

THE DEVELOPMENT AND EVALUATION OF AN INTERPERSONAL PERSON-  
CENTERED CARE INTERVENTION FOR GERIATRIC NURSE AIDES

A Dissertation by

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## ABSTRACT

Person-centered caregiving is a construct that is currently being defined and operationalized in the gerontology literature and in long-term care. The goal of this study was to further define interpersonal person-centered care by developing and pilot testing a training intervention for geriatric nurse aides. The training was developed to incorporate content regarding person-centered behaviors, knowing the residents, and understanding relationships. Specific materials used in the training were videos to model person-centered care, personalized resident videobiographies, and personalized videos of caregiving interactions between the nurse aides and the residents. The pilot testing of this intervention was implemented by using a quasi-experimental, waitlist control design in two nursing homes, Catholic Care and St. Joseph. The outcome measures included two behavioral observation measures for assessing person-centered care: the Person-Centered Care Inventory and the Global Behavioral Scale. Additional outcome measures included: dyadic measures of relational closeness and relationship satisfaction, nurse aide job satisfaction, and resident satisfaction with care. The findings indicate that the training intervention was successful in increasing both the nurse aides' and residents' sense of relationship closeness, as well as their relationship satisfaction. However, the nurse aides' person-centered caregiving behaviors care did not increase reliably. One explanation may be that the sampling of the nurse aides' caregiving behaviors was too small to provide an adequate test of the hypothesized increase. It is possible that relationship closeness increased as a result of the combination of encouraging the nurse aides and residents to think of themselves as being in a relationship as well as the specific content of the training intervention.

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## LIST OF ABBREVIATIONS

ADL	Activities of Daily Living
CNA	Certified Nurse Aide
GBS	Global Behavior Scale
MDS	Minimum Data Set
MSE	Mental Status Exam
MSQ	Minnesota Satisfaction Questionnaire
PCBI	Person-Centered Behavioral Inventory
RSI	Resident Satisfaction Index

# CHAPTER 1

## INTRODUCTION

### Overview of the Research

The number of elderly individuals in the United States in need of long-term care is growing (Pillemer, 2003). Americans are living longer and national figures project that resident placement demands will double to 14 million by 2021 (Zimmerman, Sloane, & Eckert, 2001). Frail institutionalized residents often have impaired cognition and communication abilities, and the monitoring and improving of their care quality has become a major focus of researchers (Bowers, Esmond, & Jacobson, 2003, McGilton, 2003). Many questions are raised as to the nature of nurse aide/resident relationships in long-term care and how these relationships affect quality of care. Under the current model of long-term care, nurse aides typically provide 80-90% of the direct care to residents and their ability to provide quality care has become an important determinant of resident outcomes (Bowers, Esmond, & Jacobson, 2003).

It has also been found that one of the most important sources of resident satisfaction is their relationships with staff (Skiorska-Simmons, 2001), and that nursing home residents frequently define quality of care in terms of the signs of individualized affection and friendship they found in the care they received (Bowers, Fibich & Jacobson, 2001). One type of care that embodies these preferences for personalized relationships between caregivers and residents is called person-centered care. Person-centered care is a relatively new way of thinking about care in the long-term care industry and is in the process of being defined in the literature as well as operationalized in the workplace. Recently, a study by White et al. (2008) identified six factors that best describe person-centered care. The six factors fall into two major categories:

interpersonal and organizational person-centered care. Three factors define “interpersonal” person-centered care: Personhood, Knowing the Person, and Nurturing Relationships. The three factors that define “organizational” person-centered care are Autonomy, Comfort Care, and Supportive Environment. The purpose of this study is to further define the interpersonal aspects of person-centered care by implementing and testing an intervention to promote the interpersonal aspects of person-centered care. This section outlines the concept of person-centered care as it has developed within gerontology, other recent interventions that influenced the development of the intervention, and the overall rationale for the intervention and its evaluation.

### *Person-centered Care*

Person-centered caregiving is a construct that is currently being defined and operationalized in the gerontology literature and in long-term care. Originally, it was conceptualized by Kitwood (1997) out of his work with dementia care. He defined personhood as “a standing or status that is bestowed upon one human being, by others, in the context of relationship and social being. It implies recognition, respect, and trust,” (p.8). Kitwood called upon people to no longer assume that because people were older and may have cognitive impairment they were unable to be in a relationship with others. He believed that the best kind of care was to continue to treat him or her as a person and to continue to help them define themselves through their relationships with others. He defined this type of care as person-centered care. Later, McCormick (2004) further refined the concept of person-centered care. He identified four concepts that defined person-centered care: Being in a social world, being in place, being in relation, and being with self. Being in a social world is defined as understanding the social world that the person lives in or had lived in and applying it to their care. Being in place is understanding the context where care is being provided. Being in relation is helping the

person stay connected to others through relationships and, lastly, being with self is helping people find meaning in their life and in their care. McCormick also identifies six core values of person-centered care: knowing the person, their values, their biography, their relationships, seeing their needs beyond the immediate, and showing authenticity.

Currently, the concept of person-centered care is being further refined and operationalized within the long-term care industry. It has become an important goal to increase the quality of care and a new paradigm of care is currently evolving. This has mainly been stirred by factors such as the quality improvement reforms in the Omnibus Budget Reconciliation Act (OBRA) of 1987, which require ongoing training for nurse aides and lessening the use of restraints on residents. Also, there has been a grassroots movement by the Pioneer Network, a group of social workers, nurses, and other long-term care employees that desires “culture change” and wants to reshape the very essence and philosophy of long-term care. “Culture change” efforts are defining a new paradigm of care that stresses the uniqueness and worth of each individual and providing care in ways that are respectful of residents’ autonomy. It also attempts to provide care within the context of cooperative relationships between nurse aides and residents, which are based on caregivers’ knowledge of the residents’ personality, as well as their personal histories and values. White’s work, (White, Newton-Curtin & Lyons, 2008) cited earlier, helps to clarify what is meant by both the interpersonal and organizational aspects of person-centered caregiving. White found that “Personhood” was the most important dimension and it was defined as emphasizing that each person is unique, has inherent value, and is worthy of respect. Specific emphases are placed on knowing the person’s preferences and perspective. “Knowing the Person” is defined as knowing the person’s history, cultural experience, personality, and activities of daily living (ADLs). “Autonomy” is defined as

care that emphasizes independence. “Nurturing Relationships” is defined as understanding that the person exists in a web of social relationships and that these relationships should emphasize trust, communication, consistency, attachment, friendship, and time together. “Comfort Care” is defined as competent care that combines both physical and emotional care. The last dimension is “Supportive Environment”, which is defined as using the environment to support person-centered care meaning that the environment should be both functional and beautiful. The most exciting aspect of White’s research is a new understanding that person-centered care is diverse in its meaning and that for some people person-centered care is about creating more personalized caregiving relationships and for others it is about promoting the autonomy of residents. White’s research helps to sort out the semantic confusions around person-centered care and encourages and legitimizes a variety of efforts to promote person-centered care.

White’s work also parallels the research by Grosch, Medvene, & Wolcott (2008). This research defines person-centered care as care that is not task driven, but driven by the person or individualized care. Person-centered care can be defined on an organizational level as well as on an interpersonal level. On an organizational level, person-centered care is an overarching paradigm of care that is modeled by the administration. It involves creating flexible policies that allow residents and nurse aides more autonomy which hopefully enabling them to better meet their needs. Such policies include giving choice in the composition of caregiving dyads, giving residents choices when it comes to eating, sleeping, and bathing, treating all the members of the caregiving team with respect and working in collaboration, treating staff and knowing staff in a individualized manner, and allowing time for staff and residents to socialize and maintain relationships (Grosch, Medvene, & Wolcott, 2008). These ideas are similar to the three factors associated with the organizational level in White’s conceptualization of person-centered care.

On an interpersonal level, person-centered care is focusing on the person instead of the task during caregiving and requires a range of communication and relationship-building behaviors and skills (Grosch, Medvene, & Wolcott, 2008). On an interpersonal level, person-centered care, according to this research, is knowing the resident as a person, knowing their preferences and knowing how close or how distant a relationship the resident wants with the nurse aide. Interpersonal person-centered care also involves knowing how to incorporate these concepts during care by using a range of communication and relationship skills such as showing interest and concern for the resident, orienting the resident to the task, offering choices, providing positive feedback, and showing reciprocity. This proposed study aims to further develop these aspects related to interpersonal person-centered care, to further define this concept, and to increase the quality of care provided to the residents by developing an interpersonal person-centered care intervention.

Several studies have examined what quality of care looks like from the resident, caregiver, and family points of view. Although many of these studies did not specifically ask people to define interpersonal person-centered care, their responses are related to the concepts that have been outlined in Grosch, Medvene, & Wolcott (2008) and White et al. (2008). As far as the residents are concerned, many want care that is respectful, individualized, and relationship focused. Specifically, Bowers, Fibich, & Jacobson (2001) interviewed twenty-six nursing home residents about their definition of quality care. The results were organized into three categories: care-as-service, care-as-comfort, and care-as-relating. Sixteen of the residents focused on the affect of their caregivers, the caregiver's motivations, and evidence of real friendship they found in their relationships. Technical care was not mentioned, but instead signs of individual attention, affection, and friendship were discussed. Sharing information about personal lives



(including invisible or past personal identities), being a good listener, and showing reciprocity in relationships were mentioned as specific evidence and a “good” aide was described as attending to these relationship maintenance behaviors as they provided care. The other residents did not define quality of care in terms of relationship but instead they defined quality of care as individualized care. This supports the idea that interpersonal person-centered care does require good communication and relationship skills, but it also requires the nurse aides knowing how and when to engage the resident in a relationship and that each resident requires individualized care.

Many caregivers and family members also want to provide care that is individualized and relationship focused. Bowers et al. (2000) interviewed caregivers and they felt that quality care was not based on clinical outcomes, but on how care was delivered. They wanted to know the person and treat them in an individualized manner, have reciprocity and more mutuality in their relationships, and to treat the residents like “family”. Duncan & Morgan (1994) found that family members want staff to care about the resident rather than just caring for them. They also found that treating the resident with respect was the most important aspect of quality care according to the families. Overall there is a great deal in the literature that supports the idea that the interpersonal aspects of person-centered care are needed and wanted by many of the people involved. There is also support for the idea that knowing the person in the context of relationship seems to be an important aspect of quality care. However, it is also important to note that not all people want, need, or value having the same type of relationship and an important aspect of interpersonal person-centered care is that the relational aspects of care, as well as all other aspects, need to be tailored to the individual. With this in mind, can nurse aides be trained to provide individualized care that also meets the relational needs of the resident?

This will be the main focus for the planned intervention for this study. It is hypothesized that by teaching nurse aides to view residents as complex people and to tailor the resident's care based on knowing them as a person that the outcome will be that the residents will be more satisfied with care, the nurse aides will be more satisfied with their job, and both the nurse aide and the resident will be more satisfied with the nurse aide/resident relationship.

### *Communication and Relationship-based Interventions*

The training intervention was based upon several interventions seen in the literature. Interpersonally, person-centered care requires both communication skills and relationship-building skills. There have been interventions that address each of these aspects, but rarely are both communication skills and relationship-building skills addressed specifically as part of the larger concept of person-centered care. There is a large literature of communication-based approaches. Levy-Storms (2008) completed an analysis of the interventions intended to improve nurse aide communication with older adults in long-term care settings. Thirteen journal articles were reviewed and evidence was found that nurse aides could improve their "therapeutic" communication during care. Many of the interventions were created to increase a variety of "therapeutic" communication skills which Levy-Storms defined as "a variety of emotion-oriented approaches including, person-centered care, cultural competence, dementia skills, emotion-oriented care, and behavioral management skills" (p. 17), which "represents the lack of universal terms to address interpersonal communication skills taught in long-term care settings"(p. 17). The bulk of the studies Levy-Storms reviewed were not very specific on skills other than "verbal" or "nonverbal" communication. Some of the interventions emphasized positive vs. negative statements, bibliographic statements, distraction techniques, non-verbal empathic skills, eye contact, affective touch, smiling, head nodding, forward leaning. The

findings indicated that it was possible to increase verbal skills such as positive statements, one-step instructions, open-ended questions, and information topics, and the findings indicated it was possible to increase non-verbal skills such as: eye contact, affective touch, and smiling. The best behavioral strategies included: get their attention, speak in a calm tone of voice, watch your language, keep questions simple, repeat as necessary, rephrase, and repair/fill in information if needed, use touch, be a good listener, and don't argue.

Overall, Levy-Storm suggested that future research also needed improved experimental design: two groups (experimental and control), randomization of subjects at the care unit level, 3-5 hours of training, 6 months evaluation period, outcomes related to both residents and nurse aides, and to include both non-verbal and verbal communication techniques. Levy-Storm's analysis highlights a variety of verbal and nonverbal communication and behavioral strategies that have been shown to be successful in changing nurse aides' communication and interaction patterns to be more "therapeutic" in nature. She also points out that there has not been a consensus in the literature in terms of terminology, which makes development of theory difficult. Levy-Storm (2008) further defined interpersonal person-centered care as a specific type of care and incorporated a variety of communication and behavioral skills that she identified. The present study also addressed many of the methodological issues she suggested, such as having a 4 hour intervention, having an experimental and control group, and having both resident and nurse aide measures.

Another communication-based approach that is relevant to this research is a study by Williams (2003). She created and evaluated an intervention to decrease "elderspeak", a patronizing way of addressing elders, and to positively alter emotional tone, which was defined as caring, respectful, and less controlling communication behavior. The intervention consisted

of teaching more effective communication strategies and reviewing audio recordings of interactions between the nurse aides and the residents. The results indicated that diminutives decreased significantly from pre to post and changes in emotional tone occurred and held over a two-month period. Care and respect increased and control decreased reliably. Overall, the study was able to show that emphasis on emotional tone is highly effective and that self-awareness on the part of the nurse aides was a powerful tool in changing their communication style. Emotional tone and self-awareness were used in the interpersonal person-centered care intervention implemented in the present study.

There are two relationship-based approaches reported in the literature. McGilton et al. (2003) focused on the caregiver/resident relationship by examining the role of relational behaviors and continuity of care. Instead of providing only one training, they focused on a highly inclusive program of care. The intervention was based on Winnicott's theory of relationship, which focused on empathy and reliability. It was a three-session training given to the supervisory staff and a five-session training given to the care providers that focused on skill building over a seven-month period. Specific skills included empathy, reflection, acknowledgement of perspectives, continuity, developing resident profiles, and coordination of care. Sessions were 15-20 minutes prior to the beginning of a shift and focused on experiential learning and direct application. Booklets and a newsletter were also used to reinforce concepts throughout the 7-month period. Both caregiver and resident measures were used in the intervention. These measures were taken pre-intervention and post-intervention for both the intervention and comparison group. The caregiver's relational behaviors were measured using the Relational Behavior Scale, an observational measure, and the continuity of care was measured by the number of times the caregiver performed direct care in a 2-week period. The

patient outcomes were measured using the Relational Care Scale and the Relationship Visual Analogue Scale, which measured the closeness of the relationship and were completed by the residents. The results indicated that there was a significant increase in the caregiver's relational behaviors as seen by observation and a significant increase in continuity of care. There was also a significant increase in the resident's perception of the caregiver's relational behaviors. There was also an increase in the perceived closeness of the relationship, but it was not statistically significant. The strengths of this study are that it focused on both individuals in the relationship, as well as the relationship itself. It also focused on creating an environment where the caregivers were supported by supervisors and the relationship could develop and be maintained. The present study also emphasized relationship and relationship skills, including supervisor support, and measured changes in both the resident and nurse aides.

Heliker (2007) created an intervention called "story sharing" which was aimed at helping increase reciprocal caring and positive relationships by teaching the staff how to engage the resident in self-disclosure by the use of self-narratives. Stories are important to self-identity and sharing them can build trust, cultivate understanding, transfer knowledge, and generate emotional connections. Nurse aides frequently do not know the residents they care for, which can lead to negative interactions or to distancing and objectifying the resident's care. The intervention involved three 1-hour sessions. It included practicing self-disclosure, interview skills, partner-perspective taking, role-play, and discussion. Monthly discussion forums followed the three sessions. Feedback from the aides was positive and both residents and nurse aides saw each other in relationship. Nurse aides had more expressions of concern, listened attentively, and had more respect for the comments made by residents whom they start to consider as "wise friends". They also spend more time thinking about what mattered to the

residents. Heliker's intervention specifically addressed how to use resident story telling to foster positive relationships. The training intervention for the present study also included learning about reciprocity, interview skills, and partner-perspective taking. It also involved storytelling by way of watching a videobiography of the resident for whom the nurse aide provided care and learning more about how to incorporate residents' individualized information into care.

The present research incorporated and attempted to improve upon many of the ideas seen in the communication and relationship-based approaches reviewed above and it was a direct extension of the work done by Grosch, Medvene, and Wolcott (2008). The present study used updated versions of the two observational measures of person-centered care initially developed by the Grosch, Medvene, and Wolcott study: The Person-Centered Care Behavioral Inventory (PCBI) and the Global Behavioral Scale (GBS). The PCBI focused on specific behaviors such as greetings, showing interest in the resident as a person, orienting the resident to the task, asking permission, offering choices, giving positive feedback, engaging in social conversation, and showing concern and empathy. The GBS focused on the overall emotional tone and other global aspects of the interaction. The present study also included some of the training materials used in the Grosch, Medvene, and Wolcott study.

### *The Purpose of the Present Research*

Increasing quality care is of interest to many long-term care organizations and providing person-centered care is one way of addressing this issue. Via Christi Senior Services also wants to increase the quality of their care and to operationalize their definition of person-centered caregiving. Via Christi Senior Services was interested in making changes to their organizational policies and procedures that reflected their organizational model of person-centered care, which they termed "person-respected care". The present study involves a collaboration between Via

Christi Senior Services and the WSU Psychology Department to develop, implement, and test a four-week in-service training to teach person-centered caregiving skills to nurse aides in two different nursing homes. This project was funded by a Gridley-Hoover grant secured through WSU's Institute on Aging. During the course of the present research, the training intervention was developed in collaboration with the staff at Via Christi. However, before the present study began key content areas were identified based on the previous research mentioned above. These key content areas are outlined below.

#### *Proposed Interpersonal Person-centered Care Intervention*

When the study began the author proposed to Via Christi Senior Services that the intervention should include four key content areas: 1. Communication and Relationship skills, 2. Biographical Information and Storytelling, 3. Self-Awareness, and 4. Organizational Support. These key components can be seen in Table 1 and the key methods of instruction can be seen in Table 2. The first content area was Communication and Relationship Skills. The specific communication skills the author proposed be taught included both verbal and nonverbal, as suggested by Levy-Storms (2008). Verbal behaviors included greetings, showing appreciation, empathy, asking permission, explaining the task, giving choices, checking comfort, and showing interest. Nonverbal behaviors taught were eye contact, the appropriate use of affectionate touch, tone of voice, assessing comfort, adjusting pace, and understanding personal space. Relationship skills taught were based on McGilton (2007, 2003), Williams (2003), and Heliker (2007) and included the appropriate use of self-disclosure, reciprocity, cooperation, active listening, trust/dependability, respect, positive emotional tone and partner-perspective taking.

The second content area proposed was Biographical Information and Storytelling. It was proposed that the nurse aides watch two videobiographies of residents and learn about how to

include biographical information and storytelling in their care. It was proposed that the first resident videobiography that the nurse aides watch would involve a resident for whom they were not caring. It was proposed that they watch the video as a group and learn about how each nurse aide perceived the resident. It was proposed that the training would help the nurse aides develop strategies to use this personalized information during care. They would also learn the importance of storytelling as a way to engage the resident in conversation and learning more about them as a person. It was proposed that the second videobiography that the nurse aides watch would be the personal videobiography of a resident for whom they provide care. This video would be viewed in private, outside the training, and the nurse aide will answer questions about what they knew about the resident.

The use of these videobiographies was an innovative part of the proposed training. The rationale behind their use was the idea that if the nurse aides could perceive the residents in more complex ways and understand them as complex people, they will be better able to communicate with the residents and provide care that was more person-centered. Increasing the complexity of the nurse aide's perception of the resident is based on the concept of interpersonal cognitive complexity. Interpersonal cognitive complexity is the number of unique constructs or the amount of differentiation within a person's interpersonal cognitive domain, and people high in interpersonal cognitive complexity are experts at perceiving others in relatively complex and non-stereotypical ways (Burlison & Caplan, 1998). People high in interpersonal cognitive complexity are also more likely to provide person-centered communication and show the ability to take the other person's perspective into account in constructing messages intended to comfort (Burlison & Caplan, 1998). It was hypothesized that the videobiographies would be a key educational tool for the intervention and that they would help the nurse aides perceive and think



about the residents as complex people which would increase the likelihood of them providing person-centered care.

It was proposed that the third content area of the training would be Self-Awareness. Based on Williams (2003) study, it was proposed that the nurse aide would watch a video of himself or herself caring for a resident for whom they provide regular care. This was also an innovative part of the proposed training. Based on the success of William's study, it was anticipated that the nurse aides would see their behavior on the job and be able to determine how person-centered their behaviors really were. Self-awareness is important because it plays a large role in understanding and changing one's own behavior. It was proposed that if the nurse aides were provided with specific feedback about their person-centered behavior, they will be more likely to change negative behaviors and positive behaviors will be reinforced.

Lastly, the fourth proposed content area would be Organizational Support. The success of McGilton (2003) and Heliker (2007) were partially due to the supervisory support the nurse aides received following the intervention. In this intervention, organizational support was proposed to be three fold. The first being that the trainers of the intervention would be two staff from the nursing home whom the nurse aides' already knew and respected. The second would be that these trainers would follow up and provide feedback to the nurse aides during the intervention and the two-weeks following the intervention, while the nurse aides were on the job. The third would be to assess the policies and procedures of the each of the nursing homes and whether they supported person-centered care. This directly related to the feasibility of the nurse aides providing person-centered care on a daily basis.

Table 1.

Key Components of the Proposed Interpersonal Person-Centered Care Intervention

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<b>Key Component</b>	<b>Description</b>
Communication & Relationship Skills	A variety of verbal and nonverbal communication skills as well as relationship-building techniques.
Biographical Information & Storytelling	Watch resident videos to learn about them as people and how to include biographical information and storytelling into care.
Self-Awareness	Watch videotaped interactions of themselves and a resident and review their behaviors for person-centered care.
Organizational Support	Trainers will be a nurse and a nurse aide from the facility and will provide supervision during and following the training. The policies and procedures of the nursing home will be assessed.

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Table 2.

Training Techniques for the Proposed Interpersonal Person-Centered Care Intervention.

Training Techniques	Description
Didactic Materials	PowerPoints and handouts explaining person-centered care. Nurse aide will learn how interpersonal person-centered care is defined and the specific skills that are required.
Modeling	Person-centered care will be modeled by watching <i>the Putting Person Before Task</i> Video as well as watching the role-play interactions of other nurse aides acted out person-centered care.
Resident Videobiographies	The nurse aides will watch videobiographies of residents they don't know as a group and will learn about person perception. Then they will watch a videobiography of a resident they provide care for outside of class and complete a worksheet about their resident.
Caregiving Interaction Video	The nurse aides will watch videotaped interactions of themselves and a resident and review their behaviors for person-centered care.
Role-play	Dyads of nurse aides will be asked to perform person-centered caregiving interaction where one nurse aide will play the role of the resident and the other will play the role of the nurse aide.
Discussion and Feedback	Trainers will be a nurse and a nurse aide from the facility and will provide supervision during and following the training.

Study Goals

The major goal of this study was to create, implement, and pilot test the person-centered in-service training intervention as described above. It was hypothesized that as a results of the training intervention:

1. The Nurse Aides:

- a. Nurse aides would provide care in more person-centered ways after the training intervention. Nurse aides' person-centeredness were measured by two observational

coding systems: the Person-Centered Behavior Inventory (PCBI) and the Global Behavior Scale (GBS) (Grosch, Medvene & Wolcott, 2008);

- b. There would be an increase in the nurse aides' job satisfaction, as measured by the Minneapolis Satisfaction Questionnaire (MSQ) (Friedman, Daub, Cresci & Keyser, 1999).
- c. There would be an increase in nurse aides' satisfaction with their relationships with residents, as measured by the "Personal Accomplishment" subscale of the Maslach Burnout Inventory (Maslach & Jackson, 1986);
- d. The nurse aides' perceptions of the closeness of the relationship with the residents would increase, as measured by the Mutuality Scale (Heliker, 2007, Stewart & Archbold, 1991);
- e. There would be an increase in the complexity of the nurse aide's perception of the resident as measured by the "Resident Perception Task" (Medvene, Grosch, & Swink, 2006).

## 2. The Residents:

- a. There would be an increase in the residents' satisfaction with care, as measured by the Resident Satisfaction Index (Skiorska-Simons, 2001);
- b. There would be an increases in residents' satisfaction with their relationships with nurse aides as measured by the "relationships with staff" subscale of the Resident Satisfaction Index (Skiorska-Simons, 2001);
- c. The residents' perceptions of the closeness of the relationship with the nurse aides would increase, as measured by the Mutuality Scale (Heliker, 2007, Stewart & Archbold, 1991).

## CHAPTER 2

### METHODS

#### *Overview of the Methods*

A quasi-experimental waitlist control design was used to pilot test the impact of the person-centered training intervention for the nurse aide participants. The impact was measured for both the nurse aides and their residents. The design had two groups, a treatment and a waitlist control group. The facility in the treatment condition was Catholic Care Center in Wichita, KS and the facility in the waitlist control condition was St. Joseph Village in Manhattan, KS. The data were collected at Catholic Care before and after the training. The data were also collected at St Joseph pre and post Catholic Care's training, and then again after they received the training. The research design and timeline can be seen in Table 3.

The study was conducted with nurse aide/resident dyads. Twelve nurse aides and the residents with whom they worked were recruited to participate in order to pilot test the impact of the person-centered training intervention at each site. These 12 dyads were created by randomly selecting residents at each of the nursing homes based on inclusion criteria described below. The resident was then paired with a nurse aide. The nurse aide with whom the resident was paired was randomly selected from the nurse aides who provided care for that resident. The dyads were only paired for the purposes of the study; that is, during the normal course of the nursing home functioning, each aide interacted with multiple residents during their shift including their assigned resident and vice versa. Of the 12 dyads at each site that started, eleven dyads completed the training intervention at Catholic Care and eight dyads at St Joseph.

This training intervention study was designed and implemented over a 11-month period from May 2009 to March 2010. The training intervention involved four 1-hour sessions of lecture and discussion followed up by a two-week session of supervision describe below in Table 4. This method section is organized by first describing the research participants both the nurse aides and residents. Then procedures involved in finalizing the training intervention are outlined followed by the descriptions of how the videobiographies and caregiving interaction videos were created. Then research instruments are described. This section closes with a description of the data analysis strategy.

Table 3.

The Research Design and Timeline.

	Time 1		Time 2		Time 3
Catholic Care (treatment condition)	O <sub>1</sub>	TX	O <sub>2</sub>		
	6/1 - 6/19	9/16 – 10/21	10/22 – 11/11		
	3 weeks	6 weeks	3 weeks		
St. Joseph (waitlist control condition)	O <sub>1</sub>	----	O <sub>2</sub>	TX	O <sub>3</sub>
	6/21 – 7/17		11/12 - 11/25	2/11 – 3/26	3/29 – 4/9
	4 weeks		2 weeks	7 weeks	2 weeks

### Resident Participants

Residents’ ages at Catholic Care ranged from 59 to 93 years ( $M = 82.6$ ,  $SD = 10.5$ ). There were six females and six males. All of the residents were European Americans except for one male who was Indian. Of those residents, the Mental Status Exam ranged from 20 to 30 ( $M = 25.1$ ,  $SD = 4.3$ ), with higher scores indicating greater cognitive clarity. The highest educational levels achieved by of the residents were: two graduated from high school, three had some college, six had their Bachelor’s Degrees and one resident had a graduate degree. The

residents had been living at Catholic Care from less than one year to 21 years ( $M = 5.1$ ,  $SD = 5.7$ ). See Table 5.

Residents' ages at St Joseph ranged from 77 to 95 years ( $M = 86.3$ ,  $SD = 6.3$ ). Of those residents, there were two males and ten females and all were European Americans. The residents' Mental Status Exam ranged from 23 to 30 ( $M = 27$ ,  $SD = 2.9$ ), with higher scores indicating greater cognitive clarity. The highest educational levels achieved by of residents were nine with High School degrees and three with some college. The residents had been living at St. Joseph from less than one year to 5 years ( $M = 1.9$ ,  $SD = 1.6$ ).

#### Nurse Aide Participants

At both sites certified nurse aides made up 100% of the caregivers, however, several of the nurse aides had other certifications such as home health aide (Catholic Care,  $n = 1$ , St Joseph,  $n = 1$ ) and/or medication aide (Catholic Care,  $n = 3$ , St Joseph,  $n = 7$ ). At Catholic Care there were four males and eight females. All the males were African American. Of the females, three were European American, four were African American, and one was Hispanic/Latino. The average age was 32.1 ( $SD = 11.57$ ) with a range of 19 to 51 years. The years of experience in patient care indicated ranged from one month to 15 years ( $M = 4.4$  years,  $SD = 5$  years). The years spent working at Catholic Care ranged from one month to 13 years ( $M = 2.8$  years,  $SD = 3.9$  years). See Table 5.

At St. Joseph there were two males and ten females. All were European American except for one Hispanic/Latino female. The average age was 30.8 ( $SD = 8.81$ ) with a range of 22 to 47 years. The years of experience in patient care indicated ranged from eight month to 27 years ( $M = 6.9$  years,  $SD = 7.1$  years). The years spent working at St. Joseph ranged from eight month to 10 years ( $M = 2.6$  years,  $SD = 3.6$  years), see Table 4 for resident and nurse aide demographics

by site. One interesting note is the differences in the education levels between the residents and nurse aides at the two sites. At Catholic Care the nurses aides tend to be less educated than the residents whereas at St. Joseph the nurse aides tend to be more educated than the residents.

Table 4.

Resident and Nurse Aide Demographics by Facility.

Demographic of Residents		Catholic Care (N = 12)	St Joseph (N =12)
Gender			
	Male	50% (n = 6)	16.7% (n = 2)
	Female	50% (n = 6)	83.3% (n = 10)
Age M (SD)		82.6 (10.5)	86.3 (6.3)
Ethnicity			
	European American	91.7%	100%
	Indian	8.3%	
Years at Site M (SD)		5.1 (5.7)	1.9 (1.6)
Mental Status Exam M (SD)		25.1 (4.3)	27 (2.9)
Highest Level of Education			
	High School	16.7%	83.3%
	Some College	25%	16.7%
	Bachelor's Degree	50%	
	Graduate Degree	8.3%	



Demographics of the Nurse Aides		(N = 12)	(N = 12)
<b>Gender</b>			
Male		33.3% (n = 4)	16.7% (n = 2)
Female		66.7% (n = 8)	83.3% (n = 10)
Age M (SD)		32.1 (11.6)	30.8 (8.8)
<b>Ethnicity</b>			
European American		25%	91.7%
African American		68.7%	
Hispanic/Latino		8.3%	8.3%
<b>First Language Learned</b>			
English		66.7%	100%
Spanish		8.3%	
Swahili		16.7%	
Sign Language		8.3%	
Years of Experience M (SD)		4.4 (5)	6.9 (7.1)
Years at Site M (SD)		2.8 (3.9)	2.6 (3.6)
<b>Highest Level of Education</b>			
High School		25%	41.7%
GED		8.3%	
1 Year of College		33.3%	16.7%
2 Years of College		16.7%	8.3%

3 Years of College	8.3%	8.3%
4 Years of College		25%
Highest Certifications Earned		
CNA	58.3%	33.3%
HHA	8.3%	8.3%
CMA	25%	58.3%

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*Note.* N = 12 Residents and 12 nurse aides at each site

### *Dyadic Data and Attrition*

At the beginning of the study, there were 12 nurse aide-resident pairs at both Catholic Care and St. Joseph. However, due to attrition, the total number of dyads that completed the study was eleven at Catholic Care and eight at St Joseph. At Catholic Care, two residents and one nurse aide were lost. The nurse aide broke her wrist and was unable to work, and one of the resident with which she was paired no longer wanted to participate. The other resident died. At St. Joseph, three nurse aides and one resident were lost. One nurse aide ended her employment at St. Joseph, and the resident died. The other two nurse aides continued to work at St. Joseph; however, they did not complete the six-week intervention due to school obligations that were unknown to them at the time of consent. Data were collected on these nurse aides and their residents, but was not used in the data analysis due lack of treatment.

### *Description of Settings*

Via Christi Senior Services is dedicated to ongoing quality of care development and is interested in further defining the concept of person-centered care. Two nursing homes from the Via Christi System were chosen based on their size, the availability of 12 independent dyads, and

the similarity of their policies and procedures. Catholic Care Center is located in Wichita, KS and has 160 residents and St. Joseph Village is located in Manhattan, KS and has 92 residents. Each facility is divided by neighborhoods or courts, which are groups of residents, whose care is provided by a specific team of nursing staff. The nurse aide and residents were sampled from all of the neighborhoods or courts depending on the site. All the neighborhoods or courts were utilized since the main factor in determining eligibility for the study was the mental status of the residents and their ability to participate.

Catholic Care has three neighborhoods that differ by size. Their largest neighborhood serves sixty residents while the other two have twenty-eight each. The large neighborhood uses the large common dining area whereas the smaller neighborhoods have smaller dining areas within each of them. In terms of staffing, Catholic Care has nurse aides assigned to each neighborhood and each aide cared for twelve to fourteen residents during their shift. Catholic Care maintains the same nurse aides in each neighborhood from day to day. In terms of daily tasks, at Catholic Care, the nurse aides help the residents with daily care which is getting in and out of the bed, getting dressed or undressed, toileting, oral care, feeding, exercising, and general check in. Feeding generally involves getting to and from meals and eating, which varies depending on the neighborhood; exercising involves light walking and stretching; and general check in involves making sure the resident is doing well, helping them with ADLs, and refilling their water pitchers. It is important to note that at Catholic Care, the largest neighborhood shares a large common dining hall whereas the other two neighborhoods have small local dining rooms. The residents and aides who work in the larger neighborhood spend a large portion of the day going to and from the large dining hall. At Catholic Care, 6 dyads came from the largest

neighborhood and six came from the two smaller neighborhoods, three from each. Also housekeeping and food service are separate roles.

St Joseph has six courts that are equal in size and all serve around sixteen to eighteen residents. All of the courts are exactly the same and are circular. The residents' rooms are around a common living and dining area. Three of the courts are upstairs and three are downstairs. All of the courts share a common activity area. St Joseph also tries to maintain the same staff on each court, but due to fluctuations in staff, staff assignment tended to change from day to day. Typically staff receives their court assignment at the beginning of their shift. At St Joseph, the daily tasks are similar but the courts are set up in way that the residents are closer together. The daily tasks involve daily care, feeding, exercising, and general check in but laundry and helping serve the food are also part of the daily tasks. At St. Joseph's the nurse aides take on more of a universal worker role, which means they assist in all of the care, tasks for the residents and roles are defined less by the type of task. In general there seems to be less time spent moving the residents from place to place and many of the residents are able to do this on their own even with impairment due to the shorter distances between activities. The same recruitment procedures were used at St. Joseph as used at Catholic Care. All of the courts were used in the study. Two dyads were from Court A, three from Court B, one from Court C, three from Court D, two from Court E, and one from Court F.

### Procedures

#### *Recruiting Residents*

Potential residents were identified by the designated staff liaison at each of the participating Via Christi nursing homes. Residents were eligible to participate if, in the judgment of the Via Christi nursing staff, they were medically stable, sufficiently able to understand

English to be able to respond to questions, and cognitively able to provide informed consent. The Folstein Mental Status Exam (MSE) was used to screen all residents for cognitive impairment and twenty was the lower cutoff for the study. The Folstein MSE has a range of 0 to 30 with zero indicating very severe cognitive decline and late dementia and thirty indicating no cognitive decline and normal functioning. Twenty was chosen for the cutoff for the study because it allowed for largest sampling size of residents who could be reliably questioned and interviewed. Twenty and above represents roughly the top quartile of the population of both of the nursing homes. Typically people who are rated 23 or lower do have at least some cognitive decline and are labeled mildly impaired, however, those residents who were under 23 in the study were recommended by the clinical staff based on daily functioning as the MSE is completed quarterly. The residents were randomly selected from a list of residents who met the research criteria. Two choices of caregivers were identified for each of the residents. As the residents were randomly selected, the paired nurse aide was chosen randomly from the choice of two. If the nurse aide was already paired with another resident, then the alternate nurse aide was chosen. If both nurse aides had previously been paired with a resident, then this resident was asked to participate only if the previous residents with the same caregivers chose not to participate. This method allowed a random list of residents each with a unique caregiver. The residents from the list were then approached and asked to participate in the research. If they agreed, participants completed informed consent forms. This process continued until twelve residents with twelve unique nurse aides consented to be in the study.

At Catholic Care, a total of eighteen residents were asked to participate. Six (33%) chose not to participate: four were female and two were male. All of the residents who refused to participate were European American. Their age range was 81 to 100. Three declined before

consent stating they were too old, disinterested, and/or privacy were issues. The other three residents consented to be in the study, however, two later declined due to feeling they were unable to answer the questions from the self-report measures. The third was unable to participate due to not being able to find a caregiver who was willing to participate. The demographics for residents who chose to participate and those who chose not to participate were compared and no significant differences were found for gender, ethnicity, or age. There was a significant difference found for education. Residents who chose not to participate were less educated than those who participated  $t(13) = 2.67, p < .05$ .

At St. Joseph, a total of twenty residents were asked to participate. Eight (40%) chose not to participate in the study: seven were female and one was male. Six of the eight who refused were European American and two were African American. Two declined due to disinterest, one felt that she could not do “the work”, and another was afraid that her answers would affect her care. Two others had to be moved to the hospital and one resident consented to be in the study, but later died prior to data collection. There were no significant differences in terms of ethnicity or gender when comparing those who chose to participate and those who did not. The other demographics could not be collected for this site.

#### *Recruiting Nurse Aides:*

Nurse aides were eligible to participate if they had been working at the facility for at least one month and were working on the first or second shift. Aides were selected and invited to participate if they worked with one of the participating residents. Nurse aides and residents were selected in such a way that there were 24 independent, distinct dyads, such that each nurse aide was asked about their caregiving relationship with one resident, and each resident was asked about their relationship with one aide. Aides’ participation was based on their informed consent.

At Catholic Care, a total of twenty nurse aides were asked to participate. Eight (40%) chose not participate in the study: seven were female and one was male. Two were European American, two were African American, two were African, and two were East Indian. Their age range was 24 to 41. Two declined due to their responsibilities as nuns, two declined because they were concerned about how they would be viewed by their peers, and one declined due to just starting the job and feeling overwhelmed. The other three consented, but were unable to participate due to other obligations (i.e. school) and one ended her employment at Catholic Care. The demographics for those that chose to participate and those that chose not to participate were compared and no significant differences were found for gender, ethnicity, age, or time they had worked at Catholic Care. The education level of those who chose not to participate could not be obtained.

At St Joseph, a total of seventeen nurse aides were asked to participate. Five nurse aides (30%) chose not participate in the study: all were female and European American. Two declined due to school obligations, one declined due to disinterest, one declined due to not wanting to be videotaped at work, and one declined due to lack of involvement with the resident with which she would have be paired. Demographic information could not be obtained from the group of nurse aides who chose not to participate.

#### *Finalizing the Training Intervention*

The training intervention materials were developed and initially organized by the author and modified as the result of two “train the trainer” meetings at both Catholic Care and St. Joseph. As a result of these preliminary sessions the training intervention was slightly modified from the original training intervention described in the introduction. The training intervention consisted of four 1-hour sessions followed by two weeks of supervision. See Table 5 for content

of the training sessions and Appendix A for the training materials. The PowerPoints were created by incorporating knowledge about person-centered care and relationships from several sources. One source were PowerPoints created by Dr. Kerry Grosch and Dr. Louis Medvene (Grosch, Medvene, & Wollcott, 2008) when designing a 2 hour training for nurse aides at The Wichita Area Technical College. Other sources included: the specific behaviors in the Person-centered Care Behavioral Inventory and the current research literature, specifically White (2008) and Bowers (2001). The handouts and homework were created to emphasize the information in the PowerPoints, to help the nurse aides think critically about the information presented, and to help them apply it to their current experiences. The author created the videobiography of the “unknown” resident during her practicum (prior to the dissertation) at Via Christi Village on North Broadmoor, an assisted living facility.

Once the training sessions and materials were developed, a team of people met at Catholic Care to finalize the sessions and materials. Dr. Kristine Williams, an Associate Professor of Nursing at the University of Kansas School of Nursing, was asked to help finalize the materials and acted as a training consultant. Dr. Williams has already created an effective training program to reduce elderspeak, a patronizing way to relate to residents (Williams, Herman, Gajewski & Wilson, 2008). Other members of the team were Jennifer Zoglman, a dietician at Via Christi who was assigned to help develop person-centered policies and practices throughout Via Christi Senior Services, Pat Jeane, educator at Catholic Care, Ezehel Ombati, a current nurse aide at Catholic Care, Dr. Louis Medvene, a Professor of Psychology at WSU, and the author, a psychology doctoral candidate. Pat and Ezekiel were the nurse and nurse aide who were chosen at Catholic Care to train the other 12 nurse aides.



Changes made to the proposed training during the preliminary meetings included: breaking the PowerPoint into two parts that would be presented in separate sessions, understanding the role of the nurse versus the nurse aide trainer and what each would present in the training, and redesigning session four. Originally, a role-playing exercise was chosen for session four where the nurse aides would act out a caregiving interaction and person-centered behaviors. However, the nurse trainer, based on previous experience, felt the nurse aides would not feel comfortable with this training technique. She suggested caregiving vignettes instead and the nurse aide trainer was asked to create several. The four one-hour, in-service training sessions were then implemented over a four-week period and were supplemented by on the job supervision by the trainers during the training and the two weeks following. The only major change to the curriculum during the training was to session four. Due to unavoidable circumstances, the nurse aide trainer was unable to create vignettes, so the nurse trainer asked the nurse aides in the training itself to volunteer their caregiving interaction videos, and show them to the group. This was very successful. The nurse aides did not feel uncomfortable sharing their videos and felt that they learned a great deal by watching each other interact with the residents. This was incorporated into the training curriculum and repeated in the training at St. Joseph. Overall, eleven nurse aides at Catholic Care completed the training. Six of the nurse aides went to all four training sessions, four went to three, and one went to two ( $M = 3.45$ ,  $SD = .66$ ).

Prior to the training at St Joseph, the same team as mentioned above met with Krista Thomas, the Director of Nursing, and Dixie Shepherd, a current nurse aide at St. Joseph, to “train the trainer.” They were chosen to be the nurse and nurse aide trainers at their facility. No additional changes were made to the training at that time. Four one-hour, in-service training sessions were then implemented over a five-week period and were supplemented by on the job

supervision by the trainers during the training and the two weeks following. After week two, the state surveyors arrived to audit the nursing home. The training sessions were postponed one week for staffing reasons during the audit. Ten-nurse aides completed the training. Five of the nurse aides went to all four training sessions, four went to three, and one went to two ( $M = 3.40$ ,  $SD = .66$ ).

Table 5.

The Interpersonal Person-Centered Care Intervention Sessions 1-4.

