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Linking Key Factors of Quality Dementia Care: Knowledge and Self-Efficacy

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Abstract

Dementia-related changes in cognition, memory, and personality can have wide-ranging impacts on individuals, families, and healthcare systems (Plassman et al., 2007); including caregiver burnout, disruption of family life, and costly care requirements (Graneheim, Johansson, & Lindgren, 2014). Dementia has become a global issue; 46 million people worldwide have dementia and \$600 billion are spent on dementia-related care every year (Farina al., 2016). Certified nursing assistants (CNAs) generally assume the majority of day-to-day care and are a vital component of providing quality, person-centered services to patients with dementia in residential care (Burke & Orlowski, 2015). The purpose of this study was to explore the relationship between knowledge and self-efficacy in CNA caregivers of patients with dementia. This exploratory correlational study employed a cross-sectional design to examine the relationship between knowledge and self-efficacy in a group of 29 CNA caregivers of patients with dementia. Participants completed a survey battery measuring self-rated level of dementia knowledge, general dementia knowledge, knowledge of specific dementia approaches, and caregiver self-efficacy. The researcher used a Pearson's r correlation analysis to explore the relationships among the four outcomes. The researcher did not find the expected correlation between overall knowledge and self-efficacy, but perhaps more importantly, discovered a significant relationship found between caregivers' confidence in their dementia knowledge and their self-efficacy in working with these patients. Self-efficacy in care is less related to general dementia knowledge as much as a sense of knowing what to do as a dementia caregiver. Effective dementia training should educate not only on general understanding of dementia, but also on specific approaches to improve care outcomes.

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Linking Key Factors of Quality Dementia Care: Knowledge and Self-Efficacy

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This thesis, written under the direction of Susan Morris, PhD, OTR/L and approved by the Chair of the Occupational Therapy program, Ruth Ramsey, EdD, OTR/L, was submitted in partial fulfillment of the requirements Bachelors of Science in Occupational Therapy, School of Health Sciences and the Honors Program. The content, project, and research methodologies presented in this work represent the work of the candidate alone.

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Abstract

Dementia-related changes in cognition, memory, and personality can have wide-ranging impacts on individuals, families, and healthcare systems (Plassman et al., 2007); including caregiver burnout, disruption of family life, and costly care requirements (Graneheim, Johansson, & Lindgren, 2014). Dementia has become a global issue; 46 million people worldwide have dementia and \$600 billion are spent on dementia-related care every year (Farina al., 2016). Certified nursing assistants (CNAs) generally assume the majority of day-to-day care and are a vital component of providing quality, person-centered services to patients with dementia in residential care (Burke & Orlowski, 2015). The purpose of this study was to explore the relationship between knowledge and self-efficacy in CNA caregivers of patients with dementia. This exploratory correlational study employed a cross-sectional design to examine the relationship between knowledge and self-efficacy in a group of 29 CNA caregivers of patients with dementia. Participants completed a survey battery measuring self-rated level of dementia knowledge, general dementia knowledge, knowledge of specific dementia approaches, and caregiver self-efficacy. The researcher used a Pearson's r correlation analysis to explore the relationships among the four outcomes. The researcher did not find the expected correlation between overall knowledge and self-efficacy, but perhaps more importantly, discovered a significant relationship found between caregivers' confidence in their dementia knowledge and their self-efficacy in working with these patients. Self-efficacy in care is less related to general dementia knowledge as much as a sense of knowing what to do as a dementia caregiver. Effective dementia training should educate not only on general understanding of dementia, but also on specific approaches to improve care outcomes.

Keywords: dementia, CNA, self-efficacy, knowledge, caregiver

Introduction

Dementias are a group of chronic and progressive neurocognitive disorders characterized by symptoms that may include cognitive impairments, memory deficits, personality changes, and behavioral changes (Alzheimer's Association, 2016). The progressive symptoms of dementia often interfere with a person's cognitive functioning and ability to engage in valued daily activities. As symptoms increase, individuals with dementia often need assistance completing basic activities of daily living and complexity of care also increases (Alzheimer's Association, 2016). Recent research has explored the stressful nature of dementia care, citing dementia care as more emotionally taxing than care for an individual with a physical disability (Brodaty & Donkin, 2009). In residential care facilities, certified nursing assistants (CNAs) provide the majority of day-to-day care for patients with dementia and are at significant risk for burnout due to caregiver burden (Duffy, Oyeboode, & Allen, 2009). In order to provide CNAs with the knowledge, support, and techniques necessary to provide quality care to the person with dementia (PWD), California state law requires eight hours of dementia-specific training. The training is required to meet a set list of criteria, and must be completed every two years (Burke & Orłowski, 2015). Due to the limited time and resources available for caregiver training, it is important that training programs address factors directly related to quality of care. Duffy et al. examined determinants of quality dementia care and found quality of care to be related to caregiver knowledge and caregiver self-efficacy (2009). What remains to be examined is the relationship between knowledge and self-efficacy, and determining whether specific types of knowledge and self-efficacy impact the efficacy of future training programs for caregivers of PWD.

Literature Review

Dementia: Population Description

Dementia is a broad category of chronic, progressive, and terminal conditions characterized by a group of symptoms (Warren, 2016). Common causes of dementia include Alzheimer's disease, vascular dementia, Lewy body dementia, and frontotemporal dementia (World Health Organization, 2016). Symptoms of dementia include cognitive deficits, progressive memory challenges, personality and behavioral changes, and decreased functional independence. Dementia-related changes in cognition, memory, and personality can have wide-ranging impacts on individuals, families, and healthcare systems (Plassman et al., 2007); including caregiver burnout, disruption of family life, and costly care requirements (Graneheim, Johansson, & Lindgren, 2014). In recent years, dementia has become a global issue; 46 million people worldwide have dementia and \$600 billion are spent on dementia-related care every year (Farina al., 2016). Prevalence and costs of dementia are expected to rise exponentially in the coming years, with the global dementia population reaching 131.5 million by 2050 and global care costs reaching trillions of dollars by 2018 (Alzheimer's Disease International, 2015). In North America alone, 6.4% of individuals aged 60 or older have a diagnosis of dementia; in total, it was estimated that approximately 74.88 million Americans were living with dementia in 2015 (Alzheimer's Disease International, 2015).

Treating Persons with Dementia in Residential Care Facilities

The burden of acting as the primary caregiver for a family member with dementia can be intense. The family caregiving experience can be characterized by stress, forced changes to daily life and activities, challenges balancing between care and career, and isolation (Graneheim et al., 2014). These difficulties are compounded by the need for 24-hour monitoring of the PWD. The

burden of care becomes increasingly demanding as dementia progresses and family caregivers may often seek residential care placement for their loved ones with dementia (Graneheim et al, 2014). Approximately 50% of nursing home residents in the United States have a diagnosis of dementia and 13% of residents have dementia as their primary diagnosis (Daly, Bay, Levy, & Carnahan, 2015).

Dementia caregivers in residential care facilities. In residential care facilities, interdisciplinary teams of health professionals are responsible for patient care. Certified nursing assistants (CNAs) generally assume the majority of day-to-day care and are a vital component of providing quality, person-centered services to residents with dementia (Burke & Orlowski, 2015). Caregiving for PWD often requires active assistance with and facilitation of client self-care routines throughout the day and job demands can be compounded by the need to adjust for cognitive, behavioral and affective changes associated with dementia (Brodaty & Donkin, 2009). With large numbers of people with dementia in residential care, caregiver burden among CNAs is high. Burnout, associated with emotional and physical exhaustion due to strains experienced at work, can occur among primary caregiver CNAs (Duffy, et al., 2009). Burnout, in turn, is correlated with negative outcomes for health care providers and decreases in the quality of care provided (Duffy et al., 2009).

Antipsychotic Medications and Dementia Care

According to Bakerjian (2014), dementia care quality in the United States is negatively impacted by unnecessary use of antipsychotic medications to minimize challenging behaviors associated with dementia. Antipsychotics are often prescribed “off-label” for patients with dementia demonstrating disruptive behaviors. Despite the prevalence of use, the safety and efficacy of these medications in this population have not been established (Chiu, Bero, Hessel,

Lexchin, & Harrington, 2015). Slightly more than one in four nursing home residents are actively prescribed unnecessary antipsychotic medications; which results in many adverse outcomes, including movement disorders, cardiac issues, affective changes, and death (Chiu, Bero, Hessol, Lexchin, & Harrington, 2015). Multiple factors impact the quality of dementia care; however, limited caregiver knowledge about dementia is the primary aspect contributing to reliance on pharmacological-based interventions (Bakerjian, 2014). In the past, antipsychotic medications have been administered because patients with dementia are easier to manage when subdued; however, this approach does not promote patient quality of life or positive outcomes.

A newly formed national partnership of 21 health care organizations – including the Centers for Medicare and Medicaid Services, Alzheimer’s Association, and California Department of Public Health Center for Health Care Quality – is striving to improve quality of dementia care by decreasing use of antipsychotic medications and identifying and disseminating evidence-based approaches and effective training programs (Bakerjian, 2014). The focus of care is on non-pharmacological interventions to facilitate patient engagement in care and promote quality of life. One such effort seeks to use caregiver training as a medium for enhancing empathy towards patients and promoting effective care approaches to eliminate need for medications (Bakerjian, 2014).

Factors Related to Quality of Care

Dementia knowledge. In order to promote non-pharmacological approaches to quality dementia care, many states have established dementia-specific training requirements for re-certification of CNAs (Burke & Orlowski, 2015). CNA training programs seek to meet these standards by increasing knowledge of dementia and effective care strategies. In a study evaluating one such program, Surr, Smith, Crossland, and Robins (2016) found that staff

knowledge of dementia positively impacted the quality of care and concluded by advocating for increased dementia care education and use of person-centeredness as the optimal approach to dementia care.

Caregiver self-efficacy. Caregiver self-efficacy, a caregiver's confidence and belief in his or her ability to provide effective and meaningful care to patients with dementia, is also linked to burnout and care outcomes. One study found self-efficacy to be the greatest predictor of burnout and that high levels of burnout were correlated with lower levels of self-efficacy (Duffy et al., 2009). The authors cited emotional exhaustion and depersonalization as effects experienced by caregivers with low self-efficacy, which contribute to the link between burnout and low self-efficacy. Positive self-efficacy was also positively correlated with caregiver quality of life. (Farina et al., 2016). Caregiver self-efficacy is a targeted outcome to be addressed during CNA training in an effort to reduce burnout incidences.

Gaps. Duffy et al. found that knowledge and self-efficacy are positively correlated with quality of dementia care (2009). However, the relationship between knowledge and self-efficacy among CNAs working with PWD has not been adequately studied. More needs to be understood about what kinds of knowledge are related to caregiver self-efficacy, examining the importance of not only general knowledge of dementia, but also knowledge of specific approaches to dementia. Knowledge is often the primary area of focus in training for CNAs (Burke & Orlowski, 2015), but it is not yet known if increasing knowledge has an effect on other care-related outcomes, such as self-efficacy.

Purpose Statement

The number of older adults with dementia in the United States is steadily increasing and is projected to grow exponentially in the near future. Consequently, the representation of individuals with dementia in skilled nursing facilities is also predicted to rise, as family members seek quality care for their loved ones. CNAs are the primary caregivers for patients with dementia in skilled nursing facilities, assisting patients in completing essential self-care tasks. To ensure that CNAs possess the necessary tools to provide quality care for patients with dementia, many states have begun establishing curriculum standards for CNA training programs that include techniques for meeting patient needs, communicating effectively with patients, and reducing the impact of cognitive impairment on function. Although there is evidence that caregiver knowledge and caregiver efficacy is related to quality of care, what remains to be studied is the relationship between caregiver knowledge and self-efficacy.

Therefore, the purpose of this capstone was to investigate the relationship between knowledge and self-efficacy in CNA caregivers of patients with dementia. The research question and hypotheses for this research study were as follows: What is the relationship between knowledge and self-efficacy in CNA's?

- *Null hypothesis:* There is no significant correlation between knowledge levels and self-efficacy levels in CNA caregivers of patients with dementia.
- *Alternate hypothesis 1:* There is a positive correlation between knowledge levels and self-efficacy levels in CNA caregivers of patients with dementia.
- *Alternative hypothesis 2:* There is a negative correlation between knowledge levels and self-efficacy levels in CNA caregivers of patients with dementia.

Theoretical Framework

Derived from his social learning theory, Bandura's theory of self-efficacy is the concept that belief in the ability to achieve a desired outcome increases likelihood of acting in pursuit of said outcome (Bandura, 1977). Essentially, people are motivated to attempt behaviors that they feel confident performing, or predict a high chance of success. This sense of self-efficacy or confidence can be developed and maintained via four pathways: 1) performance accomplishments or mastery experiences; 2) vicarious experiences; 3) verbal or social persuasion; and 4) physiological or somatic and emotional states. "Performance accomplishments" or personal experiences with success in a behavior are strongly linked to a sense of mastery or self-efficacy in that activity; conversely, failures in a behavior can undermine self-efficacy. Vicarious experiences of success, or observing the success of people with knowledge and skills similar to one's own, are connected to the belief that the observer also possesses the ability to achieve success in comparable activities. Verbal or social persuasion is the process of verbally persuading an individual that they have the abilities, know-how, and self-efficacy to succeed in an activity. With regard to physiologic states, physical experiences of stress or tension are associated with low chances of successful performance and thus low self-efficacy. Positive somatic states are, in turn, correlated with a higher sense of self-efficacy and increased chances of success.

Using two of the four pathways discussed in Bandura's self-efficacy theory, training programs for CNA caregivers of patients with dementia enhance self-efficacy by providing opportunities for performance accomplishments and creating vicarious experiences of successful dementia care through case studies and role play. Ideally, effective training would capitalize on

these pathways to enhance caregiver self-efficacy and increase engagement in positive care behaviors.

Definitions

Outcomes analyzed in the study are derived from self-reported responses to questionnaires and scoring on knowledge scales. Key terms utilized throughout the study are operationalized as follows:

- *Dementia knowledge*: refers to understanding of dementia; its course, progression, and symptoms, abilities retained and lost through its progression, the experience of having dementia, understanding of effective approaches working with patients with dementia, application of these approaches.
 - *General dementia knowledge*: Understanding of dementia as a diagnosis; its prognosis, and symptoms.
 - *Dementia approaches knowledge*: Understanding of abilities retained at each stage of dementia and effective approaches and techniques for facilitating patient engagement throughout the course of the disease. *Dementia is terminal and progressive; understanding the disease cannot be cured and patients are not cared for in an effort to rehabilitate, but to accommodate, support, and facilitate engagement in meaningful occupations.*
- *Caregiver self-efficacy*: Caregiver's confidence and belief in his or her ability to provide effective and meaningful care to patients with dementia. Belief that care provided has a positive impact and makes a difference for patients.

- *Dementia knowledge self-assessment*: global self-assessment of dementia-specific knowledge. Refers to an individual's perception of his or her dementia-specific knowledge and their confidence in their knowledge level, not knowledge itself.

Methodology

Design

This exploratory correlational study employed a cross-sectional design to examine the relationship between knowledge and self-efficacy in a single group of CNA caregivers of patients with dementia. The study sample consisted of 29 CNA participants who were recruited from two Ensign™ skilled nursing facilities in Sonoma County, California. In compliance with state regulations to maintain CNA certification, participants had completed training consisting of at least six to eight hours of dementia specific education (Burke & Orlowski, 2015). Inclusion criteria for participation were: status as a certified nursing assistant, a caseload that included patients with dementia, and primary language of English or Spanish. There were no exclusion criteria.

Recruitment

A convenience sample of 29 CNAs was recruited at the two SNF sites. The research team communicated with Ensign™ management to establish a convenient date, time, and venue for recruitment and participation. In preparation for recruitment, the research team created an informational flyer to discuss key points of the study and encourage CNA participation. The flyer also explained that participants would be entered into a raffle for one \$100 Visa® gift card at each SNF site. On April 21, 2017, using the facilities' break rooms for recruitment and participation, the research team invited potential eligible participants to join the study. Eligibility

was determined by a brief interview confirming status as a CNA actively working with patients with dementia. If an eligible participant consented to participate in the study, he or she was given a questionnaire packet to complete that day, during their break if possible. Prior to completing the packet, participants were provided with their research participant bill of rights and a consent form to sign, both of which were reviewed with the participants. Participants completed the questionnaire packets on the same day as recruitment and the team later entered the data, and analyzed results using SPSS software program.

Outcome Measures

In addition to the original English version, the research team translated the outcome measure packet into Spanish, available for participants who were more comfortable completing the measures in Spanish.

Dementia Knowledge Self-Assessment (KSA). Participants' perception of their knowledge about dementia was measured using a single global question where they rated their current knowledge of dementia on a Likert scale from one (no knowledge of dementia) to five (a high level of knowledge about dementia). Although this measure was named in terms of knowledge, it actually served more as a measure of self-efficacy because it asked for the respondent's perception of his or her knowledge, but did not actually measure or test said knowledge. The research team developed the KSA for this particular study and psychometrics have not been evaluated. (Appendix C, Part 4, Question 9).

Dementia Knowledge Assessment Scale (Measuring general dementia knowledge). Fifteen true/false statements adapted from Annear et al.'s Dementia Knowledge Assessment Scale (DKAS) were used to assess general knowledge of dementia (2015). The DKAS is a true/false style knowledge exam that quantifies general knowledge levels about different

components of dementia. Items include statements about characteristics, symptoms, progression, and care of dementia. Annear et al. (2015), conducted preliminary research to assess the reliability and validity of the DKAS. Results of the research found DKAS to be a valid and reliable measure of dementia knowledge across a range of settings and practitioners, including caregivers. The research team chose to select 15 of the original 27 DKAS questions to create a brief general dementia knowledge questionnaire that was relevant to CNAs and their roles in dementia care (Appendix C, Part 5). In addition, the research team simplified the response scale from a four-point Likert scale with an “I don’t know” option to simply three possible responses: “true”, “false”, and “I don’t know”. However, because of these adjustments, the validity and reliability found in Annear et al.’s (2015) research may not apply. The total possible score of the DKAS version utilized ranged from zero to 30, with a higher score indicating a higher level of dementia-specific knowledge.

Abilities Care Experts (ACE) Exam, Parts I & II (Measuring dementia approaches knowledge). In its original form, the Abilities Care Experts Exam, Parts I & II (ACE I & II) is used at the conclusion of the facility’s training sessions to test participants’ acquired knowledge about dementia overall and about specific dementia care approaches. The research team used an adapted version of the dementia knowledge exam administered in a CNA training program at one of the participating SNFs to measure CNA dementia knowledge and knowledge of stage-specific dementia-related care approaches. The training program’s knowledge exam has not been tested for validity or reliability.

The exam was adapted for use in this study and was split into two parts (ACE I and ACE II), the first focusing on overall knowledge of dementia care and the second on appropriate approaches to dementia care (Appendix C, Parts 6 & 7). The exam included, multiple choice,

matching, and true/false questions. The total possible scores on ACE I ranged from zero to 14 and on ACE II ranged from zero to 34, with a higher score on ACE I indicating higher general dementia knowledge and on ACE II higher dementia approaches knowledge.

Self-Efficacy Scale (Measuring dementia caregiver self-efficacy). The Self-Efficacy Scale (SES) was adapted from the Nursing Assistant's Self-Efficacy for Restorative Care Activities (NASERCA) to measure efficacy of care (Resnick & Simpson, 2003). NASERCA in its original form is a self-report measure that assesses CNAs' confidence in their ability to provide person-centered care for patients with dementia. The adapted NASERCA, called the SES in this study, is a nine-question measure with a Likert response scale ranging from one to five (Appendix C, Part 8). The measure defines one as no confidence and five as total confidence. Analysis using hypothesis testing provided preliminary evidence for the NASERCA's validity (Resnick & Simpson, 2003). Because the research team adapted the NASERCA to create the SES for this study, further psychometric assessment of the measure is indicated. The total possible points for the SES ranged from nine to 45, with a higher score indicating increased confidence in caregiving efficacy.

Ethical and Legal Considerations

The described research, recruitment, and implementation methods were approved by Dominican University of California's Institutional Review Board for the Protection of Human Participants (IRBPHP) and Ensign Group™ Agency Directors (Appendix A) and are in compliance with university standards, Ensign regulations, and the AOTA code of ethics. The research team obtained permission to use and modify copyrighted measures via email correspondence with measure authors (Appendix B).

Participants were provided with their bill of rights and conditions for consent in writing and consent was obtained with a signature after review of these documents (Appendix C, Part 1 & 2). Data gathered in the study was kept confidential. Participants were assigned identification numbers for the purpose of the study, which were written on each page of the questionnaire packet in lieu of participant name. Only identification numbers and, not the participant's name, were directly associated with any data gathered. The key linking names with identification numbers was locked in the office of the thesis advisor, Susan Morris, PhD, OTR/L, and will be destroyed after study completion. Only the research team and advisor will have access to completed measures and raw data. Completed outcome measures were also stored in Dr. Morris' office in a locked cabinet and any computerized data was stored on a password-protected desktop computer. Data analysis took place on university grounds on a password-protected desktop.

Statistical Analysis

The research team conducted analyses using IBM SPSS-22 Statistics software. Descriptive statistics were derived to identify the demographic characteristics of the study population and the dementia expertise of the participants. Next, a bivariate correlation analysis was carried out, to ascertain whether a relationship exists between overall scores on dementia knowledge self-assessment, general dementia knowledge, dementia approaches knowledge (parts one and two), and self-efficacy scales.

Results

Participant Characteristics

In total, 29 CNAs from two Ensign™ skilled nursing facilities participated in the study ($n=29$); 13 from one facility and 16 from the other. The majority of the participants spoke

English ($n=21$, 72.4%) and eight (27.6%) spoke Spanish. Five (17.2%) of the participants identified as male and 24 (82.8%) identified as female. The largest proportion of participants described themselves as Hispanic ($n=20$, 67.0%), five (17.2%) described themselves as Caucasian, one (3.4%) as African American, and three (10.3%) as Asian or Pacific Islander. With regard to highest level of education achieved, eight (27.6%) reported a primary school education, six (20.7%) reported a high school education, 12 (41.4%) reported a certification or apprenticeship, two (6.9%) reported a university education, and one (3.4%) reported a higher university education. See **Table 1** for a summary of participant characteristics data.

Table 1. Participant Demographics

	<i>n</i> <i>(# Of subjects out of 29)</i>	Percentage (%)
Facility		
Parkview Post Acute	13	44.8%
Broadway Villa Post Acute	16	55.2%
Language		
English	21	72.4%
Spanish	8	27.6%
Gender		
Male	5	17.2%
Female	24	82.8%
Ethnicity		
Hispanic	20	67.0%
Caucasian	5	17.2%
African American	1	3.4%
Asian or Pacific Islander	3	10.3%
Highest Education Level		
Primary school	8	27.6%
High school	6	20.7%
Certification or apprenticeship	12	41.4%
University	2	6.9%
Higher university	1	3.4%

Twenty-eight participants responded to the question, “How many years have you been a CNA?”, while one left the question blank. Answers ranged from one year to 27 years as a CNA,

with an average of 10.3 ($n=28$) years of experience. Twenty-eight participants provided information about CNA experience in dementia care, ranging from one to 20 years of dementia care experience, with an average of 8.35 years ($n=28$).

Dementia Knowledge

The knowledge section of the questionnaire was comprised of four measures: the Knowledge Self-Assessment, the Dementia Knowledge Assessment Scale, Abilities Care Experts Exam I, and Abilities Care Experts Exam II. Missing data were replaced using a mean substitution strategy, where the mean score for each individual item was imputed when data was missing. A descriptive statistics analysis was used to determine averages and standard deviations for the overall knowledge section and for each of the four measures (**Table 2** - Knowledge and Self-Efficacy Scores). Together, total scores on the four components were tabulated to create an overall knowledge score. The average score on the knowledge section overall was 84.5 ($n=27$, $s.d.=17.1$) out of 121 total possible points.

Caregiver Self-Efficacy

The SES was used as a measure of caregiver self-efficacy in working with patients with dementia. Twenty-seven of the 29 participants completed the SES measure; two participants did not complete the SES portion of the packet, so their data were excluded in the descriptive statistics analysis of self-efficacy. The average total score on the SES was 37.6 ($n=27$, $s.d.=8.33$) out of 45 possible points, a mean of 83.6% correct responses (**Table 2** – Knowledge and Self-Efficacy Scores).

Table 2. Knowledge and Self-Efficacy Scores

	<i>n</i> (number of subjects out of 29 participants)	Mean score	Possible score	Average Percentage Correct	Standard deviation	Score Range (min- max)
Overall Knowledge	27	84.5	121	69.8%	17.1	
Knowledge Self-Assessment (KSA)	29	3.91	5	78.2%	0.92	2 - 5
Dementia Knowledge Assessment Scale (DKAS)	29	22.7	30	75.7%	3.42	12 - 28
Abilities Care Experts I (ACE I)	28	6.98	9	77.6%	2.40	4-12
Abilities Care Experts II (ACE II)	28	22.0	34	64.7%	6.60	8-34
Sum of ACE I and II	28	29.0	43	67.4%	7.57	14-42
Self Efficacy						
Self-Efficacy Scale (SES)	27	37.6	45	83.6%	8.33	9-45

Correlation Between Knowledge and Self-Efficacy

A bivariate, two-tailed correlations analysis of dementia knowledge and self-efficacy measures calculated the relationship between dementia knowledge self-rating, general dementia knowledge, dementia approaches knowledge, and caregiver self-efficacy. Caregiver self-efficacy and self-rated level of dementia knowledge were strongly correlated, $r(25) = .502, p < .01$. Scores on the assessment of general dementia knowledge (DKAS) and the specific dementia approaches exam (ACE II) showed a strong correlation, $r(26) = .507, p < .01$. Results also showed a mild

trend between self-rated level of dementia knowledge (KSA) and specific dementia knowledge exam scores (ACE II), ($r(28)=0.219$, $p = .06$, which, given the small sample size of the study, suggests a possible correlation between confidence in dementia knowledge with dementia approaches knowledge that may be revealed in a subsequent study with a larger sample.

There were several correlations that did not demonstrate the significance hypothesized by the researcher. Self-efficacy did not appear to be significantly correlated with levels of dementia knowledge. In addition, self-rated confidence in dementia knowledge was not significantly related to actual levels of general dementia knowledge.

Table 3. Pearson's r Correlations

	Knowledge Self- Assessment (KSA)	Dementia Knowledge Assessment Scale (DKAS)	Abilities Care Experts I (ACE I)	Abilities Care Experts II (ACE II)	ACE I & II Sum	Self- Efficacy Scale (SES)
KSA						
Pearson Correlation	1	-.004	-.161	.219*	.140	.502**
Sig. (2-tailed)		.982	.413	.263	.478	.008
<i>n</i>	29	29	28	28	28	27
DKAS						
Pearson Correlation	-.004	1	-.012	.507**	.438*	.015
Sig. (2-tailed)	.982		.951	.006	.020	.942
<i>n</i>	29	29	28	28	28	27
ACE I						
Pearson Correlation	-.161	-.012	1	.253*	.537**	-.144
Sig. (2-tailed)	.413	.951		.194	.003	.481
<i>n</i>	28	28	28	28	28	26
ACE II						
Pearson Correlation	.219*	.507**	.253*	1	.952**	.188
Sig. (2-tailed)	.263	.006	.194		.000	.358
<i>n</i>	28	28	28	28	28	26
ACE I & II						
Pearson Correlation	.140	.438**	.537**	.952**	1	.121
Sig. (2-tailed)	.478	.020	.003	.000		.554
<i>n</i>	28	28	28	28	28	26
SES						
Pearson Correlation	.502**	.015	-.144	.188	.121	1
Sig. (2-tailed)	.008	.942	.481	.358	.554	
<i>n</i>	27	27	26	26	26	27

Discussion and Limitations

Discussion

Correlational analysis showed self-efficacy was moderately correlated with participants' dementia knowledge self-rating, despite lack of significance between knowledge and self-efficacy overall. As established in the literature review, caregiver self-efficacy is a key characteristic related to the quality of dementia care, with higher levels of self-efficacy correlating to improved care quality (Farina et al., 2016). Given the results, it appeared that dementia knowledge self-rating was not related to dementia knowledge itself as the researcher had originally predicted. Instead, the significant relationship between self-efficacy and confidence in dementia knowledge revealed dementia knowledge self-rating to be more a matter of confidence in this dementia knowledge and thus their sense of efficacy as a caregiver. As detailed in Bandura's self-efficacy theory, self-efficacy is the pursuit of outcomes driven by confidence in one's ability to achieve said desired outcome (Bandura, 1977). Following Bandura's theory, caregivers are more likely to experience a sense of self-efficacy in their ability as caregivers if they have confidence in their knowledge as caregivers.

The researcher hypothesized that dementia knowledge levels would have a significant correlation with caregiver self-efficacy. However, analysis found no significant correlation between caregiver self-efficacy scores and overall dementia knowledge scores, meaning that knowledge of dementia prognosis, impacts, and approaches as a whole were not related to self-efficacy as a caregiver for patients with dementia. Results did, however, show a small correlation between the self-rating of dementia knowledge and ACE II, which covered specific approaches for working with patients with dementia. Although this correlation was small, and did not reach significance, further evaluation of this relationship is warranted in a larger study.

When designing training programs in the future to support CNAs in providing quality and efficacious dementia care, it is important to provide more education to increase caregiver confidence in their own knowledge. Currently, existing training programs discuss definition of dementia and possible approaches. However, placing an emphasis on possible approaches and creating opportunities for practice with case studies may enhance training effectiveness. Embedding trainings with discussions of approaches for individual patients given stage of dementia, remaining abilities, and interests may result in improved outcomes of dementia training and improving care outcomes of CNAs working in dementia care.

As predicted, the study found that ACE I and ACE II scores were correlated, as they are components of the same assessment; but were not correlated to the extent predicted. ACE I appeared to act as a measure of general dementia knowledge, whereas ACE II focused on specific approaches to the different stages of dementia.

Given the absence of a significant correlation, it appears that the Dementia Knowledge Assessment Scale and Abilities Care Experts Exam, Part I are measuring different kinds of knowledge and neither are related to self-efficacy. Analysis did reveal a significant correlation between the DKAS general knowledge measure and ACE II, suggesting that general dementia knowledge may serve as a solid foundation for understanding and applying dementia approaches.

Limitations

This study included several limitations. This study was conducted within the framework of a larger study, utilizing different analyses and approaches with some of the same data sets. As such, the researcher had to work within the parameters and requirements of the broader study in designing this one. The timeline restrictions of the studies resulted in a relatively small sample size due to the brief recruitment period and, as such, results should be generalized to the broader

population of CNA dementia caregivers with caution. Moreover, the measures used in this study were adapted for use in this study's population CNA caregivers to increase relevancy of items included. Future studies should focus on establishing the psychometric properties of the modified instruments to increase confidence in the validity and reliability of the measures and data produced. Given a larger sample size, randomized study design, and psychometrically analyzed measures, a future study could further explore and support the trends found in this research. Future studies would benefit from examining the relationship of these constructs and quality of care, exploring the specific care outcomes impacted by different levels of knowledge and self-efficacy.

Implications and Recommendations

Although correlational analyses only identify the presence of a relationship between factors rather than describing the nature of or causality within that relationship, it is still possible to discern implications for future CNA training from these results. The researcher did not find the expected correlation between overall knowledge and self-efficacy, but perhaps more importantly, discovered a significant relationship found between caregivers' confidence in their dementia knowledge and their self-efficacy in working with these patients. Self-efficacy in care is less related to general dementia knowledge as much as a sense of knowing what to do as a dementia caregiver. Effective dementia training should educate not only on general understanding of dementia, but also on specific approaches to improve care outcomes. Future studies would benefit from looking at the relationship between knowledge and self-efficacy within a specific training program to provide more information about beneficial aspects of training and areas to address to enhance these outcomes.

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Appendix A: Ensign CEO - Permission to Conduct a Research Study**LETTER OF PERMISSION TO AGENCY DIRECTORS**

January 17, 2017
Ensign Group Inc.

To whom it may concern:

We are writing to request permission to conduct a research study at two Ensign facilities, namely Park View Post-Acute and Broadway Villa Post-Acute in Santa Rosa. We are currently enrolled in the Masters of Science in Occupational Therapy at Dominican University of California in San Rafael, CA. We are conducting a study for our Master's Thesis investigating the effectiveness of the Abilities Care Approach Training Program (ACE). Our Master's Thesis is under the guidance of our advisor, Dr. Susan Morris. After approval from IRB, we hope to ask Ensign CNAs who work with dementia patients to complete several questionnaires about their experience in working with dementia patients. Our goal is to compare the questionnaire responses between CNAs who have completed the Abilities Care Experts training, and those who have not. Participation will be completely voluntary, individual responses will be kept confidential, and it should take no more than 45 minutes to complete the questionnaires. We will present the results of our research to both facilities upon completion of the study.

An approval to conduct this study will be greatly appreciated. We will be happy to answer any questions or concerns that you have at this time. You can contact the research team at: michelle.damato@students.dominican.edu.

If our request to conduct our study at these two Ensign facilities meets with your approval, please sign and date this letter below, scan it and email it to us as an attachment and return it to me in the enclosed self-addressed, stamped envelope as soon as possible. Please feel free to contact us if you have any questions about this project.

Sincerely,

Michelle D'Amato, OTS
Sophie Miller, OTS
Carmen Joaquin, OTS
April Perez, OTS
Louiza Alexandria Villain, OTS
Susan Morris, PhD, OTR/L

Signature

Date

Appendix B: Permission to Use Measures**Dementia Knowledge Assessment Scale**

Sophie Miller <sophie.miller@students.dominican.edu>

Permission to Use: Dementia Knowledge Assessment Scale

2 messages

Sophie Miller <[REDACTED]>

Wed, Jan 18, 2017 at 4:37 PM

To: [REDACTED]

Cc: Michelle D'Amato <[REDACTED]>, April Perez <[REDACTED]>, Carmen Joaquin <[REDACTED]>, Louiza Alexandria Villarina <[REDACTED]>, "Morris, Susan" <[REDACTED]>

Dear Dr. Annear,

I am an occupational therapy student at Dominican University of California. I am currently working on my Master's thesis exploring abilities-based approaches to dementia care. We are interested in using your Dementia Knowledge Assessment Scale. I am writing to ask for your permission to use this knowledge measure in our study and tailor it to our CNA study population.

Please let me know if I can provide any more information or answer any questions.

Sincerely,

Sophie Miller, OTS
Carmen Joaquin, OTS
Michelle D'Amato, OTS
April Perez, OTS
Louiza Alexandria Villain, OTS
Susan Morris, PhD, OTR/L

Michael Annear <[REDACTED]>

Thu, Jan 19, 2017 at 2:52 AM

To: Sophie Miller <[REDACTED]>

Hello Sophia

Please go ahead and use the DKAS at your convenience. You have our permission to do so. Please just cite the origin of tool from the papers by Annear et al.

All the best

Dr Annear

[Quoted text hidden]

Abilities Care Experts Test

Sophie Miller <sophie.miller@students.dominican.edu>

ACE Knowledge Tests: Permission to Use

2 messages

Sophie Miller <[REDACTED]>

Thu, Jan 19, 2017 at 3:53 PM

To: Sonya Sweeney <[REDACTED]>

Dear Sonya Sweeney, OTR/L,

I am an occupational therapy student at Dominican University of California. I am currently working on my Master's thesis exploring abilities-based approaches to dementia care. We are interested in using your ACE Knowledge Tests. I am writing to ask for your permission to use this knowledge measure in our study and tailor it to our study focus.

Please let me know if I can provide any more information or answer any questions.

Sincerely,

Sophie Miller, OTS
Carmen Joaquin, OTS
Michelle D'Amato, OTS
April Perez, OTS
Louiza Alexandria Villain, OTS
Susan Morris, PhD, OTR/L

Sonya Sweeney <[REDACTED]>

Thu, Jan 19, 2017 at 3:57 PM

To: Sophie Miller <[REDACTED]>

I, Sonya Sweeney OTRL, grant permission to utilize the ACE knowledge test and tailor it the described research study.

Best Regards,

Sonya Sweeney, OTRL

Sent from my iPhone

[Quoted text hidden]

Self-Efficacy Scale

Sophie Miller

Jan 18 (1 day ago) ☆

to Resnick, Susan, me, Carmen, Louiza, April ▾

Dear Dr. Resnick,

I am an occupational therapy student at Dominican University of California. I am currently working on my Master's thesis exploring abilities-based approaches to dementia care. We are interested in using your Nursing Assistants' Self-Efficacy for Restorative Care Activities. I am writing to ask for your permission to use this Self-Efficacy measure in our study and tailor it to our CNA study population,

Please let me know if I can provide any more information or answer any questions.

Sincerely,

Sophie Miller, OTS
Carmen Joaquin, OTS
Michelle D'Amato, OTS
April Perez, OTS
Louiza Alexandria Villain, OTS
Susan Morris, PhD, OTR/L

Resnick, Barbara M. <[REDACTED]>

Jan 18 (1 day ago) ☆

to Sophie, Susan, me, Carmen, Louiza, April ▾

absolutely. Feel free to use this and revise it in any way that you would like. Barb
Barbara Resnick, PhD, CRNP, FAAN, FAANP
Professor
Sonya Ziporkin Gershowitz Chair in Gerontology
University of Maryland, School of Nursing
655 West Lombard Street Room 390
Baltimore, MD 21201
Tel: [410 706 5178](tel:4107065178)
email: resnick@son.umaryland.edu

Appendix C: Outcome Measures Packet**Part 1 – Consent to Be a Research Participant** **CONSENT TO BE A RESEARCH PARTICIPANT**

1. I understand that I am being asked to participate as a Participant in a research study designed to assess knowledge of dementia care, attitudes toward individuals with dementia, and perception of patient/ caregiver relationship, and staff satisfaction. This research is part of Michelle D'Amato, Carmen Joaquin, Sophie Miller, April Perez, and Alex Villarina's Master's Capstone research project at Dominican University of California. This research project is being supervised by Susan Morris, PhD, OTR/L Assistant Professor of Occupational Therapy, Dominican University of California.
2. I understand that participation in this research will involve completing a questionnaire that may take up to 20 minutes to complete, which will include multiple choice, short answer, and true/false questions in regards to knowledge of dementia care, attitudes toward individuals with dementia, and perception of patient/ caregiver relationship, and staff satisfaction.
3. I understand that my participation in this study is completely voluntary and I am free to withdraw my participation at any time.
4. I am aware that all study participants will be provided with a written summary of the relevant findings and conclusions of this project at a subsequent staff meeting.
5. I understand that I will be discussing topics of a personal nature and that I may refuse to answer any question that causes me distress or seems an invasion of my privacy. I may elect to stop the interview at any time.
6. I understand that my participation involves no physical risk, but may involve some psychological discomfort, given the nature of the topic being addressed.
7. I understand that by participating in this study, I am contributing to the development of quality dementia care in skilled nursing facilities.
8. I understand that the measures are not evaluating the quality of my performance, but will instead be used to inform future training sessions. The questions are designed to be difficult and I need only answer to the best of my ability. Performance on these measures is not a reflection of my ability as a caregiver.
9. I understand that disclosed information will be kept confidential. All questionnaires will be identified using an identification number, and only the research team will have access to the identification number key. My participation and responses are not meant to advance or hinder my employment or my performance as a caregiver. Only overall results and conclusions from the study will be shared with Ensign personnel.

10. All procedures related to this research project have been satisfactorily explained to me prior to my voluntary election to participate.

11. I understand that if I have any further questions about the study, I may contact Ms. D'Amato at [REDACTED] or her research advisor, Susan Morris PhD, OTR/L at [REDACTED]. If I have further questions or comments about participation in this study, I may contact the Dominican University of California Institutional Review Board for the Protection of Human Participants (IRBPHP), which is concerned with the protection of volunteers in research projects. I may reach the IRBPHP Office by calling (415) 482-3547 and leaving a voicemail message, by FAX at (415) 257-0165 or by writing to the IRBPHP, Office of the Associate Vice President for Academic Affairs, Dominican University of California, 50 Acacia Avenue, San Rafael, CA 94901.

I HAVE READ AND UNDERSTAND ALL OF THE ABOVE EXPLANATION REGARDING THIS STUDY. I VOLUNTARILY GIVE MY CONSENT TO PARTICIPATE. A COPY OF THIS FORM HAS BEEN GIVEN TO ME FOR MY FUTURE REFERENCE.

Signature

Date

Part 2 – Participant Bill of Rights **RESEARCH PARTICIPANT'S BILL OF RIGHTS**

Every person who is asked to be in a research study has the following rights:

1. To be told what the study is trying to find out;
2. To be told what will happen in the study and whether any of the procedures, drugs or devices are different from what would be used in standard practice;
3. To be told about important risks, side effects or discomforts of the things that will happen to her/him;
4. To be told if s/he can expect any benefit from participating and, if so, what the benefits might be;
5. To be told what other choices s/he has and how they may be better or worse than being in the study;
6. To be allowed to ask any questions concerning the study both before agreeing to be involved and during the course of the study;
7. To be told what sort of medical treatment is available if any complications arise;
8. To refuse to participate at all before or after the study is stated without any adverse effects. If such a decision is made, it will not affect his/her rights to receive the care or privileges expected if s/he were not in the study.
9. To receive a copy of the signed and dated consent form;
10. To be free of pressure when considering whether s/he wishes to agree to be in the study.

If you have other questions regarding the research study, you can contact the researchers Michelle D'Amato, Sophie Miller, Carmen Joaquin, Louiza Alexandria Villarina, and April Perez or their advisor Dr. Susan Morris, at [REDACTED]. You may also contact The Dominican University of California Institutional Review Board for the Protection of Human Subjects by telephoning the Office of Academic Affairs at [REDACTED] or by writing to the Associate Vice President for Academic Affairs, Dominican University of California, 50 Acacia Avenue, San Rafael, CA. 94901.

Part 3 – Letter to Participant

Dear Participant,

We value your contribution to this study.

These questions are designed to understand what health care professionals know about dementia and their experience and attitudes towards dementia care. The questions will specifically focus on knowledge of dementia care, attitudes towards dementia, self-efficacy as a dementia caregiver, and job satisfaction.

The study has 5 sections:

- Section 1: Demographic Information**
- Section 2: Attitudes Towards Dementia Survey**
- Section 3: Dementia Knowledge Assessment Scale**
- Section 4: Abilities Care Experts Tests - Part 1 and 2**
- Section 5: Job Satisfaction Scale**
- Section 6: Self-Efficacy Scale**

Your answers to this study will remain confidential and be stored securely at Dominican University of California. An identification number will be used in place of your name when analyzing, presenting, or publishing information collected using this survey. Answers provided will not be traceable to individual respondents.

This study will take about 20 minutes to complete.

Please complete all surveys to the best of your knowledge and abilities. Please DO NOT refer to any printed, online, or other information about dementia while you are completing the survey. It is important that your current understanding of dementia informs the answers you provide.

Thank you for taking part.

Sincerely,

**Michelle D'Amato, OTS
Sophie Miller, OTS
Carmen Joaquin, OTS
April Perez, OTS
Louiza Alexandria Villarina, OTS
Susan Morris, PhD, OTR/L**

Part 4 – Demographic Questionnaire (with Knowledge Self Assessment)

Directions:

In this section we would like some general information about you. Write or mark your response in the space provided.

1. Date of Birth (MM/DD/YYYY): ____ / ____ / ____
 2. Gender: ☐ Male ☐ Female ☐ Other
 3. Ethnicity (cultural heritage):
 - ☐ White/Caucasian ☐ Hispanic or Latino ☐ Black or African American
 - ☐ Native American or American Indian ☐ Asian or Pacific Islander
 - ☐ Other: _____
- (write here)
1. How many years have you been a CNA? _____ (years)
 1. How long have you worked with patients with dementia? _____ (years)
 1. What is your highest level of completed education?
 - ☐ Primary / elementary school (including middle school)
 - ☐ High school graduate (high school leaver certificate)
 - ☐ Certificate or apprenticeship
 - ☐ University / college degree (Bachelor's degree)
 - ☐ Higher University degree (Masters or PhD)
 1. Have you ever completed a formal dementia education course or workshop?
 - ☐ Yes ☐ No
 1. If so, how long was the course AND in what year did you complete the course?

_____ (length/duration)
_____ (year completed)

Knowledge Self-Assessment:

How do you rate your current knowledge of dementia on a scale from 1 (no knowledge of dementia) to 5 (a high level of knowledge about dementia)? _____

Adapted from Annear, M. J., Toye, C. M., Eccleston, C. E., McInerney, F. J., Elliott, K. J., Tranter, B. K., & ... Robinson, A. L. (2015). Dementia knowledge assessment scale: Development and preliminary psychometric Properties. *Journal Of The American Geriatrics Society*, 63(11), 2375-2381. doi:10.1111/jgs.13707

Part 5 – Dementia Knowledge Assessment Scale

Directions:

Below are statements about dementia. Please answer the following questions to the best of your

abilities using the response scale below. Mark (✓) the appropriate box to indicate how true or false you believe each statement to be. Please **DO NOT** refer to any printed, online, or other information about dementia while you are undertaking the scale.

Q#	Statements about dementia	Response Scale		
		True	False	I don't know
1	Dementia is a normal part of the aging process.	☐	☐	☐
2	Alzheimer's disease is the most common form of dementia.	☐	☐	☐
3	People can recover from the most common forms of dementia.	☐	☐	☐
4	Most forms of dementia reduce the length of a person's life.	☐	☐	☐
5	Planning for end of life care is generally NOT necessary following a diagnosis of dementia.	☐	☐	☐
6	It is impossible to communicate with a person who has advanced dementia.	☐	☐	☐
7	A person experiencing advanced dementia will NOT generally respond to changes in their environment.	☐	☐	☐
8	It is important to correct a person with dementia when they are confused.	☐	☐	☐
9	People experiencing advanced dementia often communicate through body language.	☐	☐	☐
10	Uncharacteristic or disruptive behaviors in a person experiencing dementia are generally a response to unmet needs.	☐	☐	☐
11	People experiencing dementia often have difficulty learning new	☐	☐	☐

	skills.	<input type="text"/>
12	Daily care for a person with advanced dementia is effective when it focuses on providing comfort.	<input type="text"/>
13	Difficulty eating and drinking generally occurs in the later stages of dementia.	<input type="text"/>
14	People with advanced dementia may have difficulty speaking.	<input type="text"/>
15	Movement is generally affected in the later stages of dementia.	<input type="text"/>

Adapted from Annear, M. J., Toye, C. M., Eccleston, C. E., McInerney, F. J., Elliott, K. J., Tranter, B. K., & Robinson, A. L. (2015). Dementia knowledge assessment scale: Development and preliminary psychometric Properties. *Journal Of The American Geriatrics Society*, 63(11), 2375-2381. doi:10.1111/jgs.13707

Part 6 – Abilities Care Experts I**Directions:****Circle the best answer for each question below.**

1. The abilities which are required to complete a task (fine motor skills, vision, muscle strength, balance, coordination, cognition) is/are:
 - a. Procedural memories
 - b. Task demands
 - c. Physical
 - d. Active participation
1. This is part of the long-term memory that is responsible for knowing how to do things, also known as motor skills such as walking, talking, and dressing.
 - a. Procedural memories
 - b. Cognitive
 - c. Multi-sensory cueing and external cues
 - d. Psychosocial
1. Noisy behaviors, negative vocalizations, facial expressions (sad, angry, stressed), tense body language, grinding teeth, fidgeting, restlessness, repetitive questioning, wandering, outbursts, and noisy breathing are an example of:
 - a. Active participation
 - b. Passive participation
 - c. Sensory stimulation
 - d. Negative responses or behaviors
1. _____ focus(es) on the individual rather than on the condition, and on the person's strengths and abilities rather than losses, while considering the whole person rather than a series of tasks to be completed.
 - a. Resident-centered care
 - b. Task demands
 - c. Cognitive approach
 - d. Multi-sensory cueing and external cues
1. Verbal cues, tactile cues, visual cues, and gestural cues are an example of:
 - a. Psychosocial
 - b. Abilities care approach
 - c. Multi-sensory cueing and external cues
 - d. Resident-centered care
1. Wandering, pacing, and rummaging are examples of:
 - a. Abilities care approach
 - b. Non-purposeful behavior
 - c. Procedural memories
 - d. Active participation
1. Auditory (iPod/music), visual (magazines or sensory screens), tactile (massage with lotion), and olfactory (smelling flowers, coffee, fragrances/spices) stimulation are examples of:
 - a. Active participation
 - b. Cognition
 - c. Sensory stimulation

d. Abilities care approach

Adapted from Ensign ®

Part 7 – Abilities Care Experts Exam II**Directions:**

Please fill in the blank for each question below.

The following questions are related to ways in which the stages of dementia impact a resident's ability to participate in activities, as measured by the Allen Cognitive Levels (ACLs). These levels can be briefly defined as:

1. **ACL level 1:** End stage dementia, global cognition is profoundly impaired. Person responds to internal cues only.
2. **ACL level 2:** Late stage dementia, global cognition is severely impaired. Maximum assistance is needed to elicit postural reactions.
3. **ACL level 3:** Middle stage dementia, global cognition is severely impaired. Moderate assistance is needed to re-focus attention to sustain/complete simple repetitive actions.
4. **ACL level 4:** Early stage dementia. Global cognition is moderately impaired. Minimum assistance is needed to set up goal directed activities with tangible results.

Cueing strategies:

1. Resident requires constant verbal, visual, and tactile cues to follow a 1-step direction
 - a. ACL 1
 - b. ACL 2
 - c. ACL 3
 - d. ACL 4
2. Verbal, visual, and tactile cues for what to do next or how to get started with a task.
 - a. ACL 1
 - b. ACL 2
 - c. ACL 3
 - d. ACL 4

Characteristics and problems:

3. Fear of gravity and movement (transfers, repositioning in wheelchair, bed mobility/side to side):
 - a. ACL 1
 - b. ACL 2
 - c. ACL 3
 - d. ACL 4
4. Bed bound, cannot tell you what they want, total dependence for care:
 - a. ACL 1
 - b. ACL 2
 - c. ACL 3
 - d. ACL 4
5. Asks questions over and over and can use their hands for familiar tasks:
 - a. ACL 1
 - b. ACL 2
 - c. ACL 3
 - d. ACL 4

6. Typically modified independent to supervision for self-care ADLs, needs cues for safety, may not keep walker in front of them:

- a. ACL 1
- b. ACL 2
- c. ACL 3
- d. ACL 4

7. Able to perform repetitive actions in response to tactile cues:

- a. ACL 1
- b. ACL 2
- c. ACL 3
- d. ACL 4

8. Some assistance is required to solve any problems that occur as a result of minor changes in routine:

- a. ACL 1
- b. ACL 2
- c. ACL 3
- d. ACL 4

Questions #9 - 12

Using the following descriptions (a-d), write the letter of the correct description for each ACL level.

Abilities remaining that the resident in this level may have:

- a. Bed bound, cannot use hands, can have a response to sensory stimulation (music/iPod, tactile massage, etc).
- b. Cannot use their hands but can grasp objects (may not let go), promote finger foods (sandwiches), can hit a balloon or kick a ball.
- c. Can use their hands for familiar tasks and/or that have been simplified to make easier. May need help/cues during tasks for the next step or to continue.
- d. With help to set-up, can complete familiar tasks.

9. ACL 1 is _____.

10. ACL 2 is _____.

11. ACL 3 is _____.

12. ACL 4 is _____.

For Questions #13-17, write true or false to indicate how correct you believe each statement to be.

13. _____ True or False: When speaking to a resident with dementia, it is **best** to phrase the request in a question. (For example, Mrs. R, would you like to get dressed? Or Mrs. R, would you like to go to bingo? Or Mrs. R, would you like to eat in the social dining room?).

14. _____ True or False: It is important to gain eye contact when speaking to the resident.

15. _____ True or False: A tactile cue is when you touch the resident to help with participation with the task. (For example: You touch the back of Mrs. R's arm to have her reach toward the grab bar.).
16. _____ True or False: A visual cue is when you talk or speak to the resident.
17. _____ True or False: Residents with dementia need more time to process verbal requests.

Part 8 – Self-Efficacy Scale

Directions:
Use the following scale to answer the bolded statement for each item listed below. Please write your response in the space provided.

Response Scale				
1 Strongly Disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree

Q#	<i>I feel confident I can provide appropriate cueing and support when working with residents in tasks related to:</i>	Response
1	Bathing activities	
2	Dressing and undressing	
3	Eating	
4	Toileting	
5	Communicating with the resident	
6	Providing directions and cues for the resident to follow	
7	Having resident participate in a meaningful activity	
8	Episodes when the resident demonstrates troubling behavior	
9	Changing the environment to improve the behavior of the client	