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2017

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Roles of Communication Problems and Communication Strategies on Resident-Related Role Demand and Role Satisfaction

American Journal of Alzheimer's Disease & Other Dementias 1-7
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journals.sagepub.com/home/aja



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Abstract

This study investigated the impact of dementia-related communication difficulties and communication strategies used by staff on resident-related indicators of role demand and role satisfaction. Formal/paid long-term care staff caregivers (N = 109) of residents with dementia completed questionnaires on dementia-related communication difficulties, communication strategies, role demand (ie, residents make unreasonable demands), and role satisfaction (measured by relationship closeness and influence over residents). Three types of communication strategies were included: (a) effective repair strategies, (b) completing actions by oneself, and (c) tuning out or ignoring the resident. Analyses using structural equation modeling revealed that communication problems were positively linked with role demand. Repair strategies were positively linked with relationship closeness and influence over residents. Completing actions by oneself was positively linked to role demand and influence over residents, whereas tuning out was negatively linked with influence over residents. The findings underscore that effective caregiver communication skills are essential in enhancing staff—resident relationships.

Keywords

communication, dementia, long-term care, role demand, role satisfaction, caregiving

Introduction

Communication has an important role to play in effective caregiving. The importance of effective communication is particularly evident in long-term care settings in which formal or paid caregivers (eg, registered nursing professionals, certified nursing assistants [CNAs], etc) interact with residents having dementia-related impairments in comprehension and expression. Ineffective communication or communication breakdowns between formal caregivers and residents with dementia can precipitate behavioral problems, 1 such as resisting care, which have been cited by staff caregivers as a source of dissatisfaction at work. 2

Although a variety of organizational factors can affect job satisfaction, ³⁻⁵ the day-to-day consequences of ineffective communication are most likely to be seen in staff's construal of the role of caregiving. Communication breakdowns or misunderstandings may be construed as placing an unreasonable demand on formal caregivers, lessening their effectiveness and influence as caregivers, and making it harder to feel close to residents. Indeed, demands related to working with residents, along with influence and closeness with residents, are among the components of caregiving that affect job satisfaction and the retention of staff in long-term care facilities. ^{3,6}

The Theoretical Model of Stress in Nursing Home Staff⁷ offers insight into stressors that influence staff caregivers' ability to provide high-quality care. The model demonstrates that a number of factors influence a long-term care staff's person—job

fit, such as work-related demands and stressors. Work-related demands are manifested at the institutional, unit, and patient levels. Although institutional- and unit-level factors are determinants of role satisfaction, the staff-resident relationship and the care needs of residents also contribute to both role satisfaction and staff stress.⁷ Interacting with residents with dementia can be increasingly challenging for staff because of the progressive nature of dementia and the accompanying decline of communicative abilities.^{8,9} In turn, caregiver stress has been linked to low levels of satisfaction and increases in staff turnover in nursing homes. Among the most distressing issues for staff are problem behaviors exhibited by residents with dementia.² Due to the inherently stressful nature of these interactions, staff may fail to understand that problem behaviors are attempts to communicate. 10,11 As depicted within the Theoretical Model of Stress in Nursing Home Staff, problem behaviors and impaired communication are work demands. The inability to appropriately address stressful work situations creates a poor

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person—job fit. Consequently, staff caregivers may experience low levels of role satisfaction or high levels of role demand.

However, the Theoretical Model of Stress in Nursing Home Staff depicts that work resources contribute to person-job fit.⁷ Strategies that aim to repair communication breakdowns between staff and residents would be classified as work resources at the patient level. Staff may use communication strategies to prevent residents from resisting care and to address residents who resist care, and to foster more positive interactions with them. Specifically, repair strategies are used to resolve communication breakdowns or misunderstandings. Examples of effective repair communication strategies include using 1 idea per utterance, repeating, rephrasing, and asking close-ended questions, prompting "yes" or "no" responses. 12-15 However, not all communication strategies are inherently positive in nature. For example, "tuning out" and "doing things yourself" are ineffective in addressing communication breakdowns but may be perceived as helpful when completing a caregiving task.¹⁶

Individualized communication that is based on an older adult's needs and retained abilities can result in a positive outcome for both the older adult and the staff caregiver, according to the Communication Enhancement Model. ¹⁷ Individualized communication involves assessing a resident's capacity and motivation and adjusting the environment to optimize his or her strengths. The use of individualized communication strategies is a component of person-centered care, which aims to maintain the personhood and dignity of individuals with dementia. ^{16,18,19} Providing person-centered care has also been linked to improved satisfaction for staff caregivers of individuals with dementia. ²⁰ Staff who receive training related to person-centered approaches are likely to feel more adequately prepared and demonstrate a greater understanding of dementia's impact on communication. ⁵

Taken together, the Communication Enhancement Model¹⁷ and the Theoretical Model of Stress in Nursing Home Staff⁷ offer insights on the roles of staff-resident communication, role demand, and role satisfaction. The Communication Enhancement Model claims that enhanced communication between staff and residents will lead to improved communication encounters and, consequently, empowerment of both members of the dyad. Similarly, the Theoretical Model of Stress in Nursing Home Staff states that the disability level of residents, which includes communication impairments, contributes to role demand and role satisfaction. Informed by both theoretical models, the aim of the present study was to investigate the relationships between communication, role demand, and role satisfaction. Specifically, this study investigated the roles of (a) dementia-related communication difficulties and (b) effective and ineffective communication strategies used by staff on resident-related indicators of role demand and role satisfaction.