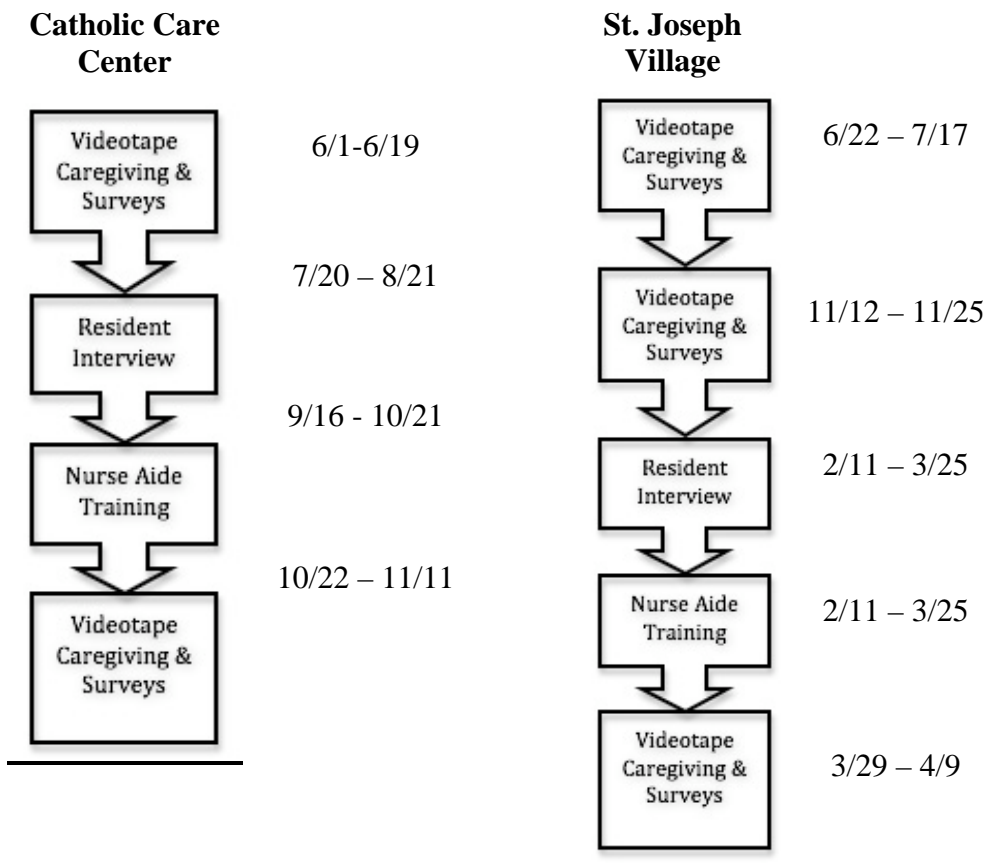
<b>Intervention Sessions</b>	<b>Description</b>
<b>Session 1</b>	
Person-centered Care PowerPoint Part 1 & Handout	Person-centered care was defined and examples were given. Communication and relationships skills were introduced. A handout was given out that explained the concept of “Putting Person Before the Task”.
<i>Putting Person Before Task Video</i>	The group watched a 7-minute video of two nurse aides modeling person-centered care with a resident.
Caregiving Interaction Worksheet	After watching each nurse aide model person-centered care, a person-centered behavioral checklist was completed as well as application questions.
Discussion	The concept of person-centered care was discussed as well as specific behaviors seen in the video.
<b>Session 2</b>	
Person-centered Care PowerPoint Part 2	Person-centered care was reviewed. Communication and relationships skills were further defined.
Resident Videobiography	The group watched a resident videobiography of a resident that was unknown to them.
In-class Video Worksheet	The worksheet asked questions about what they learned about the resident while watching the video and how they might apply it.
Discussion	The discussion involved how each person perceives the residents and how this information could be used during care.
Homework	The nurse aides checked out a 15-minute videobiography of the resident for whom they provide care and a worksheet to complete about their resident.
<b>Session 3</b>	
Discussion	The nurse aide was asked to share what they learned about their resident and how they would use this information. Also they discussed communication, storytelling, and interview skills.
Homework	The nurse aides checked out a video of their caregiving interaction with the resident and completed a worksheet evaluating their own person-respected behaviors.
<b>Session 4</b>	
Shared Caregiving Interaction Videos	The nurse aides volunteer to share their caregiving interaction videos with the group. The instructor and group critiqued the interactions in a positive environment reinforcing person-centered behaviors.
Discussion and Feedback	Discuss person-centered behaviors modeled in the interactions

*Implementing the Training Intervention*

A two group, quasi-experimental design was used. The research was started in May of 2009 and ended March of 2010. The in-service training occurred for Catholic Care Center in September 2009 and for St Joseph Village, it occurred in February of 2010. There were two observation periods at Catholic Care and three observation periods at St Joseph where caregiving was videotaped and the paper-and-pencil measures were collected. See Figure 1 and see Appendix B for the specific steps in the implementation process.

Figure 1.

Flow Chart of Data Collection for Each of the Nursing Homes.



### *Creating the Resident Videobiographies*

The author completed videotape interviews with the twelve participating residents at each of the nursing homes prior to the in-service training. When it was time to create the video for the site, a meeting was held with the resident and a time to complete the interview was scheduled. It was also explained that the video would be viewed by their paired nurse aide for the in-service training. It was also explained that the video would be about their life experiences and that standardized questions would cover such topics as: growing up, school, love and relationships, working, parenting/grandparenting, life lessons, and preferences in caregiving. The resident was given a copy of the questions and it was also explained that that they would receive a copy of the 15 minute video.

At the scheduled time, the author arrived and set up the video camera. The camera was placed in such a way that it would not be intrusive to the conversation and allowed for enough light on the resident. The residents did not seem to be affected by the video camera. None of residents refused to be interviewed or videotaped. The question “When and where were you born” was always the first question, which moved the conversation in the right direction. As the conversation continued, techniques were used to keep the conversation on their life experience. Documenting their family members and whom they regularly see and talk to was important as well as having them talk about their hobbies or things they liked to do. The other questions always asked were “How do you describe yourself, what is important to you?” and “How would you like to be remembered or what have you learned in your life that you would want to share with others?” These questions let the resident talk about life more abstractly and gave a sense of what mattered to that person. Most of the residents were able to talk for at least 45-60 minutes. Two residents at Catholic Care and one resident at St. Joseph had a harder time talking about

themselves. One of the residents at Catholic Care had difficulties staying focused and awake. It is unclear why, however, it seemed to be that his cognitive abilities were declining rapidly and that it was frustrating for him, so he chose to not participate fully. Two attempts to interview him were made and a video was created with the information he was able to give. The other resident at Catholic Care had a brain injury and she too could not have an extended conversation. The resident at St. Joseph on the other hand was having a hard time adjusting to the nurse home environment and was uncomfortable sharing personal details. As it turned out, her paired nurse aide was unable to come to the training, so the resident's videobiography was not completed. Overall, the residents were open and talkative and seemed to enjoy the experience. After the interview, the residents were thanked for their participation.

The author edited the videotaped interview into 15-minute videobiographies. After the interviews were completed, the video was digitized to the computer. For each of the interviews, the content was edited based on trying to present the fullest picture of the resident's life in a 12 - 16 minute segment. A digital movie file of the video was created and the file was embedded in a DVD. The DVDs were burned and left at the lobby desk with a sign out/sign in sheet for the nurse aides. The videobiographies were used in the in-service training and each of the nurse aides was asked to view and discuss the videobiography of their resident. All the nurse aides were able to view the video of their resident except one nurse aide at St Joseph.

### *Videotaping the Caregiving Interaction*

After residents and nurse aide dyads were selected, each dyad was videotaped during one daily care activity. The nurse aides were each asked what type of caregiving interaction would be appropriate for videotaping that best typified the type of care he or she provided the resident (Table 6). All the nurse aides were able to identify a caregiving task that they normally did with the resident even if it was just checking on them periodically. A time to meet them and videotape the interaction was scheduled. The day before the scheduled interaction time, the resident was reminded of the filming. The resident to asked to act normally and asked not to talk to the observer, however, due to the resident's cognitive abilities and/or their sense of comfort, some of the resident still addressed the observer in the videotapes. Just prior to videotaping an interaction, the nurse aide was asked to ignore the observer and just do what they normally do. Although the study had been explained to them in detail, the nurse aides did not seem to have a sense of what was expected of them or why they were being videotaped. The author videotaped the interaction and tried to be as unobtrusive as possible. At times filming was uncomfortable due to the desire to protect the privacy and dignity of the resident. When the resident was in the restroom or dressing the video camera was left on in an attempt to record the conversation, but this was not always accomplished. After the interaction was completed, the nurse aide and the resident were both thanked for their participation.

Two of the same daily care activities were videotaped for each resident/nurse aide dyad at Catholic Care Center, the nursing home in the treatment condition: one activity was videotaped before the in-service training intervention and the second was videotaped after the in-service training intervention. The videos at Catholic Care range from 30 seconds to 14.5 minutes ( $M = 6.14$ ,  $SD = 4.6$ ). Three of the same daily care activities were videotaped for each dyad at St.

Joseph Village, the nursing home in the waitlist control condition: one activity was videotaped before the in-service training at Catholic Care Center, the second was before the training intervention at St. Joseph Village and the third was after the in-service training intervention at St. Joseph Village. The videos at St Joseph range from 1 minute to 13.5 minutes ( $M = 5.65$ ,  $SD = 3.3$ ).

Table 6.

Videotaped Caregiving Tasks and Times by Nurse Aide and Facility.

Catholic Care				St Joseph				
CNA	Task	Time 1 (min)	Time 2 (min)	CNA	Task	Time 1 (min)	Time 2 (min)	Time 3 (min)
CNA 1	Afternoon Check In/Toileting	1.5	2.5	CNA 1	After Nap Routine	12	6.5	6.5
CNA 2	Afternoon Check In	1	.5	CNA 2	Afternoon Check In	6.5	2.5	ns
CNA 3	Afternoon Tea	7	8	CNA 3	Bedtime Routine	5.5	4.5	7.5
CNA 4	Walking Exercise	16	13	CNA 4	Shaving	5	6.5	8.5
CNA 5	Morning Routine	9	10	CNA 5	Morning Routine	2.5	3.5	13.5
CNA 6	Assisting the Resident to Lunch	6	5	CNA 6	Afternoon Snack and Diabetes Check	5	2	4
CNA 7	Afternoon Check In	1.5	ns	CNA 7	Personal Care	8	2.5	15
CNA 8	Exercise Routine	12	14.5	CNA 8	Afternoon Check In	2	2	6
CNA 9	Afternoon Check In	3.5	2	CNA 9	Morning Routine	9	8.5	9
CNA 10	Assisting the Resident to Lunch	3.5	6.5	CNA 10	After Breakfast Care/Toileting	5	4	ns
CNA 11	Afternoon Check In	2.5	3.5	CNA 11	Afternoon Check In	6	1	2.5
				CNA 12	Morning Check In	2	3	4.5

Two observational instruments were used to code the extent to which the nurse aide provided care in a person-centered way, and the changes in these measures were used to evaluate the effectiveness of the in-service training. The logic of creating two behavioral measures was that simply coding or counting whether specific behaviors were enacted might miss the quality or functions of the behaviors. Therefore, a second global rating scale was used. The Person Centered Behavior Inventory (PCBI) is a checklist of 11 verbal behaviors – e.g. “Orients resident



to caregiving task” and “Appropriate use of information about resident’s personal history” and 8 non-verbal items – e.g. “Resident-directed eye gaze” and “Adjusting to the resident’s pace” (Grosch, Medvene, & Wolcott, 2008).

Two undergraduates were trained by Drs. Louis Medvene and Hannah Lann-Wolcott to use the PCBI over an eight-week period, which started in February 2010. Coders’ judgments yielded a measure, which can be roughly interpreted as the proportion of the time nurse aides engaged in person-centered behaviors. The instrument was revised from earlier versions developed for other populations. A description of the revision process can be seen in Appendix C. Before the caregiving videos were coded, an acceptable level of agreement was obtained by using nine practice videos. An inter-coder agreement rate of .81 was established in coding the behaviors of 23 nurse aides over 55 video interactions (Cohen’s Kappa, Cohen, 1960). The videos were coded by site after all the data had been collected from the site. Catholic Care Time 1 and Time 2 videos were randomized together and coded first. St. Joseph Time 1, Time 2 and Time 3 were randomized together and coded second.

The Global Behavioral Scale (GBS) consists of 11 items set up in semantic differential format. Sample items are: “Put person before task” (1) versus “Put task before person” (7) and “Treating like worthy of relationship” (1) versus “Indifferent to connection or bond” (7) (Grosch, Medvene & Wolcott, 2008). The Cronbach’s alpha coefficient for the GBS was  $\alpha = .91$ . In the preliminary research the GBS served as a check on the concurrent validity of coders’ behavioral ratings on the PCBI. The concurrent validity was reasonably good: the correlation of the PCBI with the GBS in the present study was  $r(51) = .37, p < .01$ . See Appendix D and E.

### Research Instruments for the Nurse Aides

*Job Satisfaction:* The nurse aides' job satisfaction was measured by the validated 20-item Minneapolis Satisfaction Questionnaire (MSQ). Each of the items involves a 5-point scale which ranges from "1" (Very Dissatisfied) to "5" (Very Satisfied). The MSQ has been used in other studies of nurse aides' job satisfaction (Friedman, Daub, Cresci & Keyser, 1999). Sample items include: "The freedom to use my own judgment", "The pay and the amount of work I do", and "The working conditions". See Appendix F.

*Relationship Satisfaction:* A modified version of the "Personal Accomplishment" subscale of the Maslach Burnout Inventory (MBI, Maslach & Jackson, 1986) was used to measure aide's satisfaction with their relationship with the resident with whom they are paired. The subscale consists of eight items ( $\alpha = .71$ ), each of which involves a 7-point scale which ranges from "1" (strongly agree) to "7" (strongly disagree). The sub-scale has been nationally normed for non-college samples. Each of the eight items was reworded to apply to a specific resident. Sample items include: "I can easily understand how the resident feels about things", "I can easily create a relaxed atmosphere with the resident", and "I deal very effectively with the problems of the resident". See Appendix G.

*Mutuality Scale:* The nurse aides' perception of the relationship closeness was measured with a Mutuality Scale used by Heliker (2007) and created by Stewart & Archbold (1991). The scale consists of fifteen items (nurse aides'  $\alpha = .93$ ), each of which involves a 5-point scale, which ranges from "0" (not at all) to "4" (A great deal). Sample items include: "How close do you feel to him or her", "To what extent do the two of you share the same values", and "How much emotional support does he or she give you". The resident's name was inserted into the scale. See Appendix H.

*Resident Perception Task:* Nurse aides were also asked to complete a person perception task. The person perception task is based on the Role Category Questionnaire (RCQ), which is a measure of interpersonal cognitive complexity. People high in interpersonal cognitive complexity are able to perceive and describe others in more varied and abstract ways. The resident perception task measures the number of psychological constructs the nurse aide used to describe her/his target resident. The instructions ask the participant to "...describe him/her (the target person) as completely as you can, so that a stranger might be able to determine the kind of person he/she is from your description." Two undergraduates, who had been trained to code the RCQ in prior research, coded the nurse aide's descriptions of the resident with whom they were paired. The coders achieved an inter-rater agreement rate of .95. See Appendix I.

*Qualitative Questions:* Each nurse aide was asked to answer open-ended, exploratory questions about how they defined caregiving and whether the in-service training impacted them. Specifically they were asked before and after the training: "How would you describe high quality caregiving and what kinds of things do you think are most important for a caregiver to do in order to provide high quality care?" and "What are some of the ways in which having close, personal relationships with residents can be a good thing in your work?" After the training, they were asked, "What were the most important and useful things you learned from the class?", "What, if anything, were you able to apply?", "Were you satisfied with the class?", "How could it have better met your needs as a CNA?", and "How do you think this material can be taught to CNAs in a way that could be helpful and meaningful to them?".

*Demographics:* The nurse aides' demographic information which includes age, sex, race, level of educational achievement, certifications earned, years of experience as a nurse aide, and the time in their current position was collected at the initial interview.

### Research Instruments for the Residents

*Satisfaction with Care:* Residents answered the Resident Satisfaction Index (RSI, Sikorska-Simmons, 2001) as a measure of their overall satisfaction with the nursing home. The RSI is a 27-item survey, each item of which involves a 4-point Likert-type scale which ranges from “0” (never) to “3” (always). The RSI includes five subscales which measure respectively: a) health care, five items,  $\alpha = .8$ ; b) housekeeping, four items,  $\alpha = .77$ ; c) physical environment, four items,  $\alpha = .86$ ; d) relationships with staff, seven items,  $\alpha = .81$ ; and e) social life/activities, six items,  $\alpha = .92$ . The overall  $\alpha = .96$ . Sikorska-Simmons (2001) demonstrated validity by reporting the positive correlation of the RSI with the Affect Balance Scale, a measure of psychological well being (Namazi, Eckert, Kahana & Lyon, 1989). See Appendix J.

*Relationship Satisfaction:* Six of the seven items included in the “relationships with staff” subscale of the RSI were used to measure residents’ satisfaction with their relationship with their assigned nurse aide. The six items ask about: “staff’s” kindness, behavior, dependability, friendliness, quality of assistance, abusive behavior, and responsiveness. The seventh item, which asks about “dietary staff”, was not included. See Appendix J.

*Mutuality Scale:* The residents’ perception of the relationship closeness will be measured with a Mutuality Scale used by Heliker (2007) and created by Stewart & Archbold (1991). The scale consists of fifteen items (resident’s  $\alpha = .92$ ), each of which involves a 5-point scale, which ranges from “0” (not at all) to “4” (A great deal). Sample items include: “How close do you feel to him or her”, “To what extent do the two of you share the same values”, and “How much emotional support does he or she give you”. See Appendix H.

*Qualitative Questions:* Each resident was asked to answer open-ended, exploratory questions about how they defined caregiving and whether they noticed any changes in the ways the nurse aide have been taking care of them after the intervention. Specifically they were asked before and after the training: “If you think about your favorite caregiver or a really good nurse aide that you’ve known, what is it about him or her that you liked the best?”, “The CNA that you have been paired with for this study attended a training about person-respected care, have you noticed anything that has changed in the way that he or she works with you?”, and “Have you noticed any changes in your relationship with him or her?”.

*Demographics:* The Minimum Data Set (MDS) record was viewed to collect information on the resident’s age, gender, race/ethnicity, educational level, and mental status. The MDS is a standard assessment that nursing staff complete at least quarterly, as required for all nursing facilities.

#### *Data Analysis Strategy*

The major aim of this study was to pilot test the effectiveness of the training intervention in increasing person-centered care, improving the resident/nurse aide relationships, and to further define person-centered care. The five hypotheses about the nurse aides and the three hypotheses about the residents were tested using a non-parametric statistic, the Wilcoxon Signed Ranks Test, because the small sample size made assumptions about the normality untenable. The experiences of the nurse aides and the residents were also explored through qualitative analytical techniques.

## CHAPTER 3

### RESULTS

#### Overview of the Results

Both qualitative and quantitative measures were used to pilot test the training intervention. The first part of the results section describes the results of the qualitative measures. Both the nurse aides and the residents were asked to describe how they would define “quality caregiving”, both before and after the training. The nurse aides were also asked, both before and after the training, their thoughts regarding their relationship with the resident and how it affected their work. And, finally, the nurse aides and residents were asked, before and after training, to select the type of caregiving they felt was most important. Each nurse aide and resident was given a list of three types of caregiving: “Care-as-Service”, “Care-as-Comfort”, and “Care-as-Relationship”. They selected from this list the type of caregiving they felt was most important.

The second part of the results section describes the data from a quantitative perspective and tests the main hypotheses of the study. The results of the hypothesis testing were that the nurse aides showed an increase in relationship closeness and relationship satisfaction at Catholic Care. The residents showed an increase in relational satisfaction at St. Joseph and an increase in relationship closeness at both Catholic Care and St. Joseph. In order to better understand these findings, the author examined the impact of the training intervention at the dyadic level. Specifically, the four dyads, which were impacted the most and the four that were impacted least by the training were analyzed and compared. Data summarizing the experiences of the nurse aides and the residents in each of these dyads is presented.

### Definition of Caregiving and Relationship

In order to better understand person-centered care, we must understand how quality caregiving and relationship are defined in this setting. One goal of this study was to get an idea of how both nurse aides and residents viewed the idea of caregiving and to understand how each defined quality caregiving. Both the residents and the nurse aides were asked to describe quality caregiving before and after the training intervention. Both were also asked to pick their favorite type of care pre and post intervention from a list of three types defined by Bowers (2001): “Care-as-Service”, “Care-as-Comfort”, and “Care-as-Relationship”. “Care-as-Service” was defined as care that is efficient, competent, and a good value for the resident’s money. “Care-as-Comfort” was defined as care that is focused on maintaining the resident’s physical comfort and “care-as-relationship” was defined as care that is based on feelings of friendship and mutual respect between the nurse aide and the resident. The nurse aides were also asked how close personal relationships affected their work.

#### *Nurse Aides*

Prior to the training, in general, the nurse aides at both sites described quality care in terms of doing a good job and treating the resident with respect. Some examples are

“Respecting the resident’s rights and knowledge”.

“Providing the care that you would want if you were elderly. Being able to come to work and do a good job”.

“To like our job and to take care of the residents the best we know how”.

The nurse aides also mentioning gaining the resident’s trust and having good relationships with the residents as a part of quality caregiving, however, this was said less frequently than doing a good job completing caregiving tasks.

After the training, the themes changed somewhat at both sites. The nurse aides still mentioned doing a good job, however, getting to know the resident as a person and personal relationships with the residents were mentioned much more frequently. For example:

“I think that talking to the resident and getting to know them as a person not as a task or something that has to get done.”

“I think both aspects are important. A CNA needs to get the job done at a high quality but they also should take time to get know their residents.”

“I think that it is very good to get to know the person your working with and create a personal relationship with them that would make them comfortable and your job easier”.

“A balance between quickness, quality, and relationships”

“Remember to always treat them like a person not a patient. A caregiver should want to be involved in someone's life. They will want to see someone do well. They should actively listen to problems and stories. They should meet all the residents’ needs (emotional, physical, psychological, etc).”

Themes in their statements were concepts taught in the training intervention. It appears that the nurse aides were able expand their definitions of caregiving after the training to include knowing the residents, seeing them as people not tasks, and being willing to have relationships with residents.

In terms of choosing the most important type of care based on the three types above, seven of the nurse aides at Catholic Care chose “care-as-relationship” as the most important prior to the training. Three chose “care-as-comfort” and one chose “care-as-service”. After the training, “care-as-relationship” was still the most important and increased slightly (n=8). Two chose “care-as-comfort” and one chose “care-as-service”. At St Joseph, prior to the training, “care-as-relationship” was chosen the most (n=5). Three chose “care-as-comfort” and two chose “care-as-service”. After the training, more nurse aides chose “care-as-relationship” (n=8) as the most important type of care. One chose “care-as-comfort” and none of the nurse aides chose “care-as-service”. This seems to indicate that the nurse aides already understood that relationships with the residents were important for quality caregiving prior to the training if



presented with a multiple choice, but after the training more indicated it as the most important type of caregiving.

Lastly, the nurse aides were also asked about how relationships affect their work. They were asked both the positive and negative aspects of having relationships with the residents. Prior to the training, the nurse aides did see benefits to having relationships. They felt that relationships helped them to know the resident's preferences, to anticipate the resident's needs better, and to gain the residents trust. The negative aspects were when the resident felt bad then the nurse aide also felt badly and the resident could sometimes be overly dependent on just one nurse aide. After the training, the benefits were similar but they also included the idea that a more personal relationship made their job easier, less stressful, and more enjoyable. They felt that they could understand the resident's behavior better. Most importantly, however, they felt that having a relationship with the resident increased the quality of care. "You tend to give quality help when you have a close relationship with a resident" and "By knowing the resident and having a good relationship with them you are able to give them better care. You know their needs better and care when those needs are not being met." The negative aspects after the training were similar but they were more complex. They included: being too emotionally attached, dealing with death, and the residents having higher expectations about care due to the closeness of the relationship.

### *Residents*

The residents were also asked about caregiving and how they described a good nurse aide. There did not seem to be a change in their descriptions from pre to post training. Generally, the residents wanted to be treated with kindness and patience. They wanted the aides to know their preferences, they wanted to be able to trust them, and a good attitude was

important. “Attention to detail. (A good nurse aide) gets to know the resident. He gets to know their likes and dislikes. We all like to get special attention. It's nice when they take the time to do that.” The residents also mentioned that a good nurse aide was able to understand what it was like for them as a resident and treat them accordingly. “A good nurse aide would do the same things your daughter would do for you. It takes a certain kind of person to put themselves in your spot. I hate to see brash treatment of people here. If you don't have the mind for this caring profession then you have missed the point. You need to treat each person differently and understand the situation is different for each person.”

The residents were also asked to choose the most important type of care based on the three types above. Eight of the residents at Catholic Care chose “care-as-service” and “care-as-comfort” as the most important prior to the training (n=4 for both). Two chose “care-as-relationship”. After the training, “care-as-relationship” and “care-as-comfort” were the most important (n=4 for both). Two chose “care-as-service”. At St Joseph, prior to the training, “care-as-comfort” was chosen the most (n=5). Four chose “care-as-service” and three chose “care-as-relationship”. After the training, more residents chose “care-as-comfort” (n=7) as the most important type of care. Three chose “care-as-service” and one chose “care-as-relationship”. This seems to indicate that the residents varied in the type of care they feel is most important which supports the idea that nurse aides must get to know the residents in order learn their preferences for care and that the type of care they prefer might change depending on their needs. It is also important to note that many of the residents felt that all three were important and found it hard to choose just one. It also indicates that the residents felt that care-as-relationship alone was slightly less important to quality care than the nurse aides.

Describing the Data: Group Means

In terms of quantitative data, the training intervention was evaluated by using six measures for the nurse aides and three measures for the residents. See Table 7 and Table 8 for group means, standard deviations, and ranges.

Table 7.

Group Means and Standard Deviations for the Nurse Aide’s Evaluative Measures.

Measures	Nursing Home	Time 1	TX	Time 2	TX	Time 3	Min-Max
Person-centered Behavioral Inventory	Catholic Care	.36(.08)	TX	.37(.08)			.21-.50
	St Joseph	.33(.08)		.35(.10)	TX	.36(.04)	.23-.58
Global Behavioral Scale	Catholic Care	6.41(.49)	TX	6.58(.33)			5.36-6.90
	St Joseph	6.41(.41)		6.18(.52)	TX	6.56(.40)	5.18-7.00
Job Satisfaction	Catholic Care	57.73(15.91)	TX	59.45(11.14)			28-78
	St Joseph	58.00(9.09)		52.10(9.42)	TX	54.56(9.42)	33-76
Satisfaction with Resident	Catholic Care	37.09(7.84)	TX	40.64(5.87) <sup>a</sup>			22-48
	St Joseph	42.20(6.55)		40.80(6.22)	TX	41.89(6.75)	26-48
Mutuality Scale	Catholic Care	37.00(9.65)	TX	40.64(10.09)**			21-55
	St Joseph	40.50(11.58)		41.80(11.08)	TX	43.44(8.55)	23-57
Resident Perception Task	Catholic Care	7.45(4.95)	TX	6.09(2.80)			2-18
	St Joseph	7.20(4.24)		6.20(2.49)	TX	5.44(2.40)	0-13

\*\* $p < .01$ , \* $p < .05$ , <sup>a</sup> $p < .10$

Table 8.

Group Means and Standard Deviations for the Resident’s Evaluative Measures.

Measures	Nursing Home	Time 1	TX	Time 2	TX	Time 3	Min-Max
Satisfaction with Care	Catholic Care	60.09(9.29)	TX	63.60(8.14)			44-77
	St Joseph	58.80(10.77)		60.50(7.19)	TX	62.67(8.66)	44-77
Satisfaction with Nurse Aides	Catholic Care	18.90(2.80)	TX	19.80(2.52)			14-24
	St Joseph	19.00(2.83)		18.60(2.41)	TX	20.88(2.37)*	14-24
Mutuality Scale	Catholic Care	21.90(15.65)	TX	27.30(17.66)*			0-50
	St Joseph	27.40(12.31)		28.00(11.49)	TX	33.11(12.82)*	8-56

\*\* $p < .01$ , \* $p < .05$ , <sup>a</sup> $p < .10$

Behavioral Measures of Person-Centered Care

*Nurse Aides*

The first behavioral measure was the Person-centered Behavioral Inventory (PCBI). The score can be interpreted as the ratio of person-centered behaviors divided by the time of the interaction or the proportion of time the nurse aides were providing care in a person-centered way. For Catholic Care, the overall range was .21-.50. The amount of person-centered behaviors increased slightly after the training from .36 at Time 1 to .37 at Time 2. For St. Joseph, the overall range was .23-.58. The amount of person-centered care was .33 at Time 1 and increased to .35 at Time 2. After the training at St. Joseph, the amount of person-centered care increased to .36 at Time 3. The Time 1 score at Catholic Care ( $M = .36, SD = .08$ ) was not significantly different than the Time 1 score at St. Joseph ( $M = .33, SD = .08$ )(Mann-Whitney  $U = 37, n_1 = 11, n_2 = 10, p = .20$ ), so there were no differences between sites in term of the person-centeredness of the nurse aides’ caregiving.

The second behavioral measure was the Global Behavioral Scale. The score can be interpreted as the rating on a 7-point scale of the person-centeredness of the nurse aide’s

caregiving. At Catholic Care, the overall range was 5.36 to 6.90. It increased from 6.41 at Time 1 to 6.53 at Time 2. For St. Joseph, the overall range was 5.18 to 7.00. The rating of person-centered care was 6.41 at Time 1 and decreased to 6.18 at Time 2. After the training, the rating increased to 6.56 at Time 3. The Time 1 rating for Catholic Care ( $M = 6.41, SD = .49$ ) was not significantly different than the Time 1 rating for St. Joseph ( $M = 6.41, SD = .41$ ) (Mann-Whitney  $U = 51, n_1 = 11, n_2 = 10, p = .77$ ), so there were no differences between sites in term of the person-centeredness of the nurse aides' caregiving.

### Relationships Qualities

#### *Nurse Aides*

The third measure was the nurse aides' job satisfaction, which was measured by the Minneapolis Satisfaction Questionnaire. The MSQ has a theoretical range of 0 to 80. For Catholic Care, the actual range was 28 to 78. The nurse aides' job satisfaction increased from 57.73 at Time 1 to 59.45 at Time 2. For St. Joseph, the actual range was 33 to 76. The nurse aides' job satisfaction was 58.00 at Time 1 and decreased to 52.10 at Time 2. After the training, the rating increased to 54.46 at Time 3. The rating at Time 1 for Catholic Care ( $M = 57.73, SD = 15.91$ ) was not significantly different than the rating at Time 1 for St. Joseph ( $M = 58.00, SD = 9.09$ ) (Mann-Whitney  $U = 51.5, n_1 = 11, n_2 = 10, p = .80$ ), so there were no differences between sites in term of the nurse aides' rating of job satisfaction.

The fourth measure was the nurse aides' relationship satisfaction with the resident, which was measured by the modified Personal Accomplishment Scale. The scale has a theoretical range of 0 to 48. For Catholic Care, the actual range was 22 to 48. The nurse aides' satisfaction with the resident increased from 37.09 at Time 1 to 40.64 at Time 2. For St. Joseph, the actual range was 26 to 48. The nurse aides' satisfaction with the resident was 42.20 at Time 1 and

decreased to 40.80 at Time 2. After the training, the rating increased to 41.89 at Time 3. The rating at Time 1 for Catholic Care ( $M = 37.09$ ,  $SD = 7.84$ ) was not significantly different than the rating at Time 1 for St. Joseph ( $M = 42.20$ ,  $SD = 6.55$ )(Mann-Whitney  $U = 28.5$ ,  $n_1 = 11$ ,  $n_2 = 10$ ,  $p = .06$ ), so there were no differences between sites in term of the nurse aides' satisfaction with the resident.

The fifth measure was the nurse aides' perception of the nurse aide/resident relationship closeness, which was measured by the Mutuality Scale. The scale has a theoretical range of 0 to 60. For Catholic Care, the overall range was 21 to 55. The nurse aides' perception of the relationship significantly increased from 37.00 at Time 1 to 40.64 at Time 2. For St. Joseph, the actual range was 23 to 57. The nurse aides' perception of the relationship was 40.50 at Time 1 and increased to 41.80 at Time 2. After the training, the rating increased to 43.44 at Time 3. The rating at Time 1 for Catholic Care ( $M = 37.00$ ,  $SD = 9.65$ ) was not significantly different than the rating at Time 1 for St. Joseph ( $M = 40.50$ ,  $SD = 11.58$ )(Mann-Whitney  $U = 43.5$ ,  $n_1 = 11$ ,  $n_2 = 10$ ,  $p = .41$ ), so there were no differences between sites in term of the nurse aide's perception of their relationship with their resident.

The sixth measure was the Resident Perception Task which is based on the Role Category Questionnaire (RCQ). The score represents the number of constructs the nurse aides used to describe the residents. For Catholic Care, the range was 2 -18. The number of constructs used decreased from 7.45 at Time 1 to 6.09 at Time 2. For St. Joseph, the overall range was 0 -13. The number of was 7.20 at Time 1 and decreased to 6.20 at Time 2. After the training, the number decreased to 5.44 at Time 3. The number at Time 1 for Catholic Care ( $M = 7.45$ ,  $SD = 4.95$ ) was not significantly different than the number at Time 1 for St. Joseph ( $M = 7.20$ ,  $SD = 4.24$ )(Mann-

Whitney  $U = 54.5$ ,  $n_1 = 11$ ,  $n_2 = 10$ ,  $p = .97$ ), so there were no differences between sites in term of the nurse aide's number of constructs used to describe the resident.

### *Residents*

The first measure was the residents' overall satisfaction with care, which was measured by the Resident Satisfaction Index. The RSI has a theoretical range of 0 to 84. For Catholic Care, the actual range was 44 to 77. The resident's satisfaction with care increased from 60.09 at Time 1 to 63.60 at Time 2. For St. Joseph, the actual range was 44 to 77. The resident's satisfaction with care was 58.80 at Time 1 and increased to 60.50 at Time 2. After the training, the rating increased to 62.67 at Time 3. The rating at Time 1 for Catholic Care ( $M = 60.09$ ,  $SD = 9.29$ ) was not significantly different than the average rating for St. Joseph ( $M = 58.80$ ,  $SD = 10.77$ )(Mann-Whitney  $U = 52.5$ ,  $n_1 = 11$ ,  $n_2 = 10$ ,  $p = .86$ ), so there were no differences between sites in term of the resident's satisfaction with care.

The second measure was the resident's relationship satisfaction with the nurse aide, which was measured by the modified staff subscale of the RSI. The scale has a theoretical range of 0 to 24. For Catholic Care, the actual range was 14 to 24. The resident's satisfaction with the nurse aide increased from 18.90 at Time 1 to 19.80 at Time 2. For St. Joseph, the actual range was 14 to 44. The nurse aides' satisfaction with the resident was 19.00 at Time 1 and decreased to 18.60 at Time 2. After the training, the rating increased to 20.88 at Time 3. The rating at Time 1 for Catholic Care ( $M = 18.90$ ,  $SD = 2.80$ ) was not significantly different than the rating at Time 1 for St. Joseph ( $M = 19.00$ ,  $SD = 2.83$ )(Mann-Whitney  $U = 55$ ,  $n_1 = 11$ ,  $n_2 = 10$ ,  $p = 1.0$ ), so there were no differences between sites in term of the resident's satisfaction with the nurse aide.

The third measure was the nurse aides' perception of the nurse aide/resident relationship closeness, which was measured by the Mutuality Scale. The scale has a theoretical range of 0 to

60. For Catholic Care, the actual range was 0 to 50. The residents' perception of the relationship increased from 21.90 at Time 1 to 27.30 at Time 2. For St. Joseph, the actual range was 8 to 56. The resident's perception of the relationship was 27.40 at Time 1 and increased to 28.00 at Time 2. After the training, the rating increased to 33.11 at Time 3. The rating at Time 1 for Catholic Care ( $M = 21.90$ ,  $SD = 15.65$ ) was not significantly different than the rating at Time 1 for St. Joseph ( $M = 27.40$ ,  $SD = 12.31$ ) (Mann-Whitney  $U = 46$ ,  $n_1 = 11$ ,  $n_2 = 10$ ,  $p = .52$ ), so there were no differences between sites in term of the resident's perception of their relationship with their nurse aide.

### Testing Hypotheses at Both Sites

#### *Nurse Aides*

Hypothesis 1a was that nurse aides would provide care in more person-centered ways after the training intervention. Nurse aides' person-centeredness was measured by two observational coding systems: the Person-Centered Behavior Inventory (PCBI) and the Global Behavior Scale (GBS) (Grosch, Medvene & Wolcott, 2008). At Catholic Care, a related-samples Wilcoxon signed ranks test was conducted using SPSS NONPARAMETRIC TEST to test the median differences between the PCBI at Time 1 and Time 2. The results were not significant,  $z = -.45$ ,  $p = .64$ . At St. Joseph, a related-samples Wilcoxon signed ranks test was conducted using SPSS NONPARAMETRIC TEST to test the median differences between the PCBI at Time 2 and Time 3. The results were not significant,  $z = -.56$ ,  $p = .57$ . At Catholic Care, a related-samples Wilcoxon signed ranks test was conducted to test the median differences between the GBS at Time 1 and Time 2. The results were not significant,  $z = -.76$ ,  $p = .44$ . At St. Joseph, a related-samples Wilcoxon signed ranks test was conducted to test the median differences between the GBS at Time 2 and Time 3. The results were not significant,  $z = -.98$ ,  $p = .32$ .



Hypothesis 1b was that there would be an increase in the nurse aides' job satisfaction as measured by the Minneapolis Satisfaction Questionnaire (MSQ) (Friedman, Daub, Cresci & Keyser, 1999). At Catholic Care, a related-samples Wilcoxon signed ranks test was conducted to test the median differences between the MSQ at Time 1 and Time 2. The results were not significant,  $z = -.25$ ,  $p = .79$ . At St. Joseph, a related-samples Wilcoxon signed ranks test was conducted to test the median differences between the MSQ at Time 2 and Time 3. The results were not significant,  $z = -.89$ ,  $p = .37$ .

Hypothesis 1c was that there would be an increase in nurse aides' satisfaction with their relationships with residents, as measured by a modified "Personal Accomplishment" subscale of the Maslach Burnout Inventory (Maslach & Jackson, 1986). At Catholic Care, a related-samples Wilcoxon signed ranks test was conducted to test the median differences between the satisfaction ratings at Time 1 and Time 2. The results approached significance,  $z = -1.83$ ,  $p = .06$ . At St. Joseph, a related-samples Wilcoxon signed ranks test was conducted to test the median differences between the satisfaction ratings at Time 2 and Time 3. The results were not significant,  $z = -1.07$ ,  $p = .28$ .

Hypothesis 1d was that the nurse aides' perceptions of the relationship closeness with the residents would increase, as measured by the Mutuality Scale (Heliker, 2007, Stewart & Archbold, 1991). At Catholic Care, a related-samples Wilcoxon signed ranks test was conducted to test the median differences between the mutuality ratings at Time 1 and Time 2. The results were significant,  $z = -2.82$ ,  $p < .01$ , indicating that the nurse aides' perception of the relationship did significantly increase after the training. At St. Joseph, a related-samples Wilcoxon signed ranks test was conducted to test the median differences between the mutuality ratings at Time 2 and Time 3. The results were not significant,  $z = -.98$ ,  $p = .32$ .

Hypothesis 1e was that there would be an increase in the complexity of the nurse aide's perception of the resident as measured by the "Resident Perception Task" (Medvene, Grosch, & Swink, 2006). At Catholic Care, a related-samples Wilcoxon signed ranks test was conducted to test the median differences between the number of constructs at Time 1 and Time 2. The results were not significant,  $z = -.76, p = .44$ . At St. Joseph, a related-samples Wilcoxon signed ranks test was conducted to test the median differences between the number of constructs at Time 2 and Time 3. The results were not significant,  $z = -1.19, p = .23$ .

### *Residents*

Hypothesis 2a was that there would be an increase in the residents' satisfaction with care as measured by the Resident Satisfaction Index (Skiorska-Simons, 2001). At Catholic Care, a related-samples Wilcoxon signed ranks test was conducted to test the median differences between the satisfaction ratings at Time 1 and Time 2. The results were not significant,  $z = -.83, p = .40$ . At St. Joseph, a related-samples Wilcoxon signed ranks test was conducted to test the median differences between the satisfaction ratings at Time 2 and Time 3. The results were not significant,  $z = -1.40, p = .16$ .

Hypothesis 2b was that there would be an increase in residents' satisfaction with their relationships with nurse aides as measured by the "relationships with staff" subscale of the Resident Satisfaction Index (Skiorska-Simons, 2001). At Catholic Care, a related-samples Wilcoxon signed ranks test was conducted to test the median differences between the satisfaction ratings at Time 1 and Time 2. The results were not significant,  $z = -.85, p = .39$ . At St. Joseph, a related-samples Wilcoxon signed ranks test was conducted to test the median differences between the satisfaction ratings at Time 2 and Time 3. The results were significant,  $z = -2.20, p$

< .05, indicating that the residents' satisfaction of the nurse aides did significantly increase after the training intervention.

Hypothesis 2c was that the residents' perceptions of the relationship closeness with the nurse aides would increase, as measured by the Mutuality Scale (Heliker, 2007, Stewart & Archbold, 1991). At Catholic Care, a related-samples Wilcoxon signed ranks test was conducted to test the median differences between the mutuality ratings at Time 1 and Time 2. The results were significant,  $z = -1.89$ ,  $p < .05$ , indicating that the residents' perceptions of the mutuality of the relationship significantly increased after the training intervention. At St. Joseph, a related-samples Wilcoxon signed ranks test was conducted to test the median differences between the mutuality ratings at Time 2 and Time 3. The results were significant,  $z = -1.95$ ,  $p < .05$ , indicating that the residents' perceptions of the mutuality of the relationship significantly increased after the training intervention. The Wilcoxon signed ranks test was also conducted to test the median differences between the mutuality ratings at Time 1 and Time 2. The results were not significant,  $z = -.255$ ,  $p = .79$ , indicating that there was no change in the mutuality ratings between Time 1 and Time 2. See Table 9 for a summary of the hypotheses and whether they were supported.

Table 9.

Summary of the Hypothesis Testing.

Hypothesis	Catholic Care	St. Joseph
Nurse Aides:		
Increase in Person-centered Behavioral Inventory	Not Supported	Not Supported
Increase in Global Behavioral Scale	Not Supported	Not Supported
Increase in Nurse Aides' Job Satisfaction	Not Supported	Not Supported
Increase in Nurse Aides' Satisfaction with Resident	Supported	Not Supported
Increase Nurse Aides' Relationship Closeness	Supported	Not Supported
Increase in Nurse Aides' Perception of the Resident	Not Supported	Not Supported
Residents:		
Increase in Residents' Satisfaction with Care	Not Supported	Not Supported
Increase in Residents' Satisfaction with Nurse Aide	Not Supported	Supported
Increase in Residents' Relationship Closeness	Supported	Supported

*Dyadic Mutuality*

Based on the pattern of change seen in the group scores pre and post training intervention, is apparent that the perception of relationship closeness for both the resident and nurse aides were positively influenced in both settings. In order to better understand the impact of the training on these relationships, the dyadic mutuality scores were examined for each resident/aide dyad. The scores were examined in the following way. The average change in mutuality scores for the dyads was examined in order to determine the relational characteristics of those dyads on which the training intervention had the greatest impact. Understanding the impact of the training intervention on the relationship is useful in evaluating the training.

The theoretical range of the mutuality scale is 0 to 60. A score of 0 indicates several things: that the person does not perceive the relationship to be close, they are not attached to the other person, they would not enjoy spending time with them or feel indifferent, and they would

not disclose much information about themselves. A score of 60 indicates that the person perceives the relationship as very close, they would have a high degree of love for the other person, they would be highly attached to the person, and would depend on them for emotional support. The scores for Catholic Care can be see in Table 10 and the scores for St. Joseph can be seen in Table 11.

Table 10.

Dyadic Mutuality Scores for Catholic Care. Intervention Occurred Between Time 1 and 2.

Measures	Participant	Time 1	Time 2
Dyad 1	Resident	25	28
	CNA	44	46
Dyad 2	Resident	41	46
	CNA	33	40
Dyad 3	Resident	6	12
	CNA	34	34
Dyad 4	Resident	32	28
	CNA	47	51
Dyad 5	Resident	42	50
	CNA	21	24
Dyad 6	Resident	0	4
	CNA	39	42
Dyad 7	Resident	26	NS*
	CNA	41	44
Dyad 8	Resident	16	46
	CNA	22	23
Dyad 9	Resident	39	35
	CNA	33	46
Dyad 10	Resident	2	0
	CNA	41	42
Dyad 11	Resident	12	24
	CNA	52	55

\*No score

Table 11.

Dyadic Mutuality Scores for St. Joseph Village. Intervention Occurred Between Time 2 and 3.

Measures	Participant	Time 1	Time 2	Time 3
Dyad 12	Resident	38	32	37
	CNA	56	52	55
Dyad 13	Resident	42	35	NS**
	CNA	23	32	33
Dyad 14	Resident	26	44	56
	CNA	27	26	30
Dyad 15	Resident	12	8	23
	CNA	30	30	39
Dyad 16	Resident	33	36	43
	CNA	47	53	46
Dyad 17	Resident	11	17	27
	CNA	57	54	54
Dyad 18	Resident	25	13	13
	CNA	46	52	44
Dyad 19	Resident	38	29	40
	CNA	42	45	48
Dyad 20	Resident	38	35	35
	CNA	41	31	42
Dyad 21	Resident	11	31	24
	CNA	36	43	NS**
*Dyad 22	Resident	9	20	18
	CNA	23	25	23
*Dyad 23	Resident	35	37	41
	CNA	19	20	25

\*In the last two dyads the CNAs did not complete the 6-week intervention, but they did completed all the measures. Their scores as well as their residents' scores were omitted from the group mean analyses.

\*\*No score

### Changes in the Mutuality Scores

Upon examining the mutuality scores, it appears that the largest impact of the training occurred in changing how both the nurse aides and the residents viewed their relationship. For Catholic Care, seven out of ten (70%) nurse aides had an increase in their mutuality scores and eleven of eleven residents (100%) also had an increase from before to after the training intervention. For St. Joseph, five out of nine (56%) nurse aides had an increase in their mutuality scores and five out of nine residents (56%) also had an increase from before to after the training intervention. In order to better understand the changes that occurred in these scores, a decision was made to examine each of the dyads themselves, and how the relationships on a dyadic level may have been altered due to the training intervention.

In order to do this, the dyads' average mutuality change scores were calculated across both sites. This identified the dyads on which the training intervention had the most impact versus the least amount of impact. Across both sites the number of dyads was 18. See Table 12. The change in mutuality from pre to post was calculated for the nurse aides and the residents and then averaged ( $M = 4.58$ ,  $SD = 4.77$ ). For the nurse aides and residents of St. Joseph, the Time 1 and Time 2 scores were averaged first and then subtracted from Time 3. The averaged mutuality change scores were then transformed to z-scores. The top and bottom four dyads (22%) were determined across all 18 dyads, regardless of site. The top four and bottom four dyads are examined below. The qualities of the relationship, the individual differences, and how the relationship changed are examined. The demographics of the nurse aide and resident are included as well as how the nurse aide and resident felt about caregiving pre and post, and how the training may have impacted both the nurse aide and the resident. This information provides an image of which nurse aides may or may not have understood the training, the extent to which



nurse aides were able to apply the concepts of the training, as well as what kind of dyadic relationships benefited most from this type of intervention.

Table 12.

Average Change in Dyadic Mutuality Scores and z-score Distribution.

	Dyad	Nurse Aide's Change in Mutuality Score	Resident's Change in Mutuality Score	Average Change in Mutuality Scores	z-score
Top	8	1	30	15.5	2.29
	14	3.5	21	12.25	1.61
	15	9	13	11	1.35
	11	3	12	7.5	.61
	2	7	5	6	.30
	17	-1.5	13	5.75	.25
	5	3	8	5.5	.19
	19	4.5	6.5	5.5	.19
	9	13	-4	4.5	-.02
	6	3	4	3.5	-.23
	3	0	6	3	-.33
	1	2	3	2.5	-.44
	16	-4	8.5	2.25	-.49
	20	6	-1.5	2.25	-.49
Bottom	12	1	2	1.5	-.65
	4	4	-4	0	-.96
	10	1	-2	-.5	-1.07
	18	-5	-6	-5.5	-2.11

Top Four Dyads

*Dyad 8*

Dyad 8 had the highest average mutuality change, which was 15.5 and was from Catholic Care. The resident was a white male, age 87 with Parkinson's disease. He was an engineer and had owned his own business. His mental status was 29. He had lived in the nursing home 5 years. The nurse aide was an African American male, age 29. He was born in the US and English was his first language. He did not feel that his ethnicity affected his work. His highest level of education was a high school diploma. He has been a caregiver and worked at Catholic

Care for 10 years. He had known his paired resident 4 months. He was a nurse aide who does restorative work with the residents, which involves low impact exercise to help maintain muscle strength and flexibility. Before the study, the dyad did not have much of a relationship. They knew each other and worked with each other periodically, but both made it clear that they knew little about each other. This was apparent in their mutuality scores. The nurse aide's pre score was 22 and the resident's score was 16 indicating a match on the level of mutuality, but overall they both did not feel very close to one another.

Both the nurse aide and resident were asked prior to the training about caregiving and relationships. The nurse aide was asked to describe high quality caregiving, he described it as "I can spend all day talking about things you need but only one thing makes care best and that is heart. If you don't have it in your heart then don't try. It takes a lot of care not just physical but mental. So heart is where it starts and ends." He also asked how close relationships with residents helped him in his work prior to the training and his response was "You establish trust and you get good compliments. It feels really good to hear a resident say you are the best or hear that they wondered about you when you were off. That is what tells you that you are making a good impression." The resident was asked to describe a really good nurse aide and the things he liked best about the caregiving. He stated "Both skills and personal relationships are important. They must be balanced. Each person must understand each other's perspective. I like thoroughness. Some of the CNAs do it to just get by, but others take their time. If you are just doing it to get by, don't be in the profession." It was apparent from these answers that both the nurse aide and resident seem to have a complex definition of caregiving as well as high expectations surrounding caregiving.

After the training, the level of mutuality changed dramatically for the resident, it went from a 16 to 46, however, the mutuality for the nurse aide stayed the about the same. It went from 22 to 23. This indicates that the resident may have noticed something different in the way the nurse aide behaved or related to him to make him feel closer to the nurse aide. Both the nurse aide and resident were asked the same questions following the training. The nurse aide described high quality caregiving in relatively the same manner. "I think the most and major part of CNA caregiving is in your heart. If you don't have it in your heart go flip burgers or answer phones or something else because you have to care about yourself and others to do this. It works better that way. Heart equals love and love equals care, in that order." The same is true about his relationships with residents. He stated, "They depend on you and that makes you feel good inside. You show it in return and this creates trust. It helps them adjust to a place like this. The hardest part is adjusting."

The resident also responded similarly in terms of describing good nurse aides. He stated, "It's the personal relationships that they establish. They make you feel a part of the program and not just a number. They care about their work." But when asked specifically about his paired nurse aide and if he noticed anything that had changed in the way he worked with him, he responded, "It is better. I feel like I know him better. He is very talented and entertaining." He was also asked if he noticed any changes in the relationship, and he responded, "I understand him and enjoy him more. I really like that guy".

In terms of the training itself, the nurse aide attended 3 of the four classes. He watched the video of his resident and learned some new information from it but stated that he had a hard time applying it in his work. He also watched his caregiving video and felt that it was useful in understanding his behavior. He stated, "It was strange to see myself working. There are things I

can do differently. It was useful and I would recommend it for other CNAs.” The most important he learned was “learning their personal background helps you get close” and he really enjoyed the person-centered behaviors and felt they were easy to apply. Overall he was satisfied with the training and would recommend it to other nurse aides.

Based on this information, it appears that the resident feels a great deal more connected to the nurse aide after the training. The amount of person-centered care measured was high but did not change after the training, but the resident’s perception of mutuality did increase, as did his overall satisfaction. It went from 65 to 70. The resident seemed to feel much closer to the nurse aide and seemed to notice changes in their relationship. The nurse aide, on the other hand, seemed to understand the concepts of the training and apply some of them, however, he did not seem to feel closer to the resident as a result.

#### *Dyad 14*

Dyad 14 had an average mutuality change of 12.5 and was from St Joseph. The resident was a white female, age 90 with severe hearing loss. She was a homemaker, married to a university professor, had some college, and wrote book reviews for the local paper. Her mental status was 28. She had lived in the nursing home 1 year. The nurse aide was a European American female, age 23. She was born in the US and English was her first language. She did not feel that her ethnicity affected her work. Her highest level of education was high school. She has been a caregiver and worked at St. Joseph for 2.5 years. She had known her paired resident 1-year. She was a nurse aide and a med aide. Before the study, the dyad worked with each other regularly. The nurse aide’s averaged pre score was 26.5 and the resident’s averaged pre score was 35 indicating that both had a moderate level of mutuality and the resident felt closer to the nurse aide.

Both the nurse aide and resident were asked prior to the training about caregiving and relationships. The nurse aide described high quality caregiving as “knowing what the resident needs and trying to fulfill that as much as possible. Be patient and give them choices. To have a good attitude and know your resident as well as you possibly can.” She also asked how close relationships with residents helped her in her work prior to the training and her response was “You will know the things they like and how to care for them.” The resident was asked to describe a really good nurse aide and the things she liked best about the caregiving. She stated, “They have a kind manner. They have a caring attitude and they try to do what is comfortable for you.” Both the nurse aide and resident seem to understand that caring for someone means knowing the person and treating them well.

After the training, the level of mutuality increased dramatically for the resident, it went from a 35 to 56. The mutuality for the nurse aide also increased. It went from 26.5 to 30. This indicates that both the resident and the nurse aide felt closer to each other following the training. Both the nurse aide and resident were asked the same questions above. The nurse aide stated that, “knowing a residents history is very important in caregiving. It helps you foresee their needs” and in terms of relationships, she felt that they facilitated her ability to do her job. “It is easier to talk to them if you know about their personal lives and you can better understand some of the things they do.”

The resident was again asked about the most important aspect of caregiving and she responded, “kindness and understanding are the most important and there is something about having a positive attitude that makes it all better. It makes me feel better.” But when asked specifically about her paired nurse aide and if she noticed anything that had changed in the way she worked with her, she responded, “I haven't noticed any changes, she is very good.” She was

also asked if she noticed any changes in the relationship, and she responded, “I don't know. She is very friendly and I like her very much”.

In terms of the training itself, the nurse aide attended all four classes. She stated that she watched the video of her resident and learned some new information from it. She stated, “It gave me some things to help me relate to her better.” She also watched her caregiving video and felt that it was useful in understanding her own behavior. She stated, “I learned that I don't talk enough when performing specific tasks compared to just stopping in to say hi. I've learned to talk more to residents.” The most important thing she learned was “ways to connect with the residents” and was able to apply it by talking to the residents about things that they enjoy talking about. Overall she was satisfied with the training and would recommend it to other nurse aides. She also stated that she would like to watch videos about her other residents as well.

Based on this information, it appears that both the nurse aide and the resident feel more connected to each other after the training. The resident was unable to comment on anything that changed specifically, but felt that the nurse aide had excellent skills as a nurse aide and was “very friendly”. It appears that the nurse aide was able to use the information in the resident’s videobiography to connect to the resident and understood the concept that knowing a person’s background can be a good way to facilitate a closer relationship. She also realized that she needed to focus more on the person when completing caregiving tasks. Her person-centered behaviors did increase after the training, from .29 to .35, and her global scores when from 6.00 to 6.91. The resident’s overall satisfaction score also increased from 73 to 77.

#### *Dyad 15*

Dyad 15 had an average mutuality change of 11 and was from St Joseph. The resident was a white male, age 80 with chronic pain. He had worked for the railroad his entire life. His

mental status was 23. He had lived in the nursing home 1 year. The nurse aide was a European American male, age 41. He was born in the US and English was his first language. He felt that his ethnicity affected his work quite a bit. His highest level of education was a high school diploma. He has been a caregiver for 13 years and had worked at St. Joseph for 4 years. He had known his paired resident 1-year. Before the study, the dyad worked with each other regularly. The nurse aide's averaged pre score was 30 and the resident's averaged pre score was 10 indicating there was not a match in the level of mutuality and the nurse aide felt closer to the resident than vice versa.

Both the nurse aide and resident were asked prior to the training about caregiving and relationships. The nurse aide was asked to describe high quality caregiving, he described it as "Brushing their teeth, checking on the resident every 2 hours, bathing, toileting them, feeding them, and making sure they are drinking water, juice, etc. I think someone with a lot of experience is good. I don't think it is how quickly it gets done because if you do it quickly you don't do a good job and you can't talk to them." He also asked how close relationships with residents helped him in his work prior to the training and his response was "Ask them what they use to do for work, talk with them about their family, and then let them ask you questions so they will feel good about you so they won't be afraid of you. They will trust you and they will be able to work with you better. For me it is wonderful to have good relationships with the residents because they will talk to you about a problem that they might have." The resident was asked to describe a really good nurse aide and the things he liked best about the caregiving. He stated, "I don't have any likes or dislikes. They treat me all right. They try to make it like home, but it's not home. It's not as good as home."

After the training, the mutuality score increased from 10 to 23 for the resident. The mutuality for the nurse aide also increased. It went from 30 to 39. This indicates that both the resident and the nurse aide felt closer to each other after the training. Both the nurse aide and resident were asked the same questions following the training. The nurse aide described high quality caregiving as “talking to the residents and not getting into a hurry to get things done.” In terms of relationship he stated, “They will bond with the aides more and trust them, and if they are in pain or if something is bothering them, they will tell you.” The resident said, “I’ve never thought about it (quality caregiving) before. They are good to me here. They have never hurt me.” When asked specifically about his paired nurse aide and if he noticed anything that had changed in the way he worked with him, he responded, “No. I haven’t noticed anything different.” He did not notice any changes in the relationship either.

In terms of the training itself, the nurse aide attended 2 of the four classes. He watched the video of his resident and learned some new information, however, he did not watch his caregiving video. He was unable to articulate what he learned from the training and did not comment on his satisfaction of the training.

Based on this information, it appears that both the nurse aide and the resident feel more connected to each other after the training. The nurse aide seemed to use the information in the resident’s videobiography to connect to the resident. His person-centered behaviors did increase after the training from .24 to .34 and his global scores increased from 5.18 to 6.27. Interestingly, the nurse aide only went to two classes and seemed somewhat uninterested in the training, but changes were seen in his mutuality scores and his person-centered behaviors. The resident was unable to comment on caregiving or did not notice any changes in the nurse aide. However, after



the training he did feel closer to the nurse aide. The resident's overall satisfaction score remained the same at 57.

### *Dyad 11*

Dyad 11 had an average mutuality change of 7.5 and was from Catholic Care. The resident was a white female, age 77. She was disabled and had lived in institutional settings most of her life. Her mental status was 30. She had lived in the nursing home for 10 years. The nurse aide was a Hispanic female, age 32. She was born in Honduras and Spanish was her first language. She did not feel that her ethnicity affected her work. Her highest level of education was one year of college. She has been a caregiver for 3 years and had worked at Catholic Care for 2 years. She had known her paired resident 2 years. Before the study, the dyad worked with each other regularly. The nurse aide's averaged pre score was 52 and the resident's averaged pre score was 12 indicating that they did not match in their level of mutuality. The nurse aide felt very close to the resident whereas the resident did not feel close to the nurse aide.

Both the nurse aide and the resident were asked prior to the training about caregiving and relationships. When the nurse aide was asked to describe high quality caregiving, she described it as "I think a personal relationship with the resident is the most important." She was also asked how close relationships with residents helped her in her work prior to the training and her response was "You know what the person likes and dislikes." The resident was asked to describe a really good nurse aide and the things she liked best about the caregiving. She stated, "All the good ones come and I get to know them and then they leave. Some of them I can talk to and they give me advice. It is enjoyable when they make themselves available to talk and they are not just focused on their job. It would be great to have a personal aide." Both the nurse aide and resident seem to prefer having relationships with others based on their comments.

After the training, the level of mutuality increased dramatically for the resident, it went from a 12 to 24. The mutuality for the nurse aide also increased. It went from 52 to 55. This indicates that both the resident and the nurse aide felt closer to each other following the training. Both the nurse aide and resident were asked the same questions above. The nurse aide stated, "I think that it is very good to get to know the person you're working with and create a personal relationship with them. It would make them more comfortable and your job easier." In terms of relationships, she felt that they facilitated her ability to do her job. "It makes my job easier and less stressful." The resident was again asked about the most important aspect of caregiving and she responded, "They have all been good. But my favorites are good at taking care of me. They get things done. They were a lot of fun and they were great friends." When asked specifically about her paired nurse aide and if she noticed anything that had changed in the way she worked with her, she responded, "She seems more positive and self-confident." She was also asked if she noticed any changes in the relationship, and she responded, "I don't notice any change in our relationship. I haven't seen her much".

In terms of the training itself, the nurse aide attended 3 of the four classes. She stated that she watched the video of her resident and learned some new information from it. When asked if it was useful, she stated, "Yes and no. After I watched it I felt differently. I felt sorry for her. The information would have been better before I knew her. It changed the way I thought about her." She also watched her caregiving video and stated, "I didn't think watching mine was too useful, but watching other people's videos and the discussion were helpful." The most important she learned was that "this should be the first class you should have when you start, before any of the 'task' classes. It helps show you how to have a relationship with the residents and how to get the tasks done with a relationship." She also stated, "I felt like the class reinforced my values. I

don't feel like the material was new, but it reflected the way I give care and see myself.” Overall she was satisfied with the training and would recommend it to other nurse aides.

Based on this information, it appears that both the nurse aide and the resident felt more connected to each other after the training. The nurse aide seemed to view having a personal relationship with the residents as an asset in her job. It also seems that she had this viewpoint prior to the training and the training reinforced this idea. Her person-centered behaviors did increase after the training, from .26 to .43, and her global scores increased from 6.75 to 6.85. The resident also seemed to value personal relationships. After the training she did feel closer to the nurse aide according to the mutuality scale however she was not aware of any changes in the relationship, but she did notice that the nurse aide was behaving differently. The resident's overall satisfaction score increased from 63 to 70.

#### *Bottom Four Dyads*

##### *Dyad 18*

Dyad 18, from St. Joseph, had the lowest average mutuality change of -5.5. The resident was a white female, age 81. She was homemaker, married to an engineer, and had a college degree. Her mental status was 26. She had lived in the nursing home 1 year. The nurse aide was a European American female, age 27. She was born in the US and English was her first language. She did not feel that her ethnicity affected her work. Her highest level of education was four years of college. She has been a caregiver and worked at St. Joseph for 2 years. She had known her paired resident 18 months. Before the study, the dyad worked with each other regularly. The nurse aide's averaged pre score was 49 and the resident's averaged pre score was 19 indicating that they did not match in their level of mutuality. The nurse aide felt closer to the resident whereas the resident did not feel very close to the nurse aide.

Both the nurse aide and resident were asked prior to the training about caregiving and relationships. The nurse aide described high quality caregiving as “If you treat them with respect, then trust will begin and the relationship will begin. Remember the Golden Rule and get to know your residents.” The resident was asked to describe a really good nurse aide and the things she liked best about the caregiving. She stated, “They need to have patience. I feel like I know the nurse aides, but I have to work at it. You have to meet them halfway. They should be able to meet you halfway too and it is not always easy to do. Good nurse aides know all the residents and spends time with all of them.” Both the nurse aide and resident seem to prefer having relationships with others and have a sense about how start and maintain relationships.

After the training, the level of mutuality decreased for the resident, it went from a 19 to 13. The mutuality for the nurse aide also decreased. It went from 49 to 44. This indicates that both the resident and the nurse aide felt further apart from each other following the training. Both the nurse aide and resident were asked the same questions above. The nurse aide stated, “It is always a good thing to have a close personal relationships with your residents. It helps make your job more like a family.” In terms of relationships, she felt that at times they were risky due to the resident eventually dying. The resident was again asked about the most important aspect of caregiving and she responded, “I like it when they do their job and are thorough. I like when they know the people and do what they need.” But when asked specifically about her paired nurse aide and if she noticed anything that had changed in the way she worked with her, she responded, “She is worse. She went to part-time and has a new boyfriend.” She was also asked if she noticed any changes in the relationship, and she responded, “It hasn’t been as good lately”.

In terms of the training itself, the nurse aide attended 3 of the four classes. She stated that she watched the video of her resident and learned some new information from it. She also

watched her caregiving video and stated, "I learned that I don't like being videotaped on a "bad day"." She could not articulate the most important thing she learn, but noted that, "I should be able to apply everything I learned". She also stated, "Every employee should be involved and not just selective ones" and "the material needs to be in all current and future CNA courses." Overall she seemed somewhat dissatisfied with the training but would recommend it to other nurse aides.

Based on this information, it appears that both the nurse aide and the resident feel less connected to each other after the training. The nurse aide seems to have mixed feelings about the training. She seems to have known some of the concepts prior to the training but was unable to discuss what she learned afterward. She may have understood the concepts, but may not have been able to apply them. Her person-centered behaviors did not change after the training. They stayed at .39, but her global scores decreased from 7.00 to 6.17. Another possible explanation was that her attitude towards her job had changed. Her overall job satisfaction decreased from 54 to 45. The resident seemed to have a complex understanding of caregiving and relationships. She understood the mutuality of relationships and seemed frustrated after the training. She did not feel closer to the nurse aide. She was aware that the nurse aide was behaving differently towards her. The resident's overall satisfaction score slightly increased from 58 to 60.

#### *Dyad 10*

Dyad 10, from Catholic Care, had an average mutuality change of -.05. The resident was a white male, age 93. He had a college degree and had worked as a salesman. His mental status was 22. He had lived in the nursing home less than 1 year. The nurse aide was an African American male, age 24. He was born in Africa and Swahili was his first language. He did not feel that his ethnicity affected his work. His highest level of education was two years of college.

He has been a caregiver and worked at Catholic Care for 2 years. He had known his paired resident 9 months. Before the study, the dyad worked with each other regularly. The nurse aide's pre score was 41 and the resident's pre score was 2 indicating there was not a match in the level of mutuality. The nurse aide felt close to the resident but the resident had virtually no feelings towards the nurse aide.

Both the nurse aide and resident were asked prior to the training about caregiving and relationships. The nurse aide described high quality caregiving as "Always on time, treating people with respect, always watching each other's back, and being honest all the time." He also asked how close relationships with residents helped him in his work and his response was "They get to trust you in what you tend to do for them. They feel safe when you are around. They give you good recommendations to your superiors." The resident was asked to describe a really good nurse aide and the things he liked best about the caregiving. He stated, "I want them to ask me first before they do things. I want them to show interest in things I like to do and help me do it. I like to read, listen to good music, and to be with my friends and family. They are very kind, but there is no one special I can think of right now. They are all thoughtful in general."

After the training, the level of mutuality for the resident went from a 2 to 0 and the nurse aide's level of mutuality went from 41 to 42. This indicates that there was very little change in the relationship. Both the nurse aide and resident were asked the same questions following the training. The nurse aide described high quality caregiving as "taking time with the resident and treating residents with respect." He described relationships as, "knowing a little bit about the residents background and reciprocating with the residents." The resident was asked the same question, but was unable or unwilling to answer.

In terms of the training itself, the nurse aide attended 3 of the four classes. He watched the video of his resident and stated, "I need to know more about my residents. I can use the information to work with my residents. I put myself in their shoes. I can act like their friend and it makes it easier and smoother." He also watched his caregiving video and felt that it was useful in understanding his behavior. He wished the caregiving video were longer. The most important he learned was "to reciprocate with the residents and to understand them and to be more patient" and he wanted to learn more about his other residents and apply their background information to his work. He was satisfied with the training and would recommend it to other nurse aides. He stated, "I'm glad I did it. It was helpful to talk about this. I enjoyed the discussion with the others."

Based on this information, it appears that both the nurse aide and the resident feel mostly the same after the training. The nurse aide seemed to understand the concepts of the training, but this did not change his feelings towards his paired resident. Knowing a person's background and discussing it during care seemed to be a new concept for the nurse aide and he may have had a hard time applying it with his paired resident. His person-centered behaviors went down, .40 to .27, but his global scores increased from 6.09 to 6.68. The resident did not seem interested in a personal relationship with the nurse aide. The resident's overall satisfaction score decreased from 57 to 50.

#### *Dyad 4*

Dyad 4 had an average mutuality change of zero and the dyad was from Catholic Care. The resident was a white female, age 79. She was teacher and had a college degree. Her mental status was 28. She had lived in the nursing home 2 years. The nurse aide was an African American female, age 51. She was born in the US and English was her first language. She felt

that her ethnicity affected her work quite a bit. Her highest level of education was high school. She has been a caregiver and had worked at Catholic Care for 25 years. She had known her paired resident 15 months. Before the study, the dyad worked with each other regularly. The nurse aide's pre score was 47 and the resident's pre score was 32 indicating that they did not match in their level of mutuality. The nurse aide felt closer to the resident than the resident felt to the nurse aide.

Both the nurse aide and resident were asked prior to the training about caregiving and relationships. The nurse aide described high quality caregiving as "being gentle, walking them, massage, and talking to them about things they want to talk about." In terms of how she views relationships in her work, she stated, "It depends. It is harder to do special things here in the nursing home. You have to get permission. I would like to take them out. I enjoy having personal relationships, but it makes it harder or easier depending on the day." The resident was asked to describe a really good nurse aide and the things she liked best about the caregiving. She stated, "I don't have any personal relationships. I am very independent. My favorite quit just a week ago. She would stop and chat, a friendly chat. Some of the others just run." The nurse aide seems to enjoy having close relationships with residents but seems to think that having relationships can be difficult at times. The resident on the other hand seems less comfortable with having close relationships.

After the training, the level of mutuality decreased slightly for the resident, it went from a 32 to 28. The mutuality for the nurse aide increased slightly and went from 47 to 51. The indicates that following the training, the nurse aide felt closer and the resident felt less close. Both the nurse aide and resident were asked the same questions above. The nurse aide stated, "One-on-one with the residents, make sure the resident is well-taken care of, I would like to give



massages everyday, it can control their behavior, they refocus, they are calm.” In terms of relationships, she stated, “I enjoy being with the resident alone, one-on-one, they can express themselves and you feel close that way.” The resident was again asked about good nurse aides and caregiving and she responded, “I don't have a favorite per se, but a cheerful attitude would cover it. They are willing to explain things you don't understand.” But when asked specifically about her paired nurse aide and if she noticed anything that had changed in the way she worked with her, she responded, “Not really. I don't see her a lot. I don't need a lot of help.” She was also asked if she noticed any changes in the relationship, and she responded, “No. It's the same. I don't see her often.”

In terms of the training itself, the nurse aide attended all of the four classes. She stated that she watched the video of her resident and stated, “I like it. I learned a lot about her background. We don't get to read through the charts.” She also watched her caregiving video and stated, “I liked my video and there were things that I wanted to do differently.” She stated that the most important thing she learned from the training was “knowing my resident's history”. The nurse aide was satisfied with the training and would recommend it to other nurse aides.

Based on this information, it appears that the nurse aide increased slightly in closeness and the resident decreased slightly in closeness and the net sum was zero. The nurse aide did not seem to understand the more complex concepts of the training when interviewed but she felt like she knew her resident better and felt closer to her. However, her person-centered behaviors stayed relatively the same at .39 to .41. Her global scores also stayed the same at 6.68 to 6.73. The resident did not seem interested in having a personal relationship with the nurse aide and didn't notice any changes in her behavior. She ultimately felt less close to the nurse aide and her overall satisfaction score decreased from 62 to 59.

### *Dyad 12*

Dyad 12 had an average mutuality change of 1.5 and the dyad was from St Joseph. The resident was a white female, age 94. She not done office work for a university and her highest level of education was high school. Her mental status was 30. She had lived in the nursing home 1 year. The nurse aide was a European American female, age 47. She was born in the US and English was her first language. She felt that her ethnicity somewhat affected her work. Her highest level of education was 1 year of college. She has been a caregiver 27 years and had worked at St. Joseph for 10 years. She had known her paired resident one year. Before the study, the dyad worked with each other regularly. The nurse aide's averaged pre score was 54 and the resident's averaged pre score was 35 indicating that they did not match in their level of mutuality. The nurse aide felt very close to the resident whereas the resident felt moderately close to the nurse aide.

Both the nurse aide and resident were asked prior to the training about caregiving and relationships. The nurse aide was asked to described high quality caregiving, she stated, "These people should be encouraged to do basic maintenance by themselves (i.e. brushing teeth and hair). They usually need coddling and extra moisture cream at bed as well as a drink and a kiss on the cheek. Good care is when people keep busy doing what they came here to do, water, towels, taking care of residents, etc. and making sure a person can do for themselves as much as possible." In terms of how she views relationships in her work, she stated, "The more you love them the more you love your job and that's why you are really here. It makes me feel like I am here for a more worthy cause then just coming to work. One feels more accomplished because they still have a lot to give." The resident was asked to describe a really good nurse aide and the things she liked best about the caregiving. She stated, "I don't have to tell him what to do. Once

I tell him, he just automatically does it. He is thoughtful. I only have to tell him once. He knows where everything is and pays attention to the little details. It makes my life easier and makes me feel special.”

After the training, the level of mutuality increased slightly for the resident, it went from a 35 to 37. The mutuality for the nurse aide barely increased from 54 to 55. In sum, there was a very slight increase in closeness for both the nurse aide and the resident. Both the nurse aide and resident were asked the same questions above. The nurse aide stated, “I believe quality caregiving is when people are getting great oral care, clean faces, and the loving that they deserved. I don't think 'sweetie' is demeaning.” In terms of relationship, she stated, “I feel I can look forward to talking with some of them and it makes it feel as if I am not just coming to work”. The resident was again asked about good nurse aides and caregiving and she responded, “They are upbeat. They know how to do things the way I like. This is a hard job and I realize that’s why people leave.” When asked specifically about her paired nurse aide and if she noticed anything that had changed in the way she worked with her, she responded, “No she has always been good.” She was also asked if she noticed any changes in the relationship, and she responded, “She said she watched the video and we talked about it.”

In terms of the training itself, the nurse aide attended all four classes. She stated that she watched the video of her resident but did not comment on it. She also watched her caregiving video and stated, “I can teach others to be nicer and neater. It looks better when it's neat.” She stated that the most important thing she learned from the training was “to approach the residents as people and to listen better. I feel more appreciated and learned that they feel lonely and need us as much as we need them.” She was satisfied with the training and would recommend it to other nurse aides.

Based on this information, it appears that generally the nurse aide and the resident felt a little closer after the training. The nurse aide did seem to learn some new ideas about the nature of relationships from the training based on the statements she made, but she still seemed to be task driven in her caregiving. Her person-centered behaviors did increase from .24 to .43, but her global scores stayed relatively the same at 6.09 to 6.00. The resident seemed to like the nurse aide and noticed the nurse aide's interest in her videobiography. The resident's overall satisfaction was the same at 49.

### Comparing the Top and Bottom Dyads

When comparing the top and bottom dyads, some general themes are apparent. First, the nurse aides in the top dyads seemed to have a complex understanding of caregiving and relationships both *prior* to and *after* the training. Each of the nurse aides was able to describe caregiving as more than just physical care or just completing the caregiving task and included relationships as an important aspect, and three of the four were able to expand on these ideas after the training and felt like they were able to apply the concepts. This seems to indicate that the nurse aide's attitude towards caregiving and relationships could impact how they create and maintain relationships with the residents. This may have also impacted how they felt about their paired resident. Another important trend for the top dyads was that three of the four residents also had a complex understanding of caregiving and relationships. This may be important in terms of the resident's expectations and desire to have relationships. It may also mean that these residents may be more skilled at creating and maintaining relationships as well, and it may have also impacted how they felt about their paired nurse aide. The bottom dyads did not show this pattern. Either the nurse aide or the resident thought complexly about caregiving and was interested in a relationship, but not both. Other themes seen in the bottom dyads were a negative

or indifferent attitude by either the nurse aide or the resident or both, as well as a general lack of understanding on the part of the nurse aide. In two of the bottom dyads the nurse aides did not seem to understand the concepts of the training and seemed to have a somewhat overbearing caregiving style. Lastly, it is also worth noting that gender, ethnicity, education, age, and the mental status of the resident did not seem to affect whether the dyad was in the top or bottom quartile.

## CHAPTER 4

### DISCUSSION

#### Overview of the Research

The overarching goal of this study was to promote person-centered care as well as to further define the concept of interpersonal person-centered care. Specifically, the goal was to create and pilot test a training intervention that would teach nurse aides' how to provide interpersonal person-centered care. It was hypothesized that by teaching the nurse aides' specific communication and relationship-building behaviors, providing information about their resident's histories, how to have relationships with the residents, and raising self-awareness that the closeness and satisfaction with the nurse aide/resident relationship would improve for both the nurse aide and the resident. It was also hypothesized that this improvement in closeness and relationship satisfaction would improve the resident's satisfaction with care and the nurse aide's job satisfaction. Also of interest was learning about the nurse aide/resident relationship from the perspective of both the resident and the nurse aide. This dyadic perspective using comparable measures was a new and unique form of evaluation and was useful in determining if the relationship was an appropriate target of intervention. Based upon the results, it does appear that the nurse aide/resident relationship is an appropriate target of intervention and it is plausible to attribute to the training the positive changes in the residents' experience of the relationship to the nurse aide.

In this section, the nurse aides' qualitative evaluation of the training intervention will be examined. Then each of the specific hypotheses will be discussed, as well as recommendations for future research, training, and policy. Limitations of the study will also be examined.

### Nurse Aides' Qualitative Evaluation of the Training Intervention

In terms of the qualitative response to the training intervention, the nurse aides were satisfied with the training. All of the nurse aides, when interviewed, felt that the training was worthwhile and said that other nurse aides would benefit from the material. Most of the nurse aides felt that the overarching themes were congruent with Via Christi's mission and they appreciated learning new skills and how to apply them. Another comment made by many of the nurse aides was that they wished that the information had been provided to them during the orientation phase at the nursing home. They felt that it would have helped them learn how to get to know their residents and start relationships. It also would have created more concrete expectations on how to have relationships with residents as well as place the focus of the interaction on the person instead of the task.

In terms of the structure of the training intervention, most of the nurse aides enjoyed the videos and discussion the most, and the lecture portion of the training the least. There were three main videos in the training: *Person before Task* video, the videobiographies, and the caregiving interaction videos. Several of the nurse aides commented that they enjoyed watching the *Person before Task* video and completing the person-centered checklist of behaviors. They stated that it was useful to see the specific behaviors, identify them, and then to think about them while working with the residents. They also felt that the videobiography of their resident was helpful and interesting and they wished that they had more access to information about the residents. Most of the nurse aides did learn something new about their residents. Of the people who felt they did not learn anything new, they stated that they had already learned the material by talking with their resident. Lastly, the caregiving interaction videos were also useful in allowing the nurse aide to see their own behavior. Many of the nurse aides stated that they learned quite a bit

from the feedback although others felt that they learned more by watching the interactions of other nurse aides and discussing the pros and cons of their behavior. Overall the videos seemed very successful in demonstrating the appropriate behaviors and providing feedback to the nurse aides. Other feedback made about the training were wanting to include more of their residents in the videotaped interactions, videotaping more interactions, and modifying the second session to decrease the lecture portion and increase discussion time.

### *Evaluation of the Training Intervention: Specific Hypotheses*

#### *Nurse Aides*

The first hypothesis (1a) was that the nurse aides would provide care in more person-centered ways after the training intervention. The nurse aides' person-centeredness was measured by two observational coding instruments: the Person-Centered Behavior Inventory (PCBI) and the Global Behavior Scale (GBS) (Grosch, Medvene & Wolcott, 2008). Although there was an increase in both of these measures after the training at both sites, the increase was not significant. There may be several reasons for this. One explanation may be that the training was not powerful enough to change the nurse aides' behavior. Although the nurse aide's said they were able to apply the behaviors, the data did not bear this out. The training may need to be modified in order to see a significant change. One way to do this may be to have peer modeling on the job. For example, it may be helpful to have a peer or instructor model the correct behavior with a resident and then have nurse aide duplicate the behavior. This may be an additional way for the nurse aide to get more specific and direct feedback about their behavior. Another option may be to have the nurse aides interview a resident themselves. This may give them an opportunity to try some of the skills they learned without attempting to do a caregiving task at the same time.



Another possible reason for the lack of support for the hypothesized increase in the nurse aides' person-centeredness was in the way person-centeredness was measured. It is possible the nurse aide's person-centered behaviors increased but that this increase was not detected because too few samples of the nurse aide's behaviors were measured. One caregiving interaction was videotaped prior to the training and a second caregiving interaction was videotaped one week following the supervision period of the intervention. It may be that more than two interactions per dyad would need to be videotaped before and after the training in order to have an adequate sampling of the target behaviors. Also, these videos differed in their length and some of the video interactions may have been too short to get an accurate measure. Lastly, it may also be that the specific behaviors on the PCBI need to be expanded to include more interpersonal person-centered care behaviors. These might include: self-disclosure, synchronicity, initiating conversation, and humor.

The second hypothesis (1b) was that there would be an increase in the nurse aides' job satisfaction as measured by the Minneapolis Satisfaction Questionnaire (MSQ) (Friedman, Daub, Cresci & Keyser, 1999). Although there was an increase in the nurse aides' job satisfaction after the training intervention at both sites, neither were significant. One possibility for this result may be that the level of a nurse aide's job satisfaction may not be specifically tied to the nurse aide's relationship with one of their residents. This relationship may impact their job satisfaction, but the job of a nurse aide involves many factors that are separate from this relationship and these other factors may have more of an overall influence on their job satisfaction. These factors may include the administration of the nursing home, certain policies, social hierarchies, workload, available shifts, etc. Also, this one training intervention may have not have had enough power to change their overall perception of their job. It did however show signs of changing their

perception of their relationship with their resident. Lastly, an increase in job satisfaction might have been more pronounced if the supervision after the training would have been more effective. Having more in-depth conversations with their supervisors about the pros and cons of person-centered care might have created opportunities to talk with their supervisor and to possibly address other issues thus increasing overall job satisfaction.

The third hypothesis (1c) was that there would be an increase in nurse aides' satisfaction with their relationships with residents, as measured by the modified "Personal Accomplishment" subscale of the Maslach Burnout Inventory (Maslach & Jackson, 1986). The nurse aides' satisfaction with the residents did increase after the training at Catholic Care and at St. Joseph. There was a significant increase at Catholic Care, which may indicate that the training intervention was more effective at Catholic Care. One reason for this may be that the training intervention did teach the nurse aides to see residents as people instead of tasks thus increasing their satisfaction with the relationship. It may have also been due to the increase in nurse aide's feeling of closeness, as measured by the mutuality scale, and that higher levels of closeness increased satisfaction. However, it is unclear why this would be different at Catholic Care versus St. Joseph. It may be that the difference in findings could have been due to differences in culture. St Joseph was still in the beginning stages of introducing the concept of person-centered care whereas Catholic Care was further along. Catholic Care was already in the process of introducing person-centered care as a part of their mission and incorporating the concept into many of their existing trainings, policies, and procedures. This may have primed the nurse aides and accelerated their readiness for change. Another factor may have been the trainer. The trainer at Catholic Care had more experience with the concept of person-centered care and her main role at Catholic Care was an educator whereas the trainer at St. Joseph was the director of nursing

since St Joseph is too small to have their own educator. Both of the nurses who provided the training were well-respected within their nursing home, were trained to give the same training, and were reported to have covered the same content, however, the nurses may have differed somewhat in their styles and/or may have emphasized different things.

The fourth hypothesis (1d) was that nurse aides' perceptions of relationship closeness with the residents would increase, as measured by the Mutuality Scale (Heliker, 2007, Stewart & Archbold, 1991). The nurse aides' perception of relationship closeness with the resident did significantly increase at Catholic Care and it did increase at St. Joseph although not significantly. The differences in site may be explained by the differences in culture as discussed with the increase in relationship satisfaction. With regards to the increase in closeness at Catholic Care, it is possible that the training intervention was able to increase the nurse's aide knowledge about person-centered care and relationships. This new knowledge helped them to better connect to the resident thus increasing their feelings of closeness for their resident. Originally, it was anticipated that by increasing the nurse aides' knowledge of person-centered care help the nurse aide could better connect to the resident. This may have happened, however, in this study, a significant increase in person-centered behaviors after the training was not detected. It may be that the other factors of the training assisted the nurse aides in feeling closer to the residents. For example, knowing the person and having relationships with the residents were also modeled and discussed in the training. It may be that naming the nurse aide/resident interaction as a "relationship" was a relatively new concept. Typically, nurse aides are not trained to have relationships with the residents and/or they are often told explicitly not to have relationships with residents. Having this information in the training intervention and having open discussions on the matter may have created a new expectation and may have *allowed* the nurse aides to feel

closer to the residents. In other words, changing the nurse aides' thinking about relationship and giving them permission, in a sense, to know the person as a person, instead of a task, may have lead them to feel differently and possibly behave differently. Ultimately, changes in cognition may have influenced the nurse aide's and resident's feelings of closeness and relationship satisfaction.

The fifth hypothesis (1e) was that there would be an increase in the complexity of the nurse aide's perception of the resident as measured by the "Resident Perception Task" (Medvene, Grosch, & Swink, 2006). The complexity of the nurse aide's perception of the resident did not increase after the training intervention and in fact, it decreased after the training at both Catholic Care and St. Joseph. This may have occurred due to the length of time between pre and post measures. The Medvene, Grosch, & Swink (2006) study, measures of the nurse aide's perceptions of the resident were taken immediately after the nurse aides watched the resident videobiography. In the present study, the length of time between measurements was six weeks, which may have been too long of a period between pre and post measurements. It may also be that the nurse aide's may have learned more about the residents in terms of biographical information and facts, but this did not increase the psychological complexity of their perception of the residents. It may also be possible that there was a repetition effect and that the nurse aides lost interest in listing additional constructs with the second and third repetition of this task.

### *Residents*

The first hypothesis (1b) was that there would be an increase in the residents' satisfaction with care as measured by the Resident Satisfaction Index (Skiorska-Simons, 2001). The residents' satisfaction with care did increase after the training intervention at both Catholic Care and St. Joseph although it was not significant. In line with the overall goal of the study, it was

hypothesized that the residents would perceive the quality of their care as better based upon the nurse aides learning about person-centered care and relationships. The residents did perceive their care as being better as seen in the increase after the training intervention at both sites, however, it may have not been statistically significant due to the small sample. Also as with the nurse aides' job satisfaction, there may be other factors that more strongly affect an overall rating of care. One factor that some of the residents mentioned was that no matter how good the care was, how nice the setting was or how personable the people were, the nursing home was just not "home" and many wished to return to their own house.

The second hypothesis (2b) was that there would be an increase in residents' satisfaction with their relationships with nurse aides as measured by the "relationships with staff" subscale of the Resident Satisfaction Index (Skiorska-Simons, 2001). The residents' satisfaction with their relationships with their paired nurse did increase after the training at both sites, and at St. Joseph it was significant. One possible explanation may be that the nurse aides may have behaved differently following the training intervention and the residents may have been able to detect these changes even though they may not have been consciously aware of them. These changes in the nurse aide may have increased the resident's satisfaction with the relationship. It is unclear what exactly these changes might have been but it was hypothesized that the nurse aides' new knowledge about the resident, relationships, and person-centered care may have caused them to behave in a more person-centered way. Another possibility may be the increase in closeness as seen in the mutuality scores may have also increased the resident's feelings of satisfaction. In terms of the site difference, size differences in the sites may have made it easier for the residents to interact with their paired nurse aide at St. Joseph.

The third hypothesis (2c) was that the residents' perceptions of relationship closeness with the nurse aides would increase, as measured by the Mutuality Scale (Heliker, 2007, Stewart & Archbold, 1991). The residents' perception of the relationship closeness with the nurse aide significantly increased at both sites after the training intervention. This finding is particularly noteworthy since the training intervention for the nurse aides seemed to have a measureable impact on the residents. One possible reason for this could be that the nurse aides did behave in a more person-centered way by using what they learned in the training intervention and that the residents were able to better connect to the nurse aides due to the nurse aides' new knowledge and skills.

Another possibility may be that the design of the research impacted how the resident's thought about the nurse aides. As a part of the research design, each resident was paired with a specific nurse aide and they were aware of their pairing for the purpose of the study. As a function of the research design each resident was paired with a nurse aide and both may have started to see themselves in a relationship. Prior to this research, the residents may have viewed the aides as paid service providers who assisted them with ADLs, but after the training, the residents were more likely to view the aides as people, who were accessible, and with whom they had relationship. However, this pairing alone could not account for the change in closeness since it did not occur in the absence of the training intervention at St. Joseph between Time 1 and Time 2. The increase in closeness only occurred after the training intervention. This dyadic pairing of specific nurse aides and residents, which was an artifact of the study design, in conjunction with the training intervention itself may have lead to the increase of closeness.

### *Summary of Findings*

Overall, the results of the research hypotheses provided mixed support for the impact of the training intervention. There was evidence that the residents' and nurse aides' sense of closeness regarding their relationship and their sense of relational satisfaction did increase. However, it was not possible to clearly identify the 'active ingredients' of the training intervention. It was anticipated that an increase in person-centered care behaviors would positively impact closeness and relationship satisfaction, but there was little evidence to support this. It is possible that person-centered care behaviors could still be the mechanism for these increases, and that the lack of evidence here is due to a failure to collect enough samples of the caregiving behaviors. It is also possible that the research design itself as well as the changes in the nurse aides relational thinking were responsible for the changes. It is also important to note that the increases were on a dyadic level meaning that both the nurse aide and the resident changed after the training intervention. This seems to indicate that both the nurse aides and the residents began to think in terms of relationship. This supports the idea that the relationship can be an appropriate target for an intervention and the interplay between people can be impacted by a training intervention.

### *Future Research*

In evaluating this study for the purposes of future research, there are several recommendations. The first is that some of the residents were unsure of their paired nurse aide in the initial interview when prompted by their name only. In this situation, their paired nurse aide was described until the resident was able to remember the person. In the future studies it is recommended that a picture of the nurse aide would be used to help the resident identify their

nurse aide. This would increase the likelihood that the resident would have an accurate mental picture of the nurse aide when answering questions.

Another recommendation for future research would be to make changes to how videotaping might be managed. Videotaping caregiving interactions is a good way to document this type of behavior, however, having a third person videotape a caregiving situation was somewhat awkward at times due to the personal nature of the work. Some portions of the interactions cannot be videotaped in order to preserve the resident's dignity, or at times, just the presence of a third person watching a personal moment is uncomfortable. The videotaping did not seem to change the behaviors of the nurse aide and residents when they were focused on each other, but there were a few times when the nurse aide or the resident had a hard time ignoring the videotaping. In addition to increasing the sampling of the caregiving interactions, videotaping additional sessions would also help the nurse aide and the resident habituate to the videotaping. Other possible improvements may be to have a hidden camera or to set up the video camera to record all the interactions the resident has during the day.

Another recommendation for future research would be to examine which portion of the training intervention increased the nurse aides' and residents' perceptions of relationship closeness and satisfaction. The training had multiple components and it was not possible to identify the active ingredients. In future research it would be worthwhile to test these components to assess whether only one is needed or whether it was the combination of the training plus the pairing which lead to these findings. Specifically, it would be of interest to see if pairing the nurse aide and resident alone was enough to increase their joint sense of closeness or whether learning through a training intervention to think in a relational manner was necessary on the part of the nurse aide.



### Future Training

There are several recommendations for future training. The first is that the discussion of relationships needs to be incorporated into nurse aide training. Many of the nurse aides stated that the relationship portion of the training was new information for them. They also stated that they had been told not to have relationships with the residents in their initial clinical training. Although relationships can be a complex subject, it appears that just allowing the nurse aides to perceive their interactions with the residents in a relational manner can have positive effects for both the nurse aides and the residents.

Another recommendation concerns timing. Many of the nurse aides wished that this information had been available to them prior to working with the residents. They felt that it would have shown them how to behave and given them a clear expectation on how to interact with the residents. It would have also made it clear that the person is the first priority and the clinical task should be completed within the context of a personal interaction.

Another recommendation for training is tailoring the training to individual nurse aides. In this study, the videos in the training were created specifically for the nurse aides, which may have helped them relate to the material in a more personal manner. The nurse aides enjoyed watching the videobiography of their resident and learning more about them as a person. They also enjoyed watching and discussing the caregiving interactions. Most nurse aides did not mind being videotaped and learned a great deal from watching themselves as well as others working with the residents. Lastly, the methods and information that were used in the training intervention are currently being used and will continue to be used to teach “person-respected care” throughout Via Christi Senior Service’s system of care.

Lastly, the conceptual content of the training as well as the videos could be simplified for nursing homes to use on a larger scale. The conceptual content could be presented and discussed as it was in the present study, as long as the trainer was able to help the nurse aides identify the behaviors and discuss their application on the job. He or she would also need to have personal experiences with residents and be able to assist the nurse aides in discussing their own experiences. In terms of the resident videobiographies, several of the videos of “unknown” residents created in this study could be watched and discussed. Instead of watching a videobiography of a resident they knew, the nurse aides could do a personal interview with their own residents as a homework assignment. In terms of the caregiving interactions, videos of the nurse aides interacting with the residents would not be difficult to create. Caregiving interactions could be videotaped with a cell phone video application and loaded on a computer. The videos could be watched and discussed as a group as was done in the present study. Another idea would be to have the nurse aides do the videotaping of each other as a way of increasing their awareness. These changes would allow the training to remain intact. It would still be tailored to the nurse aides as well as the organization but would allow for a wider distribution.

#### *Future Policy*

In terms of policies, the first recommendation would be that the nurse aide be allowed to have more information about the resident. This would allow them to know their resident better and give them the information they could use to relate to the resident. Although the nurse aides were taught how to interview residents, the videos provided them a way to learn more about the residents in roughly 15 minutes. The nurse aides said specifically that they wished they had access to more information about the resident because knowing things about them made

conversations easier and it gave them ideas on how to tailor the care according to the resident's preferences.

Another recommendation would be to provide more continuity of care for the residents. As demonstrated here, "pairing" the nurse aides and residents seemed to have a positive effect on both the nurse aides and the residents. Although it is assumed, it is unknown if the nurse aides and the residents actually interacted more as a result of the pairing, however, it may be that just the awareness of "being a pair" increased their sense of closeness and satisfaction with the relationship and may have changed their behavior as well. In terms of policies in the nursing home, if consistent assignment was used similar results may be seen. Consistent assignment is defined as the same staff members working with the same residents on a regular basis. Many nursing homes are trying to move towards this model, however, there are many consequences in terms of staffing. These including having enough staff, reducing turnover, and having a method of pairing nurse aides and residents that would take resident and nurse aide preferences into account. Based on the findings here, consistent assignment may be a good way of increasing the quality of relationships between nurse aides and residents and may ultimately increase the quality of experience for both.

The last recommendation for policy change would be in the hiring of nurse aides. In examining the change in mutuality scores, it seems that the dyads who most benefited from the training were the nurse aide that were already had a more complex understanding of caregiving and relationships. There is no direct measureable evidence of this in this study but it is the author's hunch that measuring such complexity may be useful in hiring nurse aides. These concepts of quality of care and of the relative importance of tasks verses relationships could be discussed during interviews and the nurse aides who demonstrated more complex ideas in this

area, and specifically thought about the residents in relational terms, may prove to be more successful in understanding the residents and their needs. They may also be more open to applying interpersonal person-centered care. This also suggests that there may be a way of measuring the nurse aide's relational thinking and using it to assess perspective nurse aides.

### Limitations

The greatest limitation of this study is the small sample. This study was a pilot study for a training intervention, and due to a variety of issues, a small number of participants were included. Certainly, having a larger sample would have increased the generalizability of the study, but considering the sample size the results are quite promising. Certainly the largest problem in replicating the study with a larger sample would be the time and effort for coding the video interactions. As mentioned above, in order to get a better measure of the person-centered care behaviors, the sampling of the behaviors needs to be increased. This would increase the probability of capturing a change in behavior but it also would increase the time needed for coding. In terms of the overall design, the waitlist control design was successful in evaluating the training intervention. Patterns in the data were consistent with the hypotheses and changes were seen after the training intervention at both sites. It is possible that more significant changes would have been seen with more powerful measures and a larger sample size. It is also important to note that the present study's finding may not generalize to all nursing home residents since the residents who participated in this study represented the highest functioning residents in the nursing home.

### Conclusion

The overarching goal of this study was to promote interpersonal person-centered care. In order to reach this goal a training intervention was developed and implemented that taught nurse

aides' how to provide interpersonal person-centered care. It was hypothesized that by teaching the nurse aides' about person-centered care that they would increase the amount of person-centered care they provided to their resident thus increasing the nurse aide's relationship closeness and relationship satisfaction, as well as their overall satisfaction. It was also hypothesized that this would happen on a dyadic level, meaning that the nurse aide's change in behaviors would impact the resident's feelings of relationship closeness, relationship satisfaction, and their overall satisfaction.

The training intervention was developed according to the current research on person-centered care and the overall focus of the training was on personhood, knowing the person, and relationships, which comprise the concept of interpersonal person-centered care. The training intervention was implemented and evaluated using a quasi-experimental waitlist design using two nursing homes, Catholic Care and St. Joseph and the findings indicate that the training intervention was successful in influencing both the nurse aides' and residents' relationship closeness as well as their relationship satisfaction. These results are not completely consistent with the initial expectations of the study. Increases in person-centered care were expected to increase closeness and relationship satisfaction. One explanation for this pattern of results reported here may be that person-centered care increased, but the sampling of behavior was too small to capture it. An alternative explanation for the increase in closeness and relationship satisfaction may be that nurse aides' and the resident's level of relational thinking increased due to a combination of the training intervention and the research design. In conclusion, future research is needed to further define person-centered care and to implement it in nursing homes. It is also apparent that relationships are key to person-centered care and understanding how these relationships function within this context will be pivotal to improving the overall system.

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## APPENDICES

## APPENDIX A

11/9/10

### Person-Respected Caregiving: Part 1

*A resident has a hard time getting the words out. But she understands when others talk. She also can nod "yes" or "no."*

*Her CNA knows she has dressed nicely all through life, and she takes pride in how she looks.*

*The CNA takes two outfits from the closet, then asks the resident which one she'd like to wear. This gives the resident choices and shows respect by asking for her preference.*

*A resident was removed from the group because she would scream. Her screaming bothered others.*

*The restorative aide noticed that she would warn that she was about to scream. "If you can't hear me, then I'll scream," she'd say.*

*The aide listened for that warning. "Then I'd answer, 'I can hear you,' and she was satisfied."*

*She doesn't scream now and gets to stay with the group.*

*A male aide was nervous about giving two female residents a bath. He worried so much that he was almost sick.*

*It's so invasive. These are such dignified women. I didn't know if I could go through with it, I was so scared!*

*But each one sat with me first and talked me through what to do, and each one reassured me the whole time we bathed.*

*They were so good to me, so compassionate and understanding of what I was going through. I have the utmost respect for those two ladies to this day!*

### What is person-respected caregiving?

- Person-respected caregiving is providing individualized care in the context of a relationship.
- It involves three core ideas:
  - **Personhood:** emphasizing that each person is unique, has inherent value, and is worthy of respect.
  - **Knowing the Person:** knowing the person's history, cultural experience, personality, and activities of daily living (ADLs).
  - **Nurturing Relationships:** understanding that the person exists in a web of social relationships and that these relationships should emphasize trust, communication, consistency, attachment, friendship, and time together.

### The Person-Respected CNA

- Treats residents as **people** before **tasks**
- Knows the person and uses their personal information to earn their trust and cooperation
- Is respectful and preserves dignity
- Offers choices and provides individualized care
- Understands relationships dynamics
- Asks permission before doing
- Involves the resident in their own care
- Gives appropriate praise
- Says "Thank you!"
- Uses humor and has a positive attitude
- Treats them like **you** want to be treated

1

**Personhood**

- Every person has inherent value.
- Personhood is “a standing or status that is bestowed upon one human being, by others, in the context of relationship and social being. It implies recognition, respect, and trust,” (Kitwood, 1997).
- The resident is worthy of your time and your consideration. They are not just a task.

**The Person-Respected CNA**

- How do I show a resident respect and that they have inherent value?
- I use person-respected behaviors
- There are two types of person-respected behaviors:
  - Verbal behaviors
  - Nonverbal behaviors

**Verbal Behaviors**

- **Greetings and using the resident’s name:**  
“Hello,” “I’m Jane,” “Nice to meet you,” “Hi Bette, how are you today?”
- **Showing Appreciation:**  
“I really appreciate what you are doing,” “I don’t know how I’d manage without you”, “That is a good idea”, “Thank you for your help.”
- **Empathy:**  
“This is distressing for you, I understand”, “You seem (sad, tense, or angry) today, can I doing anything to help you feel better?”, “I feel that way too sometimes and this is how I deal with it or this is how other people who have lived here deal with it”

**Verbal Behaviors**

- **Asking Permission:**  
Before beginning a task, ask permission, “Are you ready to take your shoes off?” “Are you ready for your shower?”
- **Explaining the task:** This includes statements that tell what is about to happen.  
“I’ll start by washing your arms and then move towards your back.”
- **Giving Choices:**  
“What shirt would you like to wear?”, “Does this look good?”, “What would you like to do first?”, “Would you like me to come back later?”
- **Checking in:** “How are you feeling today?”, “Does your stomach hurt?”, “Are you comfortable, is there anything I can do to make you more comfortable?”, “Is your leg bothering you?”

**Verbal Behaviors**

- **Showing Interest:**  
“Did you have a good nap?”, “How is your book?”, “How are your children?”, “What are your plans for the holiday?” Know when and what to say at the appropriate time and show sensitivity.
- **Using humor:** Laughing together is a great way to connect.

**Nonverbal Behaviors**

- **Eye Contact:**  
Make direct eye contact when you are with the resident
- **Appropriate Use of Affectionate Touch:**  
Offering a pat on the back, to hold a hand, or a hug
- **Assessing Comfort:**  
Straightening the resident’s shirt or cleaning his or her glasses.
- **Tone of Voice:**  
Speaking clearly, calmly, and respectfully.
- **Adjusting to the Resident’s Speed During the Task:**  
Match the resident’s pace physically and verbally during the caregiving.

#### Nonverbal Behaviors

- Use of Personal Space: Helping the resident feel secure by being close or understanding and respecting his or her need for distance.
- Smiling and Positive Attitude: Smiling and having a positive attitude makes the interaction more pleasurable. Smiles are contagious!
- Being Aware of the Resident's Reactions to Your Behavior: Your behavior impacts the resident and if your behavior is not having the intended effect then stop, think, and change your behavior.

## Person-Respected Caregiving Interaction

Instructions: Watch the video of your caregiving interaction with your resident and check which verbal and non-verbal behaviors you see in the interaction and answer the discussion questions below.

Greeting	<input type="checkbox"/>	Assessing Physical Health	<input type="checkbox"/>
Showing Approval	<input type="checkbox"/>	Appropriate Use of Information	<input type="checkbox"/>
Actively Listening	<input type="checkbox"/>	Showing Interest in the Resident	<input type="checkbox"/>
Showing Reciprocity	<input type="checkbox"/>	Resident Directed Eyegaze	<input type="checkbox"/>
Using Resident's Personal Background	<input type="checkbox"/>	Affirmative Head Nodding	<input type="checkbox"/>
Empathy	<input type="checkbox"/>	Appropriate Use of Affective Touch	<input type="checkbox"/>
Asking Permission	<input type="checkbox"/>	Instrumental Touch	<input type="checkbox"/>
Orientation to the Task	<input type="checkbox"/>	Appropriate Tone of Voice	<input type="checkbox"/>
Giving Choices	<input type="checkbox"/>	Adjusting to the Resident's Pace	<input type="checkbox"/>
Assessing Comfort	<input type="checkbox"/>	Appropriate Personal Space	<input type="checkbox"/>

1. Do you feel that the caregiving interaction was person-respected? Why or why not?

2. Were the behaviors that you saw in the video used appropriately? Why or why not?

3. In what ways do you think you could have made this caregiving interaction more person-respected? What could you have done differently?

## Person-Respected Caregiving: Part 2

### What is person-respected caregiving?

- Person-respected caregiving is providing individualized care in the context of a relationship.
- It involves three core ideas:
  - **Personhood:** emphasizing that each person is unique, has inherent value, and is worthy of respect.
  - **Knowing the Person:** knowing the person's history, cultural experience, personality, and activities of daily living (ADLs).
  - **Nurturing Relationships:** understanding that the person exists in a web of social relationships and that these relationships should emphasize trust, communication, consistency, attachment, friendship, and time together.

### Knowing the Person

- Know that each resident has a rich life history and a unique personality that has been shaped by their life experiences.
- That history includes...
  - Work and Family
  - Social Connections
  - Hobbies
  - Lifestyle Habbits
  - Traditions
  - Accomplishments
  - Regrets
- Know how that history affects their life today.

### The Person-Respected CNA

- How can I learn about the resident's personal history?
  - Interviewing the resident, their family and friends, sharing stories
  - Other staff: CNAs, nurses, social workers, doctors
  - Resident's file: social history, care plan, various social and activity assessments, profile face sheet, depression scale, progress notes, etc.
  - Ask about pictures and special items in the room

### Nurturing Relationships

- Relationships are founded on person-respected behaviors, trust, dependence, and commitment.
- Relationships are formed over time.
- Relationships help people feel security, continuity, belonging, and they help us all to find meaning in ourselves and in others.
- We all exist in a web of social relationships

### The Person-Respected CNA

- How can I provide a nurturing relationships?
  - Know what type of relationship each resident wants:
  - Care-as-service residents: Are they focused on the instrumental aspects of care? Are they interested in efficiency, competence, and/or value for their money?
  - Care-as-comfort residents: Are they focused on care that allows them to maintain their physical comfort?
  - Care-as-relating residents: Are they interested in the relational aspects of care? Do they want to have friendships and show reciprocity?

**The Person-Respected CNA**

- What role do you play for them? How do they see you?
- Specific Relationship Skills: These skills help you assess what type of relationship the resident wants. They also help maintain these relationships.
  - Reciprocity
  - Spending time together
  - Sharing Stories
  - Active Listening
  - Partner-Perspective Taking/Empathy

**Why does Person-Respected Care Matter: Quality of Life**

- CNAs provide 90% of the care residents receive.
- Residents are people too!
  - They are often lonely, isolated, and frightened.
  - Social contact is the most essential human need.

CNAs are a primary source for social needs.



**Why does Person-Respected Care Matter: Cooperation**

- Residents are less likely to refuse a request with rapport established
- Talking about things interesting to the resident builds trust
- Residents may even help if you when getting the job done

**Why does Person-Respected Care Matter: Warning Signs**

- Knowing the resident personally and meaningfully means you learn what's normal for the resident
- You will recognize when something is wrong – sooner!
- With trust, the resident may tell you when something is wrong – sooner!

**Expert CNAs recommend . . .**

- Learn whether the resident wants a close or distant caregiver relationship.
- Know the resident's likes and dislikes, and honor them whenever possible.
- Give choices to provide a sense of control wherever possible. Control over little things can be important.
- Don't assume that if the resident cannot talk, he or she doesn't understand.
- Talk about things personally interesting to the resident.

Expert CNAs recommend . . .

- Be respectful; preserve dignity.
- Ask permission first.
- Be flexible with your approach. Preferences change sometimes. And sometimes, we just want variety.
- Be genuine. You're a person, too.
- Be patient -- with the resident and with yourself.
- Adjust to go at the resident's pace.
- We all have good days and bad days. Don't take it personally.
- Keep a sense of humor. Laughter helps!



### **In-Class Videobiography Discussion Questions**

What are some things that stand out about the resident's life story?

What do you notice about this person? How would you describe him or her?

What more would you like to know about the resident if you were caring for him or her?

What are family relationships like for this resident?

What do you think the resident needs from her relationships with staff?

What are some ways that staff and/or family members make use of their knowledge about his or her life story?

## **Your Resident's Videobiography Discussion Questions**

### **Life History:**

What are some things that stand out about the resident's life story?

What do you notice about this person? How would you describe him or her?

What more would you like to know about the resident if you were caring for him or her?

What are some ways that staff and/or family members make use of their knowledge about his or her life story?

What are some ways that you engage the resident in discussing their life story?

How do you think the resident feels about his or her surroundings based on what you saw in the video?

### **Family:**

What are family relationships like for this resident?

How do you think they have changed based on the resident's current living situation?

How do you think they could be improved? Do they need to be improved?

### **Staff:**

What do you think the resident needs from her relationships with staff?

How could these relationships be improved? Do they need to be improved?

### **Other residents:**

What do you notice about the resident's relationship with other residents?

What do you think can be done to foster positive relationships between the resident and other residents?

**Understanding the resident:**

What are signs of anxiety or fear you see in the resident?

What may be the possible causes?

How does his or her life experience affect current worries or fears?

What can be done to lessen these worries?

What are signs of joy or happiness you see in the resident?

What may be the possible causes?

How can these be increased?

**Environment:**

How does the environment impact the resident?

What changes in the environment can be made to positively impact the resident?

## APPENDIX B

*Step 1. Recruitment of Residents and Nurse Aides Into Study (May 2009):* A list of possible resident participants was created at both nursing homes with the help of Catholic Care and St. Joseph Village staff. Once the list was created according to the research criteria, the residents were contacted from the list to participate in the study. The study was explained to all potential residents and informed consent was obtained. Once a resident has been accepted into the study, the nurse aides who regularly care for the resident were identified. The nurse aides were contacted. The study was explained to the nurse aide and informed consent was obtained. This occurred until twelve independent dyads at each nursing home are identified. Participation in the study was voluntary.

*Step 2. Time 1 Observation at both Catholic Care Center and St. Joseph Village, (Started June 1, 2009 and ended June 19, 2009 at CCC, Started June 21, 2009 and ended July 17, 2009 at St. Joseph):* The Time 1 Data Collection with the resident was conducted. One pilot of the measures was completed and the resident survey packet was finalized. A time to meet with the residents to complete the surveys was scheduled. At the scheduled time, the project was explained again. Some residents declined to be in the project at this point. When the packet was completed, the instructions were read first and then the surveys were completed. Flash cards with the possible responses were offered if they were unable to listen and remember the options, however, very few residents chose to use them. The questions were read aloud and the author recorded the resident's responses. Any additional comments made during the survey were also noted. Overall the residents did not have trouble answering the question, however, on the mutuality scale, most residents felt that while they somewhat knew their nurse aide and liked

them, they didn't feel especially close to them and some of the questions made them feel uncomfortable.

The Time 1 Data Collection with nurse aide was also conducted. Two pilots of the measures were completed and the survey packet was finalized. Forty-five minutes was cleared with the administration where they could come at the end or beginning of their shift to complete the packet. Scheduled times were arranged with the nurse aide and their supervisor. The nurse aides met the author in the conference room and completed the packet. While there were several nurse aides in the room together at one time, each completed the packet separately. Overall, the nurse aides had few problems completing the packet. One nurse aide had trouble writing, so the questions were read aloud and her responses were written. After the survey was completed, the nurse aides were asked to think about an appropriate caregiving interaction that could be videotaped with their paired resident, a time was scheduled, and the caregiving interaction was videotaped.

*Step 3. Development of the Person-Centered Care In-Service Training, (Started June 1, 2009 and ended July 15, 2009)* The author designed the training intervention as four one-hour sessions and two weeks of supervision. The training consisted of didactic materials about person-centered care, the Putting Person Before the Task Video, exercises with resident videos, watching the target resident's video, watching their own and others caregiving interaction, and discussion.

*Step 4. Interview Residents and Create 15-minute Videotaped Biographies at Catholic Care Center, (starts July 20, 2009 and ends August 21, 2009):* Residents at Catholic Care center were interviewed and videotaped. The interview consists of personal and historical information about the resident. The videotaped interviews lasted from 30-60 minutes and were edited into

15-minute videotaped biographies. The personalized videos were used in the in-service training and a copy of the video was given to the resident.

Step 5. *Train the Trainers Sessions* (started July 29, 2009 and ended August 5, 2009) Dr. Kristine Williams, Dr. Louis Medvene, Jennifer Zoglman, and the author met twice for the “train the trainer” sessions to train one nurse aide and one nurse at Catholic Care prior to the in-service. Administration at Catholic Care identified the trainers, Pat Jeane and Ezekiel Ombati. The training sessions involved going over the materials with the trainers and having the trainers practice the material with the author and Dr. Williams.

Step 6. *Providing the In-Service Training at Catholic Care Center* (started September 16, 2009 and ended October 21, 2009) The two trainers then provided the person-centered training over four weeks and provided on-the-job feedback during the training and for two weeks following the training. Jennifer Zoglman attended the training in order to monitor the training’s fidelity. She stated that the training went well and was implemented according to the design.

Step 7. *Time 2 Observation at Both Catholic Care Center and St. Joseph Village, (Started October 22, 2009 and ended November 11, 2009 at CCC, Started November 12, 2009 and ended November 25, 2009 at St. Joseph):* The Time 2 Data Collection with the nurse aides and residents was conducted. The same type of task videotaped during observation one was videotaped again for each dyad. None of the nurse aides were bothered by the videotaping nor did they show signs of reactivity. At Catholic Care, the nurse aides were interviewed about their participation and satisfaction with the training and the residents were asked about any changes seen in their participating nurse aide.

Step 8. *Interview Residents and Create 15-minute Video Biographies at St. Joseph Village, (Started January 4, 2010 and ended January 14, 2010):* Residents at St. Joseph Village

were interviewed and videotaped. The interview consisted of personal and historical information about the resident. The videotaped interviews lasted from 30-60 minutes and were edited into 15-minute videotaped biographies. The personalized videos were used in the in-service training and a copy of the video was given to the resident.

*Step 9. Train the Trainers Sessions (January 14, 2010 and ended January 29, 2010):* Dr. Kristine Williams, Dr. Louis Medvene, Jennifer Zoglman, and the author met twice for the “train the trainer” sessions to train one nurse aide and one nurse at Catholic Care prior to the in-service. Administration at St. Joseph identified the trainers, Krista Thomas and Dixie Shepherd. The training sessions involved going over the materials with the trainers and having the trainers practice the material with the author and Dr. Williams.

*Step 10. Providing the In-Service Training at St. Joseph Village (started February 11, 2010 and ended March 25, 2010):* The two trainers then provided the person-centered training over five weeks and provided on-the-job feedback during the training and for two weeks following the training. Jennifer Zoglman attended the training in order to monitor the training’s fidelity. She stated that the training went well, was implemented according to the design, and was comparable to the Catholic Care training.

*Step 11. Time 3 Data Collection at St. Joseph Village, (Started March 29, 2010 and ended April 9, 2010):* The Time 3 Data Collection with the nurse aides and residents was conducted. The same type of task videotaped during observation one and two was videotaped again for each dyad. None of the nurse aides were bothered by the videotaping nor did they show signs of reactivity. The nurse aides were interviewed about their participation and satisfaction with the training and the residents were asked about any changes seen in their participating nurse aide.

## APPENDIX C

### Changes In PCBI Coding Categories

The Person Centered Behavior Inventory (PCBI) is a behavioral observation instrument, which continues to be in the process of development. It was developed based primarily on the communication literatures in doctor/patient and nurse/patient interactions, as well as resident/caregiver interactions within gerontological settings. When the coding process began for the present study, the PCBI consisted of 11 verbal communication behaviors and nine nonverbal communication behaviors. These coding categories had been used to code the interactions between caregivers and nursing home (NH) residents diagnosed with dementia (Lann-Wolcott & Medvene, in press). The 11 categories used to code verbal communication were: greetings, shows approval, back-channel responses, empathy, asks permission, orientation, giving choices, assessing comfort, assessing medical condition, showing interest and asks for help. The nine categories used to code nonverbal behaviors were: knocks on door, resident directed eyegaze, affirmative nodding, appropriate use of affective touch, assessing comfort, voice quality, adjusting to the resident's pace, proximity, and positive gestures/expressions.

The process of training coders to analyze the videotaped caregiving interactions in the present study also involved adapting the PCBI for use in coding interactions between caregivers and high functioning NH residents— high functioning in terms of cognitive status. The following changes were made in the categories used to code verbal behaviors. The number of categories used to code verbal behaviors was reduced from 11 to 9. The decision was made to combine the categories of: a) “asks permission” and “giving choices”; and b) “assessing comfort” and “assessing medical condition”. In both cases the distinctions were too fine to enable coders to



reliably distinguish between the two. Additionally, the category “ask for help” was expanded and re-labeled as: “asks resident for help/cooperates with resident”. This expansion was intended to capture aides’ cooperative engagement with the resident in accomplishing caregiving tasks; it didn’t simply involve asking the resident for help in accomplishing the task. No changes were made in the number of categories used to code nonverbal behaviors.

## APPENDIX D

### Person-Centered Behavioral Inventory

A checklist of Certified Nursing Assistant behaviors during caregiving interactions with residents in long-term care facilities. This includes 9 verbal items and 9 non-verbal items to be checked off for occurrence during 30 second intervals throughout a caregiving interaction. The number of items checked off for that given time period will be divided by the total number of units to ascertain the proportion of person-centered caregiving behaviors performed.

#### Verbal Behaviors

**Greetings:** Statements the nursing assistant makes upon first approaching the resident.

“Hello” “Hi John, how are you?” are examples of *greetings*. “How are you?” should be coded as *greetings* if it is asked at the beginning of the interaction. If the nursing assistant asks, “how are you?” during any other time in the interaction it should be coded as either *shows interest* or *assessing comfort/condition*, depending on the context in which the question was asked.

**Orientation:** *Orientation* statements tell the other person what is about to happen during the task. These statements guide the resident in terms of what to expect and help the resident cooperate with the nurse assistant. This includes instrumentally helping a resident accomplish a task (e.g., “Your tipping rail is right here”). **NOTE:** If aide says: “I’m going to get you tea now”, code this as *orientation*. However, if the aide says: “I’m going to get you tea now, ok?”, code this as *giving choices*. In other words, take the whole sentence into account in making a coding judgment. Orientation includes giving the resident some direction about the next steps in the task: e.g. “now you need to move your arms in the other direction”.

**Giving Choices:** Questions that ask for the resident’s opinion, point of view, permission, or perspective relating to a caregiving task. Includes questions that invite the resident’s judgment, or asks for the resident’s preferences (e.g., “Would you like your shoes on or off?”, “Does this look good?”, “Do you want to lay down in your room?”, or “Do you want your walker?”). This also includes questions that ask for the resident’s permission. Examples include, “I’m going to put your gate belt on, okay?” “Let’s go to dinner now, alright?”, or “How does that sound?” These statements are examples that previously made up the category *Asks Permission*.

**Asks Resident for Help or Cooperation:** The nursing assistant asks the resident for help during a caregiving task. For example, the nursing assistant could ask, “could you help me with this?” or “can you pull that sleeve for me?” Also included are statements the nursing assistant makes that attempt to gain the resident’s cooperation with a task through negotiation. This is accomplished when the nursing assistant works to complete

a task (e.g. brushing teeth) by allowing the resident some control. This could involve reasoning with the resident and/or allowing the resident to talk about his/her perspective. With state laws that require certain tasks be completed so often and with little flexibility, the nursing assistant is often placed in a situation where she/he must complete the task even if the resident prefers not to. However, if the nurse takes steps to reason and share control of the task with the resident, the nursing assistant is working to cooperatively to negotiate the task with the resident.

**Assessing Comfort or Condition:** The nursing assistant asks the resident if he is comfortable and takes steps to make the resident more comfortable (e.g. the nursing assistant asks the resident if his glasses are comfortably positioned or if his shoes are tied too tightly). Statements included in this category pertain to the resident's physical comfort or medical condition. Examples include, "How are you feeling today?", "Does your stomach hurt?", or "Is your leg hurting?" These are examples that previously made up the category *Assessing Medical Condition*. Also included are statements the nursing assistant makes inquiring about the resident's psychological or emotional comfort (e.g., "Did I scare you?"). To be coded as *Assessing Comfort* statements should refer to a resident's condition or feeling. Also, specific statements related to the resident's condition or safety, directed to the resident, should be included in this category (e.g., "Does anyone know the leg on here is bent?" – referring to the resident's wheel chair). Questions like "Do you need me to help with anything?" "Do you need anything", "Is there anything else I can get you" are more broad and should be coded as *Giving Choices*.

**Empathy:** Statements the nursing assistant makes that paraphrase, interpret, name or recognize the emotional state of the resident during the interaction, however the statements do not try to fix or change it (e.g. "This is distressing for you, I understand," "The pain must be very upsetting for you," "You seem to be a little bit tense," "You must be worried" or "I understand how you must be feeling," "It's not just you, everyone is a little slow today," or "I know, it's okay").

**Shows approval:** Statements that express gratitude or appreciation for the resident (e.g. "I really appreciate what you're doing" "I don't know how I'd manage without you"). Any expression of approval, praising, rewarding or showing respect or admiration directed to the resident (e.g. "You've been trying very hard", "That's a good idea"). This category also includes giving compliments (e.g. "That's fine," "Good," "You're looking good today," "That was terrific"; "I like your shirt"). Additionally, when the resident does something at the aide's request – e.g. lifts up his foot – and the aide says "Thank you", this should be coded as shows approval.

**Showing Interest:** Friendly conversation that conveys an interest in the resident, (e.g. "Did you have a good nap?" or "Happy Veteran's Day") This category also includes responses that serve to actively keep a conversation going. For example, if the resident says he likes breakfast, the nursing assistant might respond, "Oh yeah? What do you like?" This category should include wishing the resident well (e.g. "have a nice day") and conversation that shows interest in the resident's life or background (e.g. "does this

place remind you of the farm”). If the aide is talking about her or himself and making conversation this should not be coded as showing interest.

**Back-Channel Responses:** Indicators of sustained interest, attentive listening or encouragement expressed by the nursing assistant when he or she does not hold the speaking floor (e.g. “Mmm-huh”, “Yeah”, “Right”). These responses are differentiated from others in that they do not serve to “take the floor” from the speaker. They are usually the almost inaudible “under-talk” that encourages the speaker to continue talking or signifying the listeners continued interest in what the resident is saying. This also includes statements that acknowledge that the resident said something, for example, “okay,” “thank you,” “you’re welcome” or “that’s interesting.” Statements that repeat what the resident said would also be coded as *Back Channel* responses. Responses involve minimal verbalizations that serve to say “I hear you.” Additional examples are: If the resident says “Be careful, honey”, and the aide responds: “I gotcha, ok”. This would be coded as a back-channel response.

### *Non-verbal Behaviors*

**Knocks on Door:** The nursing assistant knocks on the door before entering a room. This alerts the resident to the nursing assistants presence.

**Resident Directed Eye Gaze:** This includes attempts made by the nursing assistant to make eye-contact with the resident. This could involve kneeling down, leaning over, sitting next to a resident in order to be eye level. Only code as “resident directed eye gaze” if you can see the position of both the resident and the aide.

**Affirmative Nodding:** Nursing assistant nods head as a sign of approval, encouragement, or interest in the resident.

**Appropriate use of Affective Touch:** This is touch that is not necessary for the completion of a task (e.g. a pat on the back, a hug). However, if the resident grimaces or pulls away and the nursing assistant continue with the behavior, then it should be coded as *Inappropriate Touch* on the Task-Centered Behavioral Inventory.

**Assessing Comfort:** The nursing assistant notices that a resident is experiencing discomfort and without verbally telling the resident, takes steps to make the resident more comfortable (e.g. the nursing assistant notices that the resident’s shirt is bunched up, so will straighten up the shirt, or the resident’s glasses are smudged so the nursing assistant cleans them, or adjusts shirtsleeve). This does not include instrumental tasks such as moving a walker closer to the resident or helping him/her out of bed. These behaviors are required in order to ensure the resident’s safety therefore should not be included in this category.

**Voice Quality:** The nursing assistant speaks in a calm voice that is audible and respectful of the resident. If there is no transcript for the unit of time then do not code voice quality.

**Adjusting to the Resident's Pace:** The nursing assistant adjusts to the resident's pace physically and verbally during the caregiving interaction rather than hurrying the resident along. This is different from assessing comfort (nonverbal), for example, if a nursing assistant notices that the resident is uncomfortable or in pain, then slows down the pace, this should be coded as *Adjusting to the Resident's Pace*. If the nurse and resident's physical and verbal behaviors appear to be in sync with one another, then this category should be marked for the time interval.

**Proximity:** The nursing assistant understands and respects the residents needs related to proximity (e.g., the nursing assistant helps the resident to feel secure by being close to the resident or understands the resident's need for distance). If the resident appears to react negatively to the nursing assistant (e.g., draws back, moves hand away, grimaces), then the nursing assistant would not be respecting the resident's proximity needs.

**Positive Gestures/Facial Expressions:** The nursing assistant uses positive gestures (e.g. waving, or blowing a kiss) and facial expressions (e.g. smiles). This category could also include laughter.

### **Task-Centered Behavioral Inventory**

This is a checklist of specific behaviors that focus solely on the task rather than the person during a caregiving interaction. This measure includes two verbal items and three non-verbal items to be checked off for occurrence during 30-second intervals and scored in the same way as the Person-Centered Behavioral Inventory.

#### Verbal Behaviors

**Verbally Controlling:** The nursing assistant makes statements that can be considered dominating or controlling (e.g. with a raised voice, "come here now, go sit down.") This could also include bossy remarks towards the resident.

**Interrupting/Changing topic:** The nursing assistant appears to ignore statements made by the resident by responding with an unrelated statement or question (e.g. "I haven't been able to sleep lately", and nursing assistant responds, "I see, okay, we need to get you to the toilet"). This could take place by interrupting the resident mid sentence and changing the topic.

#### Non-verbal Behaviors

**Ignores:** The nursing assistant ignores a request or question offered by the resident. This could also include statements the resident makes and the nursing assistant does not acknowledge (e.g. resident asks if she can return to her room and the nursing assistant

does not respond). This does not include statements the nursing assistant makes to other residents or staff that don't include the resident of focus for the task. However, if the resident makes a statement or request that the nursing assistant does not respond to doesn't acknowledge, this would be coded as ignoring.

**Physically Controlling:** The nursing assistant physically forces the resident to do something (e.g. pulls resident into bathroom for bathing).

**Inappropriate Touch:** The nursing assistant touches the resident in a manner that makes the resident appear uneasy. For example, the nursing assistant continuously pats the resident's shoulder or rubs the resident's leg and the resident's response is to recoil. This resident's reaction to the nursing assistant's touch is the best indicator as to whether the behavior is appropriate or inappropriate.

## APPENDIX E

### **Global behavior scale**

This is a seven point semantic differential measure intended to capture overall person-centered caregiving. Scores for each of the 11 subscales will be added and divided by the total number of points possible for the GBS (total=77) to determine the nurse aides average score. If a behavior does not occur during the interaction, do not assign a rating to the item. Average scores are figured only for the behaviors present in the interaction.

#### **Treating like a person-respecting personhood versus Treating in stereotyped way**

The nurse treats the resident as an individual with his or her own unique personality, needs, and expectations. The nurse aide is non-judgmental and open-minded. To preserve personhood, the nurse aide takes steps to strengthen the resident's sense of self. This is in contrast to treating the resident like an object. This could include behavioral incidents of treating the resident in a stereotypical manner such as being frail or incompetent.

#### **Treating as worthy of a relationship versus Indifferent to bond or connection**

The nurse aide spends time with time with the resident and learns about the resident. This could include being friendly during task as well as engaging the resident about things unrelated to the task. This is in contrast to statements or behaviors exhibited by the nurse aide that don't strive to validate the resident's feelings. Being indifferent to a connection or bond could also involve excluding the resident from conversations or withholding asked-for attention by the resident.

#### **Respecting Dignity versus Not Respecting Dignity**

The nurse aide recognizes that the resident is in a vulnerable state at which he or she must accept help to complete the daily task of living that was once possible to complete on his or her own. Specific behaviors could include covering up the exposed resident during a task such as toileting or bathing as much as possible and keeping doors or curtains closed. This is in contrast to ignoring the resident's need for privacy and respect.

#### **Put person before the task versus Put the task before the person**

The nurse aide places the needs of the resident above the requirements of the task, such as placing less emphasis on time restrictions. Additionally, the nurse aide attempts to consider the perspective of the resident, including their experience during the task. This is in contrast to rushing through the task regardless of the resident's feelings or comfort.

#### **Providing positive social environment versus Not providing positive social environment**

The nurse aide makes statements that are upbeat and promote a positive environment. This could involve joking and laughing **with** the resident or creating a calming environment for the resident. This is in contrast to being negative or detached from the resident.

For example, it's possible that during a bathing task a resident could become upset due to over stimulation. To help prevent this from occurring, the nurse aide could create a calm environment by offering reassuring statements, providing eye contact, or smiling.

### **Working Cooperatively versus Working in a directive manner**

Interactions reflect an interdependent relationship between the nurse aide and the resident. In other words, the resident is viewed as a team member with whom the nurse aide shares control of the task. This is in contrast to barking orders at the resident, such as "come here, sit down, comb you hair!"

### **Affirming versus Over nurturing**

The nurse aide communicates messages that are appropriately directive, familiar, respectful, and acknowledging of the resident's competence. This is opposed to directive messages, which are interpreted as overly sympathetic, superficially respectful, and inappropriately intimate.

### **Tolerates frustration versus intolerant**

The nurse aide does not appear to be irritated or angered by set backs that occur during the caregiving interaction. Instead, the nurse aide is patient, calm, and accepts that tasks are not always completed smoothly. This is contrast to being impatient, annoyed or making statements that mock the resident.

### **Takes likes and dislikes into account versus ignores likes and dislikes**

Learns what the resident likes and dislikes then will use this information to care for the resident. For example, giving the resident choices can help the nurse aide to learn more about the resident and at the same time help the resident to feel valued and respected. This is opposed to making decisions for the resident or ignoring their requests.

### **Responsive to spontaneous needs versus unresponsive to spontaneous needs**

The nurse aide is attentive to the resident's physical and emotional needs that arise during the caregiving interaction. This could also include tolerating the resident's expression of emotion even if it is disturbing or if the resident spontaneously begins to hum or sing, this is acknowledged and accepted into the interaction.

### **Positive affect versus Negative affect**

The nurse aide expresses observable affection for the resident through positive facial expressions and other emotional signs (e.g. smiling, laughter, showing affection through eye-contact), rather than expressing negative emotions (e.g. disgust, rolling eyes, sighing). The nurse aide's emotions appear to be sincere as opposed to being superficial.



## APPENDIX F

### MSQ Scale

On my present job, this is how I feel about . . . . .	Very Dissat	Dissat	N	Sat	Very Sat
1. Being able to keep busy all the time. . . . .	0	1	2	3	4
2. The chance to work alone on the job . . . . .	0	1	2	3	4
3. The chance to do different things from time to time. . . . .	0	1	2	3	4
4. The chance to be "somebody" in the community . .	0	1	2	3	4
5. The way my boss handles his/her workers. . . . .	0	1	2	3	4
6. The competence of my supervisor in making decisions . . . . .	0	1	2	3	4
7. Being able to do things that don't go against my conscience . . . . .	0	1	2	3	4
8. The way my job provides for steady employment .	0	1	2	3	4
9. The chance to do things for other people . . . . .	0	1	2	3	4
10. The chance to tell people what to do . . . . .	0	1	2	3	4
11. The chance to do something that makes use of my abilities . . . . .	0	1	2	3	4
12. The way company policies are put into practice . .	0	1	2	3	4
13. My pay and the amount of work I do . . . . .	0	1	2	3	4
14. The chances for advancement on this job . . . . .	0	1	2	3	4
15. The freedom to use my own judgment . . . . .	0	1	2	3	4
16. The chance to try my own methods of doing the job . . . . .	0	1	2	3	4
17. The working conditions . . . . .	0	1	2	3	4
18. The way my coworkers get along with each other .	0	1	2	3	4
19. The praise I get for doing a good job . . . . .	0	1	2	3	4
20. The feeling of accomplishment I get from the job .	0	1	2	3	4

APPENDIX G

**Personal Accomplishment Scale**

How Often:	Never	A few times a year or less	Once a month or less	A few times a month	Once a week	A few times a week	Every day
1. I can easily understand how _____ feels about things. ....	0	1	2	3	4	5	6
2. I deal very effectively with the concerns of _____	0	1	2	3	4	5	6
3. I feel I'm positively influencing other people's lives through my work . . . .	0	1	2	3	4	5	6
4. I feel very energetic . . . . .	0	1	2	3	4	5	6
5. I can easily create a relaxed atmosphere with _____ . . . . .	0	1	2	3	4	5	6
6. I feel exhilarated after working closely with _____ . . . . .	0	1	2	3	4	5	6
7. I have accomplished many worthwhile things in this job . . . . .	0	1	2	3	4	5	6
8. In my work, I deal with emotional problems very calmly . . . . .	0	1	2	3	4	5	6

## APPENDIX H

### Mutuality Scale

	Not at all	A little	Some	Quite a bit	A great deal
1. To what extent do the two of you see eye to eye (agree on things)? . . . . .	0	1	2	3	4
2. How close do you feel to him or her? . . . . .	0	1	2	3	4
3. How much do you enjoy sharing past experiences with him or her? . . . . .	0	1	2	3	4
4. How much does he or she express feelings of appreciation for you and the things you do? . . . . .	0	1	2	3	4
5. How attached are you to him or her? . . . . .	0	1	2	3	4
6. How much does he or she help you? . . . . .	0	1	2	3	4
7. How much do you like to sit and talk with him or her? . . . . .	0	1	2	3	4
8. How much love do you feel for him or her? . . . . .	0	1	2	3	4
9. To what extent do the two of you share the same values? . . . . .	0	1	2	3	4
10. When you really need it, how much does he or she comfort you? . . . . .	0	1	2	3	4
11. How much do the two of you laugh together? . . . . .	0	1	2	3	4
12. How much do you confide in him or her? . . . . .	0	1	2	3	4
13. How much emotional support does he or she give you? . . . . .	0	1	2	3	4
14. To what extent do you enjoy the time the two of you spend together? . . . . .	0	1	2	3	4
15. How often does he or she express feelings of warmth towards you? . . . . .	0	1	2	3	4

APPENDIX I

*Describing A Resident*

For this research study, you have been paired with a resident. On the lines below, please describe \_\_\_\_\_ as fully as you can. List the qualities or things that you feel describe him or her. List as many as you can think of. Do not simply list words that makes him or her different. Also list qualities she or he appears to have that are common to others. For example, you could:

- \* Describe what he or she respects
- \* Describe his or her values
- \* Describe how he or she treats others
- \* Describe his or her habits
- \* Describe things you like or dislike about how he or she treats others
- \* Describe how he or she acts or behaves

Try to describe \_\_\_\_\_ well enough that a stranger would recognize him or her based on your description. If you reach the last line in the first column and have more to write, begin listing more on the second column. Use the second page if you need more space. ***Please spend only about five (5) minutes describing him or her***

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APPENDIX J

**RSI Scale**

Health Care	Never	Rarely/ Some	Usually/ Most of the time	Always
1. Is your nurse aide making every effort to keep you as healthy as possible? . . . . .	0	1	2	3
2. Do you think that you are not receiving the medical attention you need? . . . . .	0	1	2	3
3. Are you satisfied with skills of your nurse aide? . . . . .	0	1	2	3
4. Is your nurse aide nice and courteous? . . . . .	0	1	2	3
5. Do you feel like talking to your nurse aide if you have any health concerns? . . . . .	0	1	2	3
Housekeeping Services	Never	Rarely/ Some	Usually/ Most of the time	Always
1. Is the cleaning of you room done well? . . . . .	0	1	2	3
2. Are you satisfied with the skills of the people who do the cleaning? . . . . .	0	1	2	3
3. Is this community a well-maintained and clean facility? . . . . .	0	1	2	3
4. Are the people who do the cleaning nice and courteous? . . . . .	0	1	2	3
Physical Environment	Never	Rarely/ Some	Usually/ Most of the time	Always
1. Do you feel a lack of personal space? . . . . .	0	1	2	3
2. Are you satisfied with your room? . . . . .	0	1	2	3
3. Is this community a comfortable place to live? . . . . .	0	1	2	3
4. Do you feel at "home" here? . . . . .	0	1	2	3

Relationships With Staff	Never	Rarely/ Some	Usually/ Most of the time	Always
1. Is _____ kind and caring? . . . . .	0	1	2	3
2. Are the people who serve the food nice and courteous? . . . . .	0	1	2	3
3. Are you unhappy with _____ attitude or behavior? . . . . .	0	1	2	3
4. Do you think that you have dependable nurse aide taking care of you? . . . . .	0	1	2	3
5. Do you feel that you are friends with _____? . . . . .	0	1	2	3
6. Are you satisfied with the personal assistance you are getting here? . . . . .	0	1	2	3
7. Do you see _____ treating other residents in a rude way? . . . . .	0	1	2	3
8. Is _____ slow to respond to your requests? . . . . .	0	1	2	3

Social Life/Activities	Never	Rarely/ Some	Usually/ Most of the time	Always
1. Do you like social activities here (are they interesting)?	0	1	2	3
2. How often do you attend social activities? . . . . .	0	1	2	3
3. Do you have opportunities to participate in interesting activities? . . . . .	0	1	2	3
4. Do you meet residents here with whom you share similar interests? . . . . .	0	1	2	3
5. Do you have enough opportunities to participate in activities outside the community? . . . . .	0	1	2	3
6. Do you like the food here? . . . . .	0	1	2	3