustworthiness in qualitative research are: credibility, transferability, and dependability (Pitney, 2004). Working with another researcher outside of the content area of dementia care, and being clear in our process of data collection and analysis aids in establishing credibility. I have a firm understanding of the research literature on quality interactions with persons with dementia. I took detailed notes during interviews when possible. Transferability, or the applicability of findings to similar contexts, can be demonstrated by providing a rich and thorough description of participants, context, and processes used. The dependability of this study is supported by the use of the qualitative researcher outside of the content area, who acted as a “critical friend”. Yardley (2000) explains that having two coders and checking for “inter-rater reliability” does not necessarily mean the interpretation is purely objective. It only means that two people agree on one possible interpretation. The purpose of a second researcher in the present study was to go over the initial coding and apply or add new codes the initial coder may have missed in the first wave of coding. As an experienced qualitative researcher who has very little background in gerontology and

dementia care, she was able to provide a different perspective than that of the primary researcher. Tolly, Ulinm Mack, and Succop (2016) discuss a fourth domain of trustworthiness: confirmability. Due to my personal experience working in a facility much like where participants worked, I was able to facilitate more of discussion rather than simply have a formal interviewer-interviewee dynamic. My experiences aided me in knowing what clarifying questions to ask if participants were vague. I was also able to share some of my experiences with participants if their accounts were similar to what I have encountered. Sharing similar experiences with participants adds confirmability to the present study.

## CHAPTER IV

## FINDINGS

**Themes**

Through the use of in vivo and values coding I was able to uncover five themes. Interestingly, my two research questions related to “particular verbal and nonverbal” behaviors are only *directly* captured in theme 1, titled, “Observable behaviors”. The remaining four themes capture factors that are not directly observable, including attitudes, traits, and internal processes. These attitudes, traits, and internal processes manifest into behaviors that exemplify high quality interactions, and these latter four themes could not be separated to inform verbal and nonverbal behaviors, distinctly. Therefore, the latter four themes inform quality interactions as a whole – the ‘meta-research question’, per se. Despite interviewers continually trying to get participants to identify specific and observable behaviors, participants consistently drifted towards identifying attitudes, traits, and internal processes suggesting that participants believe having a high-quality interaction with a person with dementia requires more than a checklist of verbal and nonverbal behaviors.

Table 2  
*Quality Interaction Thematic Categories*

Theme		
Sub-theme	Key Terms	Characteristic Response
Observable behaviors		
Verbal behaviors	Volume, tone	Appropriate volume depends on the resident and situation. Appropriate tone was described as “warm”, “comforting”, “friendly” and “sweet”.

Table 2 (continued)  
*Quality Interaction Thematic Categories*

Theme	Sub-theme	Key Terms	Characteristic Response
	Nonverbal behaviors	Body language, eye contact, appropriate touch, physical level, positive demeanor	Maintain open body language that is welcoming. Make eye contact, touch their arm or shoulder when appropriate, don't tower over the resident when he/she is sitting or lying down, and have overall positive appearance.
	Valuing personhood	Comfort, reassurance, encourage independence, reciprocity	Recognize resident as an individual rather than a task. Actions facilitate the preservation of individuality.
	Get on their level	Adjust to cognitive level and reality of resident	Adjust to appropriate vocabulary for resident, explaining processes step-by-step, play into reality of resident, and respond to "reality" appropriately.
	Be a friend	Go the extra mile, be kind, ask about topics known to the resident, get to know them	Exhibit friendly mannerisms and get to know residents on a personal level.
	Internal processes Compassion	Understanding, insight to residents' situations and illness	Be patient with residents and understand the difficulty of their situations.
	"Brush it off"	Don't take situations personally, move forward	When difficult situations or interactions occur, do not allow them to influence subsequent interactions throughout the day with that resident or others.

Table 2 (Continued)  
*Quality Interaction Thematic Categories*

Theme		
Sub-theme	Key Terms	Characteristic Response
Be present	Avoid distractions	Behave in a way that residents know they are a priority.
Awareness	Awareness of personal behaviors, aware of residents and their needs	Acknowledge the presence of residents when not engaged in care tasks. Be aware of behaviors and how they influence the behavior residents.

**Observable behaviors.** Even though participants demonstrated that a high-quality interaction goes beyond the verbal and nonverbal behaviors, there were answers that were common throughout the interviews that would be easily classified as such, and that directly mapped onto the research questions.

***Findings related to Research question 1.** What particular verbal behaviors (if any) do staff consider necessary in quality interactions with residents with dementia?*

*Volume.* When specifically asked about verbal behaviors that were the most effective in a high-quality interaction, almost all responses were related to the appropriateness of volume, although not always in the same direction – a couple participants stated it was important to talk louder to residents with dementia, while a few stated that in higher quality conversations it was better to talk softer. Like most participants, Ann [female, aged 18], explained that it depends on the resident. She stated:



“When you talk to somebody with dementia, you try to use a very, like calm, and, calm but like, loud because, I, usually they’re deaf. If they're not deaf, then don't be loud with them, they will get aggravated so fast.”

*Tone.* Another valued verbal behavior discussed was the tone of voice used. An appropriate tone was described as “friendly”, “sweet”, “comforting” and “warm”. Violet [female, aged 21] said:

“...you just have to have a very comforting tone while you're talking to them. You have to have a very positive attitude. And just make sure that you're being very reassuring in your words. Like you're talking to them in a nice warm tone, and you're being very friendly, and the friendlier you are, the more that they're willing to talk back.”

Some participants did not specify what their tone was like when interacting with residents with dementia, but they demonstrated it in their examples. One participant, Rachel [female, aged 19], described how she interacted differently with a particular resident at bedtime. In her response to the interviewer, Rachel spoke much softer, slower, and calmer when she listed the things she says to the resident (highlighted below in *italics*). She contrasted this with regular speed and volume in her voice when she described the alternative way of speaking to her (highlighted below in **bold**). Rachel felt that this slowing down and using a calmer tone helped relax the resident who typically resisted going to bed.

“I think that one thing that I've tried that has made a difference in that is when I put her to bed, I make sure she goes to the bathroom, I see to all our needs tell her ‘*it's going to be warm in her room, the sun will come in tomorrow,*

*everything will be good*'. And I think that when you put them to bed in that sort of way then they're like relaxed and it's okay. So I just think they're like taking the time and not be like, **'get in bed, here you go, turn off the lights, see ya later.'**”

*Additional Verbal Behaviors.* Other verbal behaviors mentioned included speaking clearly and calling the residents by their names. While these are observable behaviors they are described below in other themes identified in the interviews. Compared to nonverbal behaviors and other interaction characteristics, there was very little discussion from the participants of observable verbal behaviors.

***Findings related to Research question 2. What nonverbal behaviors (if any) do staff consider necessary in quality interactions with residents with dementia?***  
As stated above, there were more nonverbal behaviors discussed in the interviews than verbal ones.

*Body language.* Quality interactions were defined as having more open or welcoming body language. This included CNAs *not* crossing their arms, putting their hands on their hips, presenting the body as intimidating, or rolling their eyes. Instead CNAs suggested keeping arms down and smiling. Alex [male, aged 35] described what he meant by having open body language.

“...in the movies, you see the guys in the white coats come to get the person, and if they're like, you know, standing with their imposing stance. I just try to look just like a normal...I try not to look like I'm going to like manhandle them, or, or try to be imposing, like, look down at them.”

*Eye contact, appropriate touch, and getting to the same physical level.* Although these mark three separate behaviors, eye contact, appropriate touch, and getting to the same physical level as the residents were often grouped together in participants' responses, thus they are described collectively. This is demonstrated in Connie's [female, aged 22] response to our question regarding important nonverbal behaviors.

“Depending on the resident, if it feels appropriate, I'll sit at the foot of their bed so that I'm closer to them. And touch is something that is ‘touchy’. For some people, it's very comforting if I reach out and just hold their hand. That's comforting and it helps them focus on what I'm saying and what I'm asking. For some people that sets them off... For a lot of people, it's okay to, like, touch their knee or something. It's away from their face and stuff so it doesn't feel threatening. I'm also making contact so that they can look and notice me and look at me and [I can] help them focus and also touch is important for I mean, feeling human connections. I think those things are nonverbal things that have helped me in my communication.”

Eye contact was said to establish a connection and trust. Getting on residents' physical level facilitated both eye contact, and was a way to demonstrate overall welcoming body language. One participant explained that she felt uncomfortable standing or towering over the residents and talking down to them. She feels more connected to the residents when she squats or kneels by their bed or wheelchair.

Physical contact or touch was one of very few behaviors that was mentioned by every participant – some brought it up more than once. Like with volume, it was acknowledged that “appropriate touch” can have different meanings for different

residents. Knowing the individual preferences of residents was consistently described as important for gauging what level of physical contact would aid or hinder a high-quality interaction. Violet [female, aged 21] stated:

“There are residents I work with they love hugging and so when I greet them, I'll go up and give them a hug and then they just, like, light up, and they're so happy. The ones that are little more reserved, I'll just touch their arm and that just kind of gets their attention and warms them up to it [touch]. It depends on the resident. But for the most part, most of them are pretty welcoming and you can go up and give them a hug and it makes their day.”

*Displaying positive mood through non-verbal cues.* The final nonverbal behavior described by many participants was displaying an overall happy demeanor. This includes maintaining open body language as described above (getting to the level of the resident, not towering over them, keeping arms down), and also having a friendly tone, and smiling. CNAs reported that when they appeared to be happier residents better responded to instructions or requests during care tasks (e.g. showering or dressing the resident). Shawna [female, aged 22] summed up this finding well when she said:

“I think it's just important that you are displaying what you feel...I guess it's like tricking them into being in a good mood just through your positive energy. They read your body language and facial expression. So, you have to explain what you want them to be doing...It's the same as interacting with any other person. If you act frustrated with them, they're going to get frustrated with you.”

Connie [female, aged 22] shared a similar perspective. She stated, “If you look happy, they're going to be happy. And so it's, you know, even if it's a hard day, I have to perk up anyway, it helps me and that helps them too.”

Like the verbal behaviors, there were nonverbal behaviors that would be considered observable. These include the pacing of care task and being flexible to accommodate residents’ individual preferences. Most of those behaviors fit more appropriately into other themes, below.

**Valuing personhood.** In the process of CNAs interacting with residents in high quality way, many participants provided examples or scenarios where valuing personhood improved the quality of the interaction. For example, participants described the importance of being a source of encouragement to the residents for whom they care, which meant also seeing the resident as a person, and not as a client or a patient. At times this encouragement came in the form of comfort and reassurance when a resident was feeling lost or confused. As Ann described, “...especially in like the beginning of Alzheimer's, when they know that something's wrong. They know that they are developing dementia, they know that they can't remember what they used to, and that's so hard for them.”

Abby [female, aged 22] explained there are times when she offers reassurance to a resident who doesn't remember where they are. In these experiences it is rewarding when she is able to calm the person who may be agitated. Even in instances where there was no “real” problem, she described that residents deserve to have their concerns addressed because it is “real to them”. Alex [male, aged 35] shared an example of a woman who adamantly demanded a wheel chair be moved to a different spot so that it was no longer

in her way. The reality was that it was not in anyone's way and was where it belonged. However, this woman's reality was causing her distress and it was important to her that the issue be resolved, so Alex moved the wheelchair.

While many residents with dementia require assistance in their activities of daily living, CNAs found value in encouraging as much independence as possible when appropriate and safe to do so. This approach also helps define the resident as a person – an adult who can do as much as possible, independently. Participants described that, usually, this came in the form of giving the resident choices. Connie [female, aged 22] explained that a resident has the right to refuse care, and some will refuse, particularly when they are told they “have to do something”, such as take a shower. She said that if she asks, “Is it alright if I help you get out of your shirt? This one is dirty and I want you to look nice”, she can continue to ask and give them choices throughout the showering process. Alex shared an example of providing choices for the residents for which he cares.

“... when I pick out clothes for them, I usually ask them, "Is this okay? Do you want to wear this?" Whereas some of them [other CNAs] will just, you know, pick out the clothes, and that's what they're wearing. And even if it like, looks ridiculous, like the color? You know, the colors or whatever?”

In these cases, where the resident wants to wear clothes outside of what Alex has suggested, he doesn't demand they wear his choices. He does this because it makes the interaction involved in the care person-focused.

Connie [female, age 22] described a former co-worker who highly valued the personhood of residents.

“We also had this man who is from Mexico and he didn't speak any English. And, [my co-worker] didn't speak any Spanish, but she would learn... she'd like point to stuff and he'd sit and teach her and she would spend time in there with him. And she would, you know, on her days off, she would bring him like some food. Or she'd bring him like treats and stuff and just come in and sit with him. Like, she loved him so much.”

This example informs Valuing Personhood through giving the resident a sense of reciprocity. The man discussed had few people with whom he could converse. By taking the extra time to learn Spanish words from this individual, the CNA provided him with opportunities for quality interaction and demonstrated that she valued him as a person.

Marcy [female, aged 41] also acknowledged the reciprocity in her relationships with the residents for whom she cares. She also sometimes comes in to visit them on her day off and sometimes brings her children. She said, “...sometimes I need that, like, you know, there's something that they can teach me that day or something...”

**Get on their [cognitive and reality] level.** Dementia involves deteriorating cognition, including language and comprehension, which exacerbates existing distress and confusion. Many CNAs reported that making adjustments in their word choice (depending on the cognitive level of the resident) helped improve the quality of their interactions and lessened instances of confusion. Violet [female, aged 21] stated:

“You have to use, like, simpler language. You can't use a huge vocabulary because it might seem confusing. They'll sometimes understand that, but you just have to be very concise and you can't like use big, like, sentences. You have to be shorter in the way that you're saying things because they can lose

focus in the sentence. You just have to use three-word sentences instead of ten-word sentences.”

Sometimes adjusting word choice can both improve the quality interaction with the resident with dementia and aid in keeping the resident safe. One participant described an experience where she did not give clear, step-by-step instructions of what she needed the resident to do while she was helping him with an activity of daily living. As a result, this resident did not understand what was expected of him in the moment and he fell. From this experience she learned the value of being very specific when talking to a person with dementia. Another participant explained that residents often have the physical abilities to complete some care tasks, but need instructions throughout the process, such as brushing their teeth. While encouraging a resident to be independent via step-by-step instructions could inform the aforementioned Valuing Personhood theme, in this case it was more about being appropriate to the cognitive level of the resident. From these two examples it can be assumed breaking down the processes into language that is easy to understand and is very specific can keep the resident with dementia safer and give them small amounts of independence. However, a few participants made it clear that simplifying their language should in no way resemble baby talk or “talking down” to the residents.

Often residents with dementia have an altered perception of reality. What they remember and what they are experiencing is real to them even if it is not accurate. While “entering the reality of the resident” can address Valuing Personhood, as described above, this approach was also discussed in the context of



adjusting for the resident's cognitive level. Abby explained that going along with the reality of the residents with dementia tends to put them more at ease and can prevent them from getting more agitated.

“...you can try to, like, correct them and be like, ‘No, that's wrong. It's not 1950. Your husband is dead,’ and I feel like sometimes that ends okay, but I feel like a lot of the time it is easier, maybe not easier, but it's better to not contradict them and be like, ‘No, that's wrong.’ But instead be like, ‘Okay yeah’ and kind of try to redirect it to something else rather than ‘No, you're wrong’ because really all that's going to do is confuse them or agitate them.”

Other participants explained how they played into the reality of residents. One said that when she asks “How was your day?” residents will sometimes talk about their day at work. Rather than correct them, she asks questions about their employment. This helps contribute to a quality interaction, while otherwise, with correction, may have resulted in a negative interaction.

There are times when the reality of a resident, or their disorientation, causes them great distress. Due to their confusion, they may feel paranoid and suspicious of others around them, sad, or angry. When asked about using laughter in her interactions with residents, Violet [female, aged 21] responded:

“If they're saying something you should laugh at, you can laugh at that. But like if they're saying something serious, obviously you're not going to laugh at that even if it is a little bit funny. Sometimes they'll say stuff that's kind of funny, but we know that they're not meaning it in that way. We have to be very professional and respond to what they're saying.”

In sum, “getting to their level” was described both for cognitive status and for managing or responding to reality and disorientation. When CNAs were able to match the cognitive and reality level of the resident, quality interactions were more possible.

**Be a friend.** Maintaining a sense of friendship for the residents was significant to many participants, and contributed to high-quality interactions with residents. CNAs valued the ability to make residents feel noticed and appreciated, despite their deteriorating cognitive state. Many participants used the words “be friendly” and “be nice” in their responses. Others mentioned the importance of being “bubbly” or “upbeat” to make the residents feel comfortable. None gave a definition of what it means to “be friendly”, but they described interactions to illustrate what being friendly looks like.