Methods

Participants and Procedure

Participants included 109 frontline staff who worked in a longterm care home located in a large American city. As shown in

Table 1. Sample Characteristics.

Demographic Characteristic	Long-Term Care Staff $(N = 109)$			
Job role				
Certified nursing assistant	55%			
Nursing (eg, registered nurse, licensed practical nurse)	24%			
Housekeeping	6%			
Recreation therapy	3%			
Other (eg, dietary, chaplain)	12%			
Average age	46 years (20-67 years)			
Gender (female)	94%			
Length at long-term care home	9.54 years (I month to 33.3 years)			
Hours worked per week	35			
Number of residents under care				
I-5	5%			
6-10	30%			
>10	65%			

Table 1, CNAs comprised the majority of the sample, followed by nursing staff. The average age of participants was 46 years, and nearly all participants were female. Participants worked in the long-term care home for an average of 9.5 years and for an average of 36 hours per week. Nearly two-thirds of the participants provided care for more than 10 residents. Participants completed a questionnaire that asked about dementia-related communication difficulties they encountered, communication strategies they used to resolve breakdowns or misunderstandings, role demand, and role satisfaction. Participants provided written consent. The requisite Human Research Ethics Board approved this study.

Measures

Communication difficulties. The Perception of Conversation Index-Dementia of the Alzheimer's Type (PCI-DAT) is an instrument developed by Orange and colleagues²¹ to assess the influence of communication-related variables on caregivers. Section 1 of the PCI-DAT focuses on appraisals of communication difficulties and contains 22 items. Participants in the current study were asked to reflect on conversations they had with residents with Alzheimer's disease that was typical of the area in which they work. Using the past week as a frame of reference, participants were asked whether a communication difficulty occurred. They circled 0 if the difficulty never occurred. If the difficulty occurred, they appraised how seriously each difficulty affected their conversations by selecting an option from 1 (occurs, but not a problem) to 7 (serious problem). Examples of communication difficulties include "uses words that do not go together to form a clear idea (eg, uses vague terms)," "has difficulty finding words," and "has difficulty understanding what is said to him or her." The Cronbach α for the appraisals of effective strategies was .97.

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Communication strategies. Section 2 of the PCI-DAT²¹ was used to assess the appraisals of communication strategies used by staff. It contains 22 items that address caregivers' strategies to overcome conversation difficulties. Participants circled 0 if they did not use the communication strategy. If they used the strategy, participants appraised how helpful the strategy was in overcoming conversation difficulties by selecting an option on a 7-point Likert-type scale ranging from 1 (not helpful) to 7 (very helpful). Given that the purpose of the study was to examine the role of both effective and ineffective communication strategies on role demand and satisfaction, we focused on items that were categorized in previous work as effective and ineffective. The following 7 items were categorized as effective repair strategies using existing literature on communication strategies in Alzheimer's disease: repeat, rephrase, simplify, fill in missing information, give more information, show what you mean, and use gestures.²² The term "repair strategies" is used to describe attempts to resolve misunderstandings.²³ The Cronbach α for the appraisals of effective repair strategies was .86. An appraisal score, in terms of perceived helpfulness of strategies in resolving breakdowns, was created using the mean appraisal scores of the effective repair strategies. Higher scores indicated that participants perceived these repair strategies to be helpful in overcoming communication breakdowns. Previous research has demonstrated poor reliability among items from the PCI-DAT that are categorized as ineffective communication strategies.²² One of the reasons for the low reliability is that the items are poorly correlated. This suggests that they are distinct concepts and need to be investigated separately. Thus, we chose the following 2 items to represent ineffective strategies: complete actions yourself and tune out/ignore. These items were chosen because they can be perceived as effective strategies to complete tasks but are less effective in resolving communication breakdowns during interactions between staff and residents.

Resident-related role demand and role satisfaction. Role demand and satisfaction that are specific to interactions and relationships with residents were measured using 3 items from the Nursing Home Nurse Aide Job Satisfaction Questionnaire. The item "residents place unreasonable demands on me" was used to represent role demand. The items "my role influences the lives of residents" and "I am close to residents" were used to represent role satisfaction. Participants chose an option on a 5-point Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree). The Cronbach α was .41, supporting the use of the items separately in the analyses.

Analyses

Structural equation modeling using LISREL 8.8 was used to assess the roles of communication difficulties and communication strategies on role demand and role satisfaction. Structural equation modeling was chosen because it allows simultaneous examination of the effect of multiple constructs on different outcomes.

Measurement model. Communication difficulties and effective communication strategies were composed of multiple indicators. The respective indicators for both constructs included 3 random parcels composed of the means of items corresponding to each measure. These parcels contain approximately equal common factor variance.²⁴ All the other constructs were composed of single indicators, which were locally identified by setting the error variance of the indicator to 0 and leaving the factor loading to be estimated. Each construct's variance was set to 1.0 to standardize the scale.

Structural equation modeling analysis was conducted using the variance–covariