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Person-Centered Communication and Activity Engagement in Dementia Patients: A Correlational Study

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ABSTRACT

Dementia presents a significant public health challenge, with a majority of long-term care residents experiencing cognitive and motor impairments that hinder their engagement in meaningful activities. Prolonged inactivity and a lack of brain stimulation can accelerate cognitive decline, promote isolation, and decrease overall well-being. While person-centered communication is widely accepted as a quality standard to address these challenges, existing literature rarely links real-time staff communication methods to active, quantitative behavioral engagement metrics during group activities.

This study investigated the relationship between the measured use of person-centered communication methods by memory care unit staff and the observed frequency of social interaction and engagement among residents with dementia using two tools that tracked resident engagement and staff caregiving quality.

Ultimately, the findings indicate that person-centered care acts as an effective environmental catalyst that enhances resident participation, highlighting the value of targeted communication training to improve caregiving quality and well-being in dementia care. While basic interaction habits like maintaining eye contact were highly prevalent among staff, formal behaviors like introductions were frequently omitted. Furthermore, verbal interaction was the most frequent type of resident engagement, and the specific activity type emerged as a key confounding factor.

INTRODUCTION

Dementia is a nationwide health problem. In fact, recent epidemiological data indicates that a significant majority of long-term care residents - 64% of them residing in residential care facilities - live with a form of cognitive impairment (Alzheimer's Association, 2026). As defined by the Alzheimer's Association, dementia is, "A general term for loss of memory, language, problem-solving and other thinking abilities that are severe enough to interfere with daily life" (2026). More physical symptoms such

as postural instability, decreased step length, or slower walking speed are also common due to cognitive and motor impairments (Jehu et al., 2024). Although there is currently no cure for the disease, research in dementia is not lacking; researchers continue to work towards finding a cure regularly.

Given the clear cognitive and physical impairments that people with dementia face, they often struggle engaging in activities. According to Dr. Miranda Trahan and others, dementia patients spend the majority of their days with little to no commitment to meaningful activity (Trahan et al., 2014). Such neglect can foster isolation, a decrease in well-being, and increased dependency on caregivers. If brain stimulation is scarce, then cognitive decline is at high risk. Therefore, it is important to prioritize activity engagement for dementia residents to battle and delay disease progression.

Patients cannot be forced to participate in activities. Instead, person-centered communication presented by their caregivers can be a great motivator. As argued in the National Institute for Health and Care Excellence (NICE) guidelines, person-centered care is a highly effective framework for communicating with dementia residents, as noted in clinical reviews (NICE, 2012). This form of communication focuses on psychological and social needs, in turn stimulating intensive and personalised interactions between staff and patients. Person-centered care can especially help dementia residents feel cared for and seen, as it is more catered to their specific needs. The Institute of Medicine supports this statement by defining person-centered care as mindful of the preferences and values of patients (Islam, 2025).

While person-centered communication is widely accepted as the standard of quality care, the existing literature exploring its direct relationship with activity engagement remains limited. Previous studies have established the theoretical benefits of person-centered communication, yet few have quantitatively evaluated how its application by staff correlates with the behavioral engagement of residents during structured activities. Therefore, there is a gap in the literature which needs to be recognized so that changes can be made to interactions intended to boost participation. This then led me to the essential research question: What is the relationship between the measured use of person-centered communication methods by memory care unit staff and the observed frequency of engagement among residents with dementia? The purpose of this study is to explore the association between person-centered care and activity engagement among dementia patients within a memory care unit setting. This is important to determine in order to promote efforts to slow disease progression and facilitate a better quality of life by improving care-giving quality. If a positive correlation is made, this study can further assist facilities in altering their ways of communication with dementia residents, effectively enhancing their well-being and instilling comfortable living.

LITERATURE REVIEW

The existing literature surrounding this research falls under two subsections: the social behaviors of dementia patients in memory care units, and communication methods implemented by nursing staff or caregivers. While these areas have been studied separately, the literature has historically treated them as

two separate domains. Few studies have linked specific caregiver qualities in communication to the behavioral engagement of residents during group settings. By synthesizing these two areas, this review builds a framework for examining staff and resident interactions as one interdependent relationship.

Communication Methods

Research into caregiver communication has evolved significantly over the past years, moving from simple task-oriented approaches to more relational methods. To begin, S. Alsawy et al. (2017) provided a deep analysis over different communication styles suited for those living with dementia, using a mixed-methods approach. After narrowing down their search from 927 to 15 articles, the researchers found that difficulties in communication most commonly came from the inability of the patient and staff member to understand one another, which inhibited staff to understand the emotional needs of the patients (Alsawy et al., 2017). Out of the 15 studies, only one described the perspective from a dementia patient, whereas the other 14 portrayed the experiences of healthcare professionals and family members. Regardless of this limitation, the researchers concluded that a belief held by the staff member that persons with dementia are able to reciprocate understanding can foster efficient person-centered communication (Alsawy et al., 2017).

Transitioning from general communication barriers to specific linguistic patterns, researchers such as Williams et al. (2018) have identified certain speech styles that hinder resident autonomy. This study specifically focuses on reducing elderspeak, a simplified speech similar to baby talk, and increasing-person centered communication through a training program for certified nursing assistants (CNAs). Although the intent of elderspeak is to allow patients to comprehend speech in a cohesive way, Williams et al. argued that such speech is inappropriate and provides a negative message to older adults. Similarly, Zhang et al. (2020) described elderspeak as known to decrease the self-esteem of patients and promote resistiveness. Therefore, elderspeak can be ruled out as an effective form of person-centered communication, as it is seen as harmful among multiple credible perspectives.

To avoid invoking misspoken tensions among patients, their opinions on communication must be prioritized. Burshnic and Bourgeois (2020) expanded research on preference communication by utilizing preference assessment tools among dementia residents. Using a quantitative experimental method, their findings as published in the peer-reviewed *Clinical Gerontologist* journal indicate that residents with severe dementia are able to communicate their activity preferences (Burshnic and Bourgeois, 2022). Although the assessment tools in this study, including a verbal and visual assessment were successfully comprehended by the patients, this communication, especially verbal, is not ideal, as the tools display recall rather than connection. Therefore, while the researchers reached a successful conclusion, the communication incorporated is unfit for conversation with dementia residents, narrowing down the scope for observed conversation between patients and staff.

More recently, Hodder et al. (2024) introduces a “check-in” procedure to assess engagement in persons with dementia. The check-in procedure comprises approaching a resident every 15 or 30 minutes, and

giving them praise if they are actively engaged (Hodder et al., 2024). While the check-in procedure was associated with increased engagement, the study's scope was limited by a sample size of only three participants. Furthermore, this small sample size can jeopardize the reliability of the results, which can prove the results as unrepresentative. Even though person-centered communication was correctly implemented, the results of this study cannot solely determine its effectiveness for generalized populations.

Addressing this gap, Backhouse et al. (2024) analyzed what made interactions between dementia residents and caregivers engaging, and how such interactions can be improved using a naturalistic approach. Their findings suggested that the personhood of a patient can be enhanced with nurturing tendencies such as reassurance and guidance (Backhouse et al., 2024). On the other hand, uncertainty displayed by the caregiver can be difficult to handle for the patient (Backhouse et al., 2024). The video clips used to analyze the interactions were at a reasonable length of 3 hours and approximately 2 minutes, so various interactions could be measured. Because the groundwork of the research is appropriate, conclusions can be drawn that having nurturing attentiveness is an effective form of person-centered care.

On the topic of nurturing attentiveness, the use of pet names when regarding dementia residents is viewed as infantilising to practitioners. Similar to Backhouse in a previous study, Sunjaya et al. (2025) also found that people with dementia are at risk of isolation if a lack of confidence and competence is displayed by caregivers during interactions, as it can promote feelings of avoidance and fear (Sunjaya et al., 2025). These traits then provide an example of what not to do, and stray away from person-centered care.

All in all, these six studies allow a proper understanding of what care interactions between caregivers and dementia residents to be formed. However, they continue to leave a persisting gap in the literature, as they rarely provide quantitative data linking real-time staff communication methods to active behavioral engagement metrics during group activities. While Hodder et al. (2024) does consider engagement fluctuation based off of a check-in procedure, the results cannot be relied upon, due to the small sample size. To build upon this literature, a complementary understanding of social engagement patterns is required.

Social Engagement

Along with studying caregiver inputs, literature focusing on resident outputs provides support to the fact that social environment profoundly alters the behavioral presentation of dementia. Hsiao et al. (2018) studied the impact of social behaviors, and how they affect cognitive decline in animal models with Alzheimer's disease. As the researchers hypothesized, mice performed better in memory tasks when they were in the presence of others (Hsiao et al., 2018). This research can be applied to the theory that cognitive decline can be prevented when social interaction is prioritized in the environment of a dementia resident. This framework is heavily supported by Gebhard et al. (2024) , who argued that a higher frequency of social interaction in the life of a dementia patient is associated with less psychological and

behavioral symptoms of the disease exhibited, better mood, and an improved quality of life. The article also claims that dementia residents living in long-term care spend 62% to 83% of their day without social interaction, and that 59% of these interactions take place with staff (Gebhard et al., 2024). This suggests that the communication of dementia residents is extremely limited, which can inhibit their overall health progression. Both the articles by Gebhard and Hsiao portray the importance of social interaction in the life of a dementia resident as a way to battle or slow the disorder altogether.

Knecht and Rodriguez (2025) analyzed the characteristics of social interaction and their importance through the opinions of the caregivers, family members, dementia patients, and the patients themselves, using a quantitative survey. Analysis of 501 responses allowed the researchers to come to the conclusion that persons with dementia enjoy being involved in activities that make them feel needed, such as being asked for help or gardening (Knecht and Rodriguez, 2025). Additionally, participants also rated social interaction as a necessity to help alleviate symptoms (Knecht and Rodriguez, 2025). Although the research provides valuable insight to the value of social interaction, the majority of the responses come from people who were not experiencing dementia symptoms themselves. Therefore, their statements could be unreliable because they are not the ones actively living with the disorder. Similarly to Knecht and Rodriguez, Frissen et al. (2025) conducted an observational study evaluating how social engagement relates to behavioral symptoms and emotional well-being. In their observational study, the researchers found that positive social interactions are strongly linked to immediate, observable improvements in resident mood (Frissen et al., 2025).

In summary, while the existing studies assert that person-centered care is beneficial and that social engagement improves the well-being of residents, there is still a disconnect between the correlation of the two variables within actual care environments. Because most studies rely on subjective caregiver opinions, conducting real-time observations within a group activity setting provides an appropriate method to evaluate these variables. Based on these findings, it was hypothesized that there is a positive relationship between the use of person-centered communication methods by staff and the frequency of social interaction and engagement demonstrated by residents with dementia in a memory care unit, yet further analysis is necessary.

METHODS

To measure the association between person-centered communication and resident engagement, correlational research design was utilized. A correlational method was the best fit for this research, as the goal of the study design as seen in prior studies is to find a relationship between two variables. Furthermore, this method assists in locating a relationship between person-centered care utilized by memory care unit staff and the frequency of active engagement in residents with dementia. There is not necessarily an independent or dependent variable in this particular study, as the goal is to measure a naturally occurring relationship without manipulating anything. Therefore, non-participant naturalistic

observation was incorporated in order to gather data for each predictor. To understand the data collection method, an evaluation of the tools used is necessary.

Ethics, Consent, and Vulnerable Population Protections

Rigorous ethical safeguards were established, as dementia patients represent a highly vulnerable research population. This study underwent formal administrative review and was approved by the facility's management through an inquiry form agreement and meeting prior to commencement. All of the residents and staff of the memory care unit were made aware of the observations. Formal consent was not needed, as the study was purely observational, and no direct communication with the residents or staff was needed. To protect the privacy beyond omitting the facility's name, no personally identifiable information, names of residents or staff members, or medical chart data were recorded. All data sheets used code numbers (e.g., Observation 1, Observation 2) to maintain confidentiality and anonymity.

Unit of Analysis and Measurement Tools

The unit of analysis in this study's design is a critical care unit. The unit of analysis is defined as a single, overall group activity period rather than individual staff members or residents. The data points represent the environment of the memory care unit during the activities. The facility consisted of 19 permanent residents and a staff rotation of 6 CNAs. Across the observations, the numbers of staff members and residents changed, as not all residents were present for all 20 observations and staff members were in charge of different activities. Because the same residents and staff members did not appear repeatedly across all sessions, the 20 observations are not statistically independent. This proves as a limitation of naturalistic research, therefore the resulting Pearson correlation coefficient must be interpreted as an environmental association rather than an independent sample distribution. As the observer, no prior training or reliability check was acquired, which could act as a limiting factor for data collection.

For measuring person-centered communication by memory care unit staff, the CARES Observational Tool was employed. Created by Hobday et al. (2013), this tool intends to assess the type of care given to dementia residents, specifically the prevalence of certain caregiving qualities in dementia care. The CARES Observational Tool consists of a 16-item checklist reflecting behaviors that showcase adequate personal care, such as respecting the residents personal history, speaking to the residents at eye level, and using their name frequently. If a behavior is observed, then it is scored a "1", whereas the opposite would result in a "0". To reach a final score, the numbers must all be added up, a higher score on the scale indicating that the interaction between staff and residents displayed effective person-centered communication, whereas a lower score indicates the opposite. A score of above 12 indicated high person-centered care, whereas a score of below 7 exhibited low person-centered care. Between 7-12 was the average range demonstrating mediocre person-centered care. To apply this tool in a group setting, behaviors of the primary CNA leading the activity were marked. Items that measure individual care tasks,

such as documenting something about the resident, were retained on the data sheet to preserve the standardized composition of the tool.

To measure the frequency of engagement among dementia residents, the Engagement of a Person With Dementia Scale was used (EPWDS), created by Dr. Cindy Jones and other PhDs (2018). The purpose of this tool is to observationally measure the engagement of persons with dementia, focusing on 5 categories; visual, verbal, affective, behavioral, and social. Each category has 2 sections on the tool, one for positive engagement and another for negative, leading to a total of 10 items. For example, positive visual engagement includes behaviors of consistent eye contact with the activity, materials used, or persons involved, whereas negative visual engagement would display inattentive and unfocused behavior towards the activity. The items are scored on a 1 to 5 scale, furthermore a total score can range from 10 to 50. The higher the total score, the higher level of positive engagement exhibited, vice versa. An item rating the overall environment of the observation is also present, but does not affect the score. Because multiple residents were present during each activity, a single, representative group-level score for each item on the EPWDS. This score reflected the average behavior of the room during that activity. Time-interval sampling was incorporated in order to simultaneously track the behavior of staff and residents. The first 3 minutes of the activity were dedicated to tracking the behavior of the CNAs, and then 2 minutes of tracking resident behavior. This rotation continued until the end of the activity period.

The CARES Observational Tool and the EPWDS are both appropriate ways to collect data, as they both specialize in assessing the respective predictors that are the main focus of the study. Both tools will be used simultaneously in the same observation period. In order to appropriately collect data, collection will be done in a residential living home unit specifically housing persons with dementia. For ethical considerations, the name of the memory care unit that was utilized for data collection will be kept private. Consent for the study was handled through facility-level administration. Once permission was obtained from management, collection using the previously explained tools was permissible.

For the observations, the primary goal was to observe moments where residents were involved in a group activity to test the possibility of increased engagement. Observation during activities that held consistent communication from one staff member to multiple residents was also desirable. Any communication with the residents would be considered crossing the boundaries of the study, as doing so would require ethical evaluation, and could also skew the study results. I also made sure to act as a neutral presence to minimize the Hawthorne effect, where subjects change behavior because they know they are being watched. Observation periods ranged from 10-45 minutes in length, with 20 observations taking place in the memory care unit total. The 20 observations were chosen according to observer availability, and the activity schedule of the residential living home. Consistency can be ensured across these periods, as the same tools were used continuously at each visit. This procedure provides a logical way of doing the study, as the predictors are being measured in their natural setting, erasing the possibility of biases that would occur in other methods such as surveys or structured interviews.

After data collection, a final score was totaled for both the CARES Observational Tool, and the EPWDS. Once scores were totaled for each tool, both totals were placed into a Pearson correlation through a Google Sheets software in order to determine the relationship. The data was first entered into two columns (A and B). Then to get the correlation, "=PEARSON(A:A, B:B)" was typed into a blank cell. After clicking enter, Google Sheets displayed the correlation coefficient as "r". A value between -1 and +1 indicates the strength of the relationship, with a +1 indicating a perfect positive relationship between the variables, and a -1 meaning the opposite. In the perspective of the study, a positive correlation would indicate that as person-centered communication is higher, then the frequency of engagement in dementia residents will increase with it. Both extremes represent the strongest possible correlation between the two predictors, with values closer to 0 showing weaker relationships.

Once a correlation is established, all data collected will be destroyed one calendar year after project submission. A positive correlation would be the most desirable outcome, as the results can encourage efforts to increase both person-centered care to foster engagement in dementia residents. All tools and software are available for use on the internet, allowing replicability of the study with no accessibility complications. The steps of the methodology were meticulously defined to ensure replication by future researchers.

FINDINGS

In order to assess the degree of person centered care displayed by CNAs, observations were taken using the CARES Observational Tool. A total of 20 observations were taken, each one scoring on a scale of 1-16. Table 1 breaks down the frequency of the type of care presented by the CNA's during the observations:

Table 1

Results of the CARES Observational Tool from 20 observations

Person-Centered Behavior	Frequency	Percentage
CNA uses greeting	4	20%
CNA introduces himself/herself	1	5%
CNA uses resident's name	18	90%
CNA smiles and makes eye contact for at least 2 seconds	19	95%
CNA makes physical contact	9	45%

CNA approaches resident from the front	20	100%
CNA crouches down or sits next to resident to be at eye level or below	13	65%
CNA is calm and not rushed in approach	19	95%
CNA asks/discusses how resident is feeling or doing	14	70%
CNA speaks to resident at least a total of 15 seconds during care interaction	20	100%
CNA explains an activity/care **and/or** proposes an activity	19	95%
CNA involves resident in care appropriately **and/or** tries to involve resident in a care	18	90%
CNA mentions something specific about resident's life **and/or** mentions something meaningful in resident's life, personal life story, or history	4	20%
CNA gets resident into a more comfortable position **and/or** asks if there is anything he/she can bring them or do for them	10	50%
CNA shares something verbally about the resident with another team member	3	15%
CNA documents/writes something about resident	0	0%

Next, engagement level of dementia patients during group activities was assessed through the EPWDS, a 5 dimension, 10-item checklist scored on a 1-5 range, falling under affective, visual, verbal, behavioural, and social engagement. Items 2, 4, 6, 8, and 10 are reverse scored items, meaning that a score of 5 becomes 1, 4 becomes 2, 3 stays the same, 2 becomes a 4, and a 1 becomes a 5. After the reverse scoring process was completed, scores were added together. The average score for each category was calculated by adding all of the 20 numbers for each category then dividing by 20. Table 2 summarizes the average frequency of reactions given by dementia patients during activities:

Table 2

Results of the Engagement of a Person with Dementia Scale

Types of engagement	Average score across 20 observations
Affective	8.25
Visual	7.9
Verbal	8.4
Behavioural	8.35
Social	7.95

Then, to assess the primary goal of the research, table 3 presents the scores of the CARES tool and the EPWDS side by side for each observation so that a visual correlation can be established between the scores. The observations are listed from lowest to highest CARES score in order to allow correlation visualization, along with the activities for each observation period.

Table 3

Correlation between CARES and EPWDS Scores

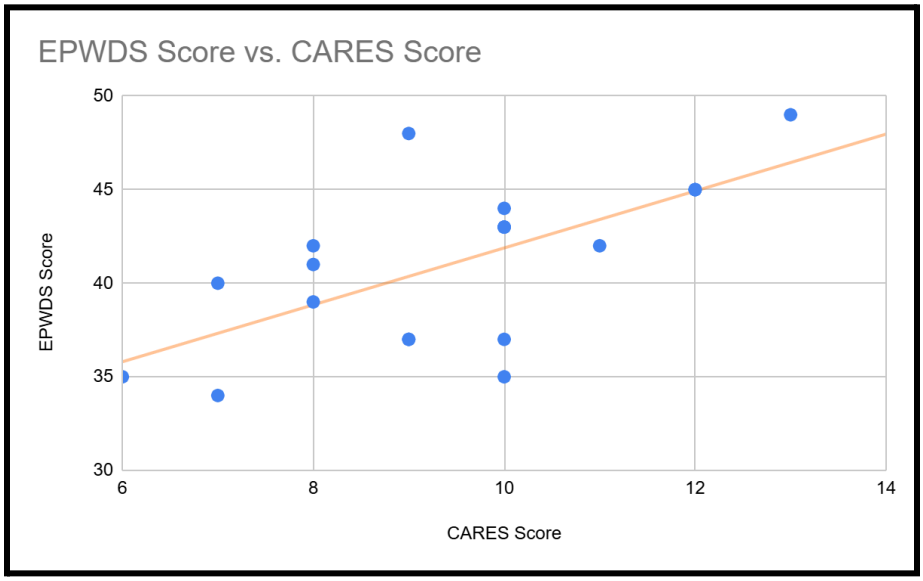
Observation #	CARES Score	EPWDS Score	Activity
3	6	35	Word games
7	7	34	Word games
14	7	40	Word games
9	8	39	Bingo

18	8	41	Snack
19	8	42	Craft
2	9	37	Word games
8	9	48	Word games
10	9	37	Trivia
1	10	43	Snack
6	10	37	Craft
12	10	43	Word games
13	10	44	Drums circle
16	10	43	Guess the chocolate
20	10	35	Bingo
15	11	42	Music therapy
5	12	45	Yoga
11	12	45	Pie tasting
17	12	45	Craft
4	13	49	Yoga

Note: CARES scores 0-7 are considered low, 8-11 are considered mid, and 12+ are considered high

Finally, a scatterplot (figure 1) presenting the r value confirms the positive relationship between person centered communication and engagement in dementia patients. While a relationship can be assumed by looking at Table 3, mathematical evidence of that connection is also needed to confirm the correlation.

Figure 1: Relationship between person centered communication and engagement of dementia patients



The statistical calculation yielded a positive correlation coefficient of r=0.66. Because of the descriptive statistics and the environment dependencies within a single memory care unit, the p-value cannot be robustly calculated due to the repeated exposure of the same resident pool. Thus, the r-value is strictly a descriptive indicator of environmental covariance. The orange trendline demonstrates the r value, and the blue dots represent the scores of the tools used.

DISCUSSION

As evidenced by the data, it can be concluded that the relationship between person centered care and engagement in dementia patients is positive. A thorough explanation of the results from the tools used provides the substantiation for these understandings. Because a correlational study was performed, the outcomes for each tool developed the basis for such understandings.

In table 1, the distribution of the frequency of observation for each item on the CARES tool is shown. This table is necessary to the research as it clarifies what actions fall under person centered care. Actions such as eye contact and smiling, approaching from the front, and conversing for at least 15 seconds were the most prevalent, as they were seen across the majority of all 20 observations. On the other hand, the data shows that CNA's rarely introduced themselves, documented things about the residents, or shared information about a resident to another CNA. Other items on the tool were also more prevalent than not, and contributed to the care displayed by CNA's. The average score of 9.55 out of 16 suggests that while basic and common CNA tasks like eye contact are a given in interactions, more formal actions such as

introductions could be overlooked, potentially due to familiarity or routine. Certain structural behaviors like documenting resident data (0%), did not occur, as staff prioritized immediate supervision over writing during communicative events.

Next, table 2 shows the average engagement score between each of the 5 categories on the EPWDS. Although all of the scores were in the same range, the most fulfilling category was verbal engagement, earning an average of 8.4 out of 10 throughout the 20 observations. Therefore, residents exhibited verbal engagement the most frequently compared to other categories. This could be due to the fact that the activities required verbal feedback from the residents, such as word games or bingo, in order to function, or because patients were motivated to speak due to the communication used. Because all of the categories earned a score of at least 7.9, it can be inferred that the residents were actively engaged to a great extent, as the averages add up to a high score that indicates high engagement.

Table 3 finally places the results of the EPWDS and CARES tool side by side, giving a visual representation of the correlation between engagement of dementia residents and person centered care, while exposing important confounding factors. The CARES scores are listed from lowest to highest to illustrate the gradual increase alongside the EPWDS. Although the CARES scores increase, the EPWDS scores fluctuate. A consistent stream of high scores is seen after observation 15, but other observations such as observation 8 have a high EPWDS score (48) and a low CARES score (9). This suggests that the activity performed during the observations can also affect the engagement of dementia residents, not just the type of care given by the CNA's. Therefore, the correlation illustrated in Table 3 indicates that person centered care is a catalyst for engagement; high quality care does not guarantee a high engagement score, but enhances it. Regardless of the distinction, this study specifically illustrated a positive relationship between the variables. Table 3 essentially suggests that the content of the activity can be a profound confounder itself. Activities such as yoga (observations 4 and 5) and pie tasting (observation 11) yielded maximum engagement scores regardless of communication. On the other hand, tasks requiring heavy thinking such as word games demonstrated lower scores (between 34 to 38). This suggests that person-centered care acts as a catalyst for resident response. Because the study is observational, the data cannot be generalized to prove that person-centered care guarantees higher engagement. It also cannot support the generalizability that such interactions can assist in slowing disease progression or inhibiting symptoms.

Aside from the visual correlation, a mathematical model was also necessary to confirm the scientific relationship between the variables. Through the Pearson equation, it is seen that the r-value is .66. This indicates that there is a strong positive correlation between the care given by the CNA's and the engagement exhibited by the dementia residents, and that the correlation is unlikely due to chance. In other words, adequate care demonstrated by the CARES tool is positively associated with high engagement levels presented by the EPWDS. This data gives the evidence needed to bridge the gap between personalized care and its influence on activity engagement in dementia care, but it specifically extends to American memory care units.

Direct observation of the interactions also corroborated with the data from the tools, revealing high patience exhibited by the CNA's and good rapport among the dementia residents. A handful of residents did not exhibit active engagement during some observations, but the overall majority showed attentive traits and interest, which is reflected in the quantitative data.

The findings also reflect conclusions reached by various researchers in the literature review, such as Hodder and others in their 2024 study regarding the "check-in" theory, which implies that personalized conversation between residents and CNA's can increase active engagement. Even though Hodder's study had a limited sample size, the r-value of .66 found across 20 observations proved as a strong, reliable predictor to support the claim. By effectively initiating the actions found in the CARES tool, staff members can also encourage residents into more participation that Gebhard and others claim residents miss from 62% to 83% of their day.

LIMITATIONS

In this study, there exist limitations that must be addressed in order to acknowledge the weaknesses of the research. To begin, observations took place in one residential facility memory unit, which housed 19 residents. The small sample size creates risk for unreliable or underrepresentative results, as it only accounts for those people, and the data coming from one memory care unit can limit the results to that single population. The observations also did not have 19 residents included each time, as they were not all present during those periods. Therefore, there was not a fixed number of patients for the observations. Likewise, the study only took data from 20 observations, which can also decrease data accuracy. The more observations used, the better, so data from 20 periods can limit the accuracy of the results. Observations also generally took place during mid to late afternoons, and sometimes in the early morning. This creates the risk of a time-period bias, which can lead to inaccurate data since evidence is only being drawn from a typical time frame, rather than multiple timings. Residents or CNA's could behave in a different manner in the morning than how they do during later times, so it would be more ideal to capture data from a range of times. Additionally, the data points lack statistical independence, since the same residents, activity types, and staff members were repeatedly observed. This therefore artificially inflates the correlation strength and prevents generalizability.

CONCLUSION

Ultimately, this research provides significant enhancement in understanding the gap between person-centered care and activity engagement, which is answered through the following research question: What is the relationship between the measured use of person-centered communication methods by memory care unit staff and the observed frequency of engagement among residents with dementia? This study provided evidence supporting a positive relationship between person-centered communication exhibited by CNAs and residents engagement seen in memory care unit activities. This research

highlights the efficiency of using scaled tools during observations to measure a correlation, successfully bridging the gap.

Because this study is strictly correlational, the findings describe an association rather than a treatment effect. The correlation exhibited by the research has many key implications for staff in dementia care. These findings develop a new understanding about the benefits of person-centered communication and what mannerisms are key to promoting and facilitating engagement among dementia residents. When thinking about future studies, the understanding developed by the research is a critical development, as it allows caretakers to follow a new or refined approach to communicating with people who have dementia. Because the research has similarities to studies completed by other experts, the correlation produced is significant. Similarly, the replicability of this research allows future researchers to discover similarities with projects available to larger sample sizes or different demographics.

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