Alex expressed it was important for him to show that he cares about the residents. He said, “I like to tap, tap them on the shoulder, like, you know, touch their arm or some kind of physical contact that lets them know that I’m there. I’m their friend. Like, I care about them.”

Another participant told how she enjoys doing extra things for the residents when time allows her.

“...after showers, I’ll be like, ‘Hey, do you want to use like the scented lotion?’, or instead of just like drying them off and getting them ready to go. I’ll take the extra time to just kind of like, ‘Let’s put this lotion on, and let’s brush your teeth and do all that extra stuff.’ I think it just makes them feel more like person.”

This CNA's response also informs Valuing Personhood, but because of the way she described the interactions, via her friendly tone and warm delivery of “Hey, do you want to use the scented lotion?” this response elicited a feeling of friendship. In other words, she spoke in a tone that was akin to speaking to a friend. Other ways of “being a friend” included asking about the residents’ families, topics that the residents know well, learning and remembering their individual preferences, referring to residents by their names, and showing interest in them as a person. Interacting with a resident as if they are a friend contributed to high quality interactions.

Of note, most of the CNAs interviewed described the most rewarding part of their job was sitting with the residents and getting to know them. When asked what keeps them from being able to sit and socially engage with residents more, the number one barrier reported was lack of time or having too many tasks to complete. Due to their time restrictions they identified that the best time to interact with residents with dementia is during a care task, rather than in a separate social situation.

**Internal processes.** Participants identified certain approaches that they take that can contribute to high quality interactions. Rather than being observable behaviors or certain approaches with residents, this theme identified cognitive processes that go on, cognitively, during tasks and interactions. While internal thoughts are not behaviors, these examples include internal dialog, self-talk and cognitive approaches that CNAs use to guide their behavior. This theme included strategies for “how to behave on the inside”.

**Compassion.** Being compassionate and understanding was discussed in many of the interviews. Participants were asked to think of a co-worker who engages in high-quality interactions and share what they do to make those interactions possible. Ann

[female, aged 18] responded, “They're trying to be understanding of the resident and how they're feeling, maybe what they're thinking. Yeah, probably that, just being there, they're usually understanding and just genuinely wanting to help that resident.”

Another example of this can be found in a specific experience shared by Connie [female, aged 22] who was discussing the actions of a previous co-worker. She said:

“We had a resident who had to be transferred to so many times a day to use the bathroom. And it was really hard on us physically. And it was also a time issue because every 30 minutes two people had to go into her room for 15 minutes. And so it was extremely difficult to manage...[T]he director of nursing and like the, you know, the social worker, and everybody decided that it was probably time for her to try using a standing lift... it's just the one that goes, like, behind your back, and then it straps onto a little lift. So you like hook it up and it helps them stand. And that was so hard on her, it was painful. Her, she had really weak knees. So, like, when you would transfer her, like, I would have to push on her knee with my knee when we would stand her up. So it was like, really complicated. So it was hard on her when we started using the lift. And so this co-worker was getting frustrated because the resident was getting frustrated. But she was such a genuine person. She would just, like, walk out of the room and just cry. She's like, ‘She's in so much pain. Eventually this will be better for her. But it's so hard for her.’ And she, she would just cry. And it was it was hard for her to see somebody

going through pain where it's like, at that time, I hadn't quite bonded with that resident... So at that point, I'm like, 'She's so mean us. Like, she doesn't get it. Like, we're just trying to help her.' And she, her approach to it was 'She's hurting and I can't take that away.'”

Connie showed a natural response to feel animosity toward that particular “difficult” resident. However, the co-worker had an understanding of the woman’s pain and the insight to recognize the resident was not truly at fault for her negative behaviors. This likely caused the co-worker’s interactions with this resident to be better than they could have been without the compassion. Connie then also realized, after the fact, that having this kind of understanding can better facilitate patience and the ability to not take things personally as a CNA.

**“Brush it Off”.** The previous example also demonstrates the ability to not take situations personally. Being able to “brush off” the less-than-pleasant experiences presented itself in other responses, as well. Marcy [female, aged 41] shared an instance when she was showing a resident who had a reputation of being difficult to shower because she often refused to take off her socks.

“I told her that her socks were going to get soaking wet. She was convinced that they weren't. ‘No, they're not!’ So, I'm like, trying to scrub, I tried to take her socks off, and she smacked me on the head with her first, really, really hard. And I was like, ‘Ow! That hurt!’ And, you know, outside of with, you know, how we would normally do things you have to remember these are different people are working with. So I made sure that she knew that that hurt me. But I said, ‘Well, your socks are soaking wet, you're going to catch a

cold.’ And she, she goes, ‘They are?’ and she looks down, and she goes, ‘Oh.’ And so I was like, ‘I need to take them off.’ She goes, ‘Okay.’ So I took her socks off.”

The resident here physically harmed Marcy, but by being able to “brush off” the incident in the moment, Marcy was able to still communicate with the agitated resident to accomplish the goal at hand. If Marcy had allowed the resident’s actions to make her angry and responded to that anger as if it was a client without cognitive impairment, she would have been less likely to be able to communicate with the resident and resolve the incident in a successful way. In sum, “brushing it off” means that responding to client agitation with more staff agitation only results to more negative behaviors and lowers the quality of a possible interaction.

***Be Present.*** According to participants, residents are aware when they do not have others’ attention. They appreciate being seen, heard, and listened to. When CNAs seem distracted while performing care tasks or engaging in social interactions with residents, the residents show their disapproval. Shawna [female, aged 22] stated:

“You might be helping one person and trying to help another and they realize that they’re not getting your full attention. So just like the gesture of looking over at somebody else when you’re talking to them or trying to help somebody else when you’re interacting with somebody else... They start to get a little bit angry when that happens.”

Another participant, Violet [female, aged 21] said:

“When it [an interaction] is separate from care it’s a little more focused on that one person, so you’re able to get a little more, like, a high-quality answer and

high-quality conversation. Yeah, like, if you're getting someone ready for bed, you're, like, showering them, you're able to still have conversations with them, even though they are a little bit more distracted, because I could do other things at the same time. Like, I'm still able to get to know people while I'm giving them care, I'm just not able to have as good of conversations when it's a little more distracted.

Due to the number of residents a CNA needs to care for, often with multiple tasks to complete for each, it may not always be possible for CNAs to give their undivided attention to one resident as the resident would like. However, when they have the time and ability to focus their attention to one-on-one time with a resident, the resident appreciates it and the quality of the interaction is greatly enhanced.

***Awareness.*** The final internal behavior manifested was awareness of varying sorts. These included awareness of body language, verbal language, appropriate pacing, how the residents are approached, and overall how the resident was being treated. It was suggested, for example, that when approaching a resident, it is best to do so from an angle where one is in clear view of the resident. Karen [female, aged 19] said:

“A lot of people though, like, get kind of not timid, but kind of afraid when you approach them from behind. And so it's really important to kind of get their attention before you approach them from behind. So they'll turn around and see you or they get kind of spooked really easy.”

Her awareness of this phenomenon aids Karen in starting her interactions in a more positive way. When approached from behind, residents may be startled and have a less pleasant interaction with the CNA even if the CNA does other behaviors “correctly”.

Alex [male, aged 35] shared a similar experience in regards to his pace. He recalled an incident when he was in a hurry to complete a task but also wanted to talk to a resident in passing.

“...my body language was interpreted by them as being like, “I'm coming to get you” because I'm walking fast towards them. And so he was kind of like backing away, like not sure what was happening. And I wasn't going to touch him, I was just, I was kind of in a hurry, and I needed, I wanted to talk to him for a second. So from that experience, I try to be like careful about my body language.”

Again, this example exhibits that being self-aware of possibly provoking behaviors and avoiding them can set the tone and feel of an interaction upon initiation.

There is a noteworthy age difference between CNAs and the residents for whom they care. Growing up in different eras, there are times when there can be communication barriers. Using common present-day slang terms can add to the confusion of residents with dementia. Abby [female, aged 22] explained:

“I think sometimes it's really easy for me at least, like get caught up and use slang. I'm kind of like, ‘Oh that's legit’ or I'll say like, ‘lol’ out loud. And they're like, ‘what is that?’ Yeah, that's not specific to people with dementia, but just the older generation.”

As established earlier, there is little difference in the social and psychological needs of those who live with dementia and those who do not. All people require connection and understanding. Being aware of this makes it easier to have higher quality interactions with residents with dementia. Alex [male, aged 35] stated:



“So I thought, ‘Okay, how would I want to be treated if I were here?’ Or ‘How would I want, like, a loved one,’ if, I’d imagine a specific loved one in the shoes and the place of the patient. And I would think ‘how would I want them to be treated? How would I want the staff to be?’ And that’s sort of like, that’s the yardstick I try to use. But I don’t, I don’t know that I ever, like received training on how to do that like, or had it explained to me or...it’s just a good thing to do.”

In addition to being aware of how one may be perceived by a resident with dementia, participants indicated the importance of being aware of the residents’ needs or simply being aware of their existence. Doing so makes the resident feel noticed and valued. Alex also shared an example of this.

“...sometimes when they’re sitting there, I’ll say, ‘Are you cold? Let me get you a blanket,’ and I’ll give them a blanket, even if it may not be cold, but it’s just like a nicety that you can do to make them, you know, let them know that you are aware of them.”

The previous two examples also inform Valuing Personhood. However, these two excerpts demonstrate the internal processes of choosing to act a certain way or how to handle certain situations that will improve the quality of potential interactions.

## **Summary of Results**

The original research questions addressed the verbal and nonverbal behaviors CNAs believed to be important in high-quality interactions with residents with dementia. Upon conclusion of the interviews and coding process, it was found that a majority of the most valued behaviors were not observable. The themes identified in facilitating high

quality interactions between CNAs and residents with dementia therefore include observable behaviors to a lesser extent, and attitudes, approaches, traits, and internal processes, to a greater extent. There was little variation between participants in regards to what they claim to be important behaviors. However, more differentiation and depth in responses were provided when they described the non-observable attitudes and reasoning behind the behaviors.

## CHAPTER V

### DISCUSSION

The five themes emerging from this study suggest that CNAs do not focus on observable verbal and non-verbal behaviors when identifying and defining quality interactions between CNAs and persons with dementia living in residential care. Instead, they identify attitudes and general approaches to use while working and interacting with clients. Examples and vignettes captured by themes such as Valuing Personhood, Be a Friend, and Get on Their [Cognitive and Reality] Level map closely onto existing dementia care concepts of person-centered care. According to Chenoweth and colleagues (2019), person-centered care is ideology that endorses care that is focused on promoting the use of abilities still possessed by persons with dementia rather than on what they can no longer do. This includes knowing the individual's personal history, individual preferences, and allowing the person with dementia to make decisions. All of these were addressed by participants of the present study. These areas of person-centered care also tie directly to the belonging, love, and respect of and by other discussed by Maslow (1970).

A previous study looked at the self-perceived met and unmet needs of frail adults in residential settings (Hoogendijk et al., 2014). A vast majority (up to 97%) of the met needs discussed were physical and environmental. The reported unmet needs were primarily psychosocial. They included "company", "daytime activities", and "caring for another" among others. When older adults without cognitive impairment in residential settings report that these needs are not being met, it is a logical assumption that persons with dementia in similar settings are facing the same unmet needs. The high-quality

interactions described by participants in the present study often had components tied to results found by Hoogendijk and colleagues (2014). For example, CNAs in the present study described interactions where they spent time one-on-one with a resident, or kept them company.

### **Future Application**

Norton and colleagues (2009) found that when family, unpaid caregivers and person with dementia have closer emotional relationships (as reported by the caregiver) there is less reported behavior problems from the person with dementia. While this study focused on family caregivers, some of the CNAs in the present study also suggested that closer relationships are important in paid, formal care. In multiple CNA responses when they described how they improved an interaction by changing their tone, or body language, or brushing it off and starting over with a resident, less behavior problems were exhibited by the residents in dementia care tasks. These themes support CNA's ability to recognize and meet the psychological and social needs of residents with dementia and using person-centered approaches, which are key in high quality interactions.

The observable verbal and non-verbal behaviors identified by participants were fairly consistent from one participant to the next, and behaviors described here closely match behaviors that were found to be indicators of quality interactions for other populations in the literature. Facial expression, eye contact, tone, and physical touch were all viewed as important by a majority of current participants. All of the nonverbal behaviors endorsed by participants were also noted in a study conducted by Kozlowska and Doboszynska (2012). In their study nurses said that

“touch is an indispensable component” of their profession with the most valued form of touch being holding the hand of the patient. Current participants often spoke of holding the hand of a resident with dementia and how it made them feel closer and more intimate in their interactions. Other research suggests that nonverbal behaviors are often perceived as more important for patient satisfaction than verbal ones (Timmerman et al., 2016; Dijkstra et al., 2013). Even when current participants were asked specifically about verbal behaviors they use, they often included nonverbal behaviors such as touch and eye contact in their response.

For many CNAs in the present study, the internal processes were learned on the job. Being aware of others, being compassionate, and “brushing it off” were not addressed in CNA training. They were primarily taught to care for the physical needs of the residents. However, participants stated that they learned how to do these things better from other CNAs and practicing them. This indicates that CNAs who value having high-quality interactions with residents with dementia recognize the important role certain behaviors have in facilitating them. They then pass along what they’ve realized for themselves to newer CNAs. Internal processes like compassion and self-awareness may be considered personality traits, but they can be cultivated and learned. Including discussion in CNA training of how these processes can make the job a little easier and how they influence the lives of those for whom they care may help new CNAs learn the value of these processes sooner.

### **Implications for Future Measurement**

After analyzing the responses from participants of the present study, two existing prior measures of quality interactions appear to be the best templates in creating a

new/modified measure for assessing quality interactions between staff and residents with dementia. The Parental Embodied Mentalizing (PEM) has been used to evaluate parental ability to know and understand the needs of his/her child (Shai & Belsky, 2017). The three domains assessed by the PEM include parental reflective functioning (the ability to predict the child's mental status), insightfulness (capacity to acknowledge possible reasons for the child's behavior and understanding the child's perspective), and mind-mindedness (the ability to view the child as an individual with valid concerns). This measure could be adapted to assess CNAs' abilities to view the resident with dementia in the same way. For example, a person with dementia may have concerns or problems that most would view as trivial but are very real to them. The PEM has the potential to assess CNAs' ability to understand the importance of addressing the concerns of residents. To best demonstrate the insightfulness described in the PEM, parents need to have intimate knowledge of the child. According to current participants, CNAs already find value in knowing the residents' histories and individual preferences which may be necessary for understanding possible reasons for certain behaviors. For instance, one participant told a story of a resident who would repeatedly defecate in the shower but refused to use the toilet. It was later learned that the resident had been in a relationship where her controlling partner would turn off the water forcing the family to use a bucket in the shower. Learning about the resident's past in this situation helped CNAs understand her complex behavior and gave them better ideas of how get her to use the facilities appropriately.

The second existing measure that could be adaptable to assess staff-resident interactions is the Classroom Assessment Scoring System (CLASS; Pearlman et al., 2016). Two of the three domains in this scale – Classroom Organization and Instructional Support – are not a good fit for assessing aging adults with cognitive decline. However, the third domain, Emotional Support, could be applied to residential care settings. This domain assesses the negative and positive climate of the environment, teacher [could be changed to staff] sensitivity, and regard for student [changed to client] perspective. Some of the themes and internal behaviors identified in the current analysis, such as valuing personhood, compassion, and awareness, have the potential to fit into these sub-domains of the CLASS. One participant described a reoccurring interaction she had with a particular male resident. The participant noticed that the resident would get agitated around the same time every day, usually just before dinner. She learned from a coworker that he (the resident) enjoyed having a root beer at that time daily. He was unable to express what he wanted, but was aware enough to know something from his routine was missing. This participant made a point to take him to the cafeteria for a root beer every day. She valued him as a person by being aware of a small thing – which may seem trivial – that made him happy. This interaction shows regard for the client's perspective and staff sensitivity through Using the Emotional Support Domain may provide a good starting point for assessing CNA-resident interactions.

### **Future Research**

In the present study, all CNAs stated that lack of time or having too many responsibilities was the greatest barrier to them being more social and engaging with residents. Although most participants claimed the best interactions took place without

distractions, time restrictions resulted in most of their interactions taking place during care tasks. Much of the CNA assistance with activities of daily living occur in private settings, such as toileting, showering, and dressing, which occur in residents' rooms. This point is noteworthy because past research has concluded that persons with dementia in residential care spend a majority of their days alone and having very little interaction, yet these studies observe residents in common areas (Ward et al., 2008). It is possible that because CNAs do not have a great quantity of time to devote to social interactions outside of care tasks, and thus do not have the ability to socialize in the common areas, estimates of staff interactions with residents may be underestimated. Future studies of interactions will have to identify ways to maintain resident privacy, while capturing interactions outside of just common areas.

In the current study, the participant sample was fairly homogeneous in terms of ethnicity, geography, gender, and to some extent, age. Having a group with high levels of homogeneity may impede obtaining transferability. Because the present study is based off a very specific group of participants, findings may not be applicable to other contexts. However, this is true for other interaction scenarios. For example, affectionate touch would be appropriate in a parent-child interaction but not in an interaction between a doctor and their patient. The transferability of the current study will also depend on how representative the sample is of the population. Due to the expected high levels of homogeneity, I expect the sample is representative of the population of CNAs working in dementia care in northern Utah or southern Idaho. However, findings may not be as transferable to other CNA populations in other parts of the country or other parts of the world. It is not practical to use a truly representative sample and explore the depth of



their experiences that the present study is trying to understand. However the study represents a solid “start” to examining this in more diverse areas.

Possible factors that could influence alternative findings about quality interactions include different CNA to resident ratios, the ethnic diversity of CNAs and residents, and varying cultures. Future extensions of this research should interview CNAs from different areas and backgrounds to uncover other possible important behaviors, attitudes, and approaches used in high-quality interactions with residents with dementia. More universal and culturally specific verbal, nonverbal, and internal behaviors/approaches could be beneficial in building a measurement scale that assess varying levels of quality interactions via observations.

This being said, because attitudes, approaches, traits, and internal behaviors were so valued by the participants in the current study, we are presented with a bit of a conundrum in incorporating these themes into an observational scale of higher and lower quality interactions in the dementia care setting. For example, there are difficulties in scoring if the staff member is “taking things personally” if they did so internally. Using approaches such as being a friend, valuing personhood, and internal behaviors like “understanding” could be measurable, but are subjective and therefore not as easy to capture in standardized ways. These traits and approaches are also based on personality (e.g. the extent to which the CNA is naturally “bubbly”), influenced by the cognitive and emotional state of the resident (e.g. the resident is nonverbal), as well as his or her preferences (e.g. the resident does not like to be touched), and based on context. However, which these difficulties are noted, the themes identified here suggest that mere counts of observable behaviors in CNA interactions with persons with dementia are likely

not sufficient, alone. An interaction scale will need to consider scaling the extent to which these themes were present in staff interactions. A possible solution would be to pair such a scale with a questionnaire assessing a person's knowledge about and attitude toward dementia.

Due to the sample being made of volunteers, self-selection bias is also a potential concern. For example, those that volunteered for the study may be more outgoing or see that social needs of persons with dementia is an important issue. Their answers may be different than those who opted not to participate. Our sample consisted of CNAs who were passionate about the interactions they described and others who said they had good interactions but did not demonstrate the same excitement and intensity as the others. Participants from both of these groups mentioned co-workers who do not do some of the behaviors (both verbal and nonverbal) that they believe to be valuable. Thus, by their own admission, this sample does not represent all types of CNAs in dementia care. However, the consistency of the answers given at the very least provide a starting point for future research in quality interactions as a construct, as well as potential themes to include in creating a measure.

## **Conclusion**

If future iterations of this research result in a successful, observational measure of higher quality interactions, the implications would be immense for this field. Being able to identify the areas where CNAs or facilities might improve their interactions could aid in the development of better trainings for CNAs. When CNAs have the knowledge of how to have better interactions, the quality of life of the residents for whom they care is likely to improve.

Persons with dementia have the same psychological needs as any other person. When their need to be loved and respected and to have human connections are met, their quality of life is likely to be optimized. CNAs have a unique opportunity to make that difference in the lives of the residents by employing a series of behaviors and attitudes and facilitating high-quality interactions. However, these interactions do not become ones of higher quality with a mere checklist of behaviors. They become better when residents are simply viewed as human beings with needs; when those who can make a difference recognize the personhood of each resident and make an effort to maintain it.

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## APPENDICES

**Appendix A. Quantitative Survey Questions: (in a Qualtrics survey)**

1. How long have you worked as a certified nursing assistant (CNA)?  
 \_\_\_\_\_ Years \_\_\_\_\_ Months
2. How many hours per week do you work as a CNA (on average)? \_\_\_\_\_
3. How many hours per week do you work with individuals with dementia (on average)? \_\_\_\_\_
4. Outside of people you care for at work, have you had experience interacting with a family member or friend who has been diagnosed with dementia?
  - a. Yes (please specify)
  - b. No
  - c. Not sure
  - d. Prefer not to answer
5. In your opinion, how important are each of the following tasks in your professional role, *specifically while working among individuals with dementia*?
 

NA = Not considered my responsibility

0	= Not at all important
1	= Just a little important
2	= Somewhat important
3	= Fairly Important
4	= Extremely important

  - a. Housekeeping for residents
  - b. Administering medications
  - c. Assisting in personal hygiene
  - d. Preparing/serving food
  - e. Taking residents for a walk or assisting in mobility within the facility

- f. Ensuring residents are safe
- g. Answering call lights
- h. Offering emotional support (kind words, active listening)
- i. Assistance with leisure activities
- j. Offering informational support (giving instructions)
- k. Offering companionate support (making sincere friendly connections)
- l. Offering esteem support (encouragement, positive statements)

6. What kind of education or training have you received for your job? Please list the

**CNA Certification course:** Approximately \_\_\_\_\_ hours OR  
\_\_\_\_\_ full days of training

**Clinical hours:** Approximately \_\_\_\_\_ hours

**In-service education/participation:** Approximately \_\_\_\_\_ hours

**Other (please specify)** \_\_\_\_\_ Approximately  
\_\_\_\_\_ hours OR \_\_\_\_\_ full days

7. In the above trainings, how many of the hours were devoted specifically to  
*dementia-care*?

**CNA Certification course:** Approximately \_\_\_\_\_ hours

**Clinical hours:** Approximately \_\_\_\_\_ hours

**In-service education/participation:** Approximately \_\_\_\_\_ hours

**Other (please specify)** \_\_\_\_\_ Approximately  
\_\_\_\_\_ hours

\_\_\_\_\_ **Check here if you don't remember**

8. If you have received dementia-specific education/training, why did you attend the training? Check all that apply
- a. Personal interest
  - b. Required for job
  - c. Extra compensation/incentive
  - d. Maintain certification
  - e. Other (please specify)

Demographics (age, sex, race, ethnicity, income level)

9. Your Age \_\_\_\_\_

10. What is your gender?

- i. Female
- ii. Male
- iii. Trans male
- iv. Trans female
- v. Other (please specify)
- vi. Prefer not to answer

11. What is your race/ethnicity?

- i. White
- ii. Hispanic, Latino, or Spanish
- iii. Black or African American
- iv. Asian
- v. American Indian or Alaska Native
- vi. Middle Eastern or North African

- vii. Native Hawaiian or Pacific Islander
- viii. Other (please specify) \_\_\_\_\_
- ix. Multi-racial (please specify) \_\_\_\_\_
- x. Prefer not to answer

12. What is your household income level?

- i. Less than \$25,000
- ii. \$25,000 - \$44,999
- iii. \$45,000 - \$64,999
- iv. \$65,000 - \$84,999
- v. \$85,000 or more

13. What is your current level of formal education?

- i. GED or equivalent
- ii. High school diploma
- iii. Some college \_\_\_\_\_ years
- iv. Completed Associate's Degree
- v. Completed Bachelor's Degree
- vi. Some graduate training \_\_\_\_\_ years
- vii. Completed a Graduate Degree (specify degree) \_\_\_\_\_

## **Appendix B. Qualitative Interview Questions:**

### **Career**

1. Why did you choose to work as a CNA as opposed to other jobs?
2. How long do you plan to work as a CNA? Do you see this as a long-term career?
3. Tell me about training required for this job: Can you describe in more detail the dementia-specific trainings you have received? Do you think these trainings prepared you well for working with people with dementia? Why or why not?

### **Rapport building questions**

4. Of all of the duties you have in your job, which do you find particularly rewarding, and why?
5. Which of these duties do you find particularly difficult or dissatisfying, and why?

### **Interactions**

6. How often do you feel you are able to engage in social conversations interactions with residents with dementia? What makes it easier or more difficult to interact with a person with dementia in social conversation?
7. Think about the times that you think you have had a high-quality social interaction with a resident with dementia, or you saw another CNA interacting really well with a resident with dementia. What verbal behaviors, like the ways that you or they were talking to the resident, made this most effective? Prompts:
  - a. What kind of volume do you (did they) use? Is always a “good” volume or are their situations that might require a different level of volume?
  - b. What kinds of words/language are used in high quality interactions with residents with dementia? (More Prompts: Are these words similar or do they differ from conversations with residents without dementia?)



- c. What is the overall tone of high-quality interactions with someone with dementia, and how might this vary based on the behavior or the mood of the person with dementia?
  - d. What specific phrases, if any, do you or other CNA's use in high quality interactions?
- 8. What verbal behaviors are least effective when working with residents with dementia?
  - a. Tell me about ineffective use of language (words/phrases) and overall tone – why are these ineffective?
- 9. What nonverbal behaviors lead to high quality interactions with residents with dementia?
  - a. Tell me about how you approach and use touch/physical contact with residents. Is it similar or different with a resident with dementia?
  - b. What is the best way to stand/posture yourself when interacting with patients with dementia?
  - c. What is the best way to use facial expressions such as smiling, eye contact, laughter, etc. when interacting with someone with dementia?
- 10. What nonverbal behaviors least effective when working with residents with dementia?
  - a. Prompts: posture, facial expressions, avoiding eye contact, etc.,
- 11. How did you come to realize the effective or ineffective ways to interact with someone with dementia?
  - a. Prompts: trial and error? (Give an example), observed or asked questions to co-workers, previous trainings (required or not) in learning these behaviors?
- 12. Possible Follow-up – Summary question:
 

Imagine a co-worker who seems to have the best interactions with residents with dementia. Describe what this person does that makes it go well.

Imagine a co-worker who has lower-quality interactions with residents. What would a low-quality interaction look like?

**Social Support**

13. The definition of social support includes emotional care and respect, encouragement, information and answers to questions, help with problems, and companionship from others. Do you think a person with dementia living at an assisted living facility needs all of these kinds of social support? If yes, which ones are the most important? Who should provide this support for them? If they don't need very much, why not?
14. What particular characteristics of residents with dementia that make it especially difficult for you to offer them these different kinds of social support?
15. Think of a staff member who you know has high quality *relationships* with one or more resident who has dementia. What do they do to build those relationships? How does this staff member provide social support to residents?
16. Which positions at this facility are the most responsible for engaging in social support with residents with dementia?

What keeps you from being more socially supportive to persons with dementia in your occupational role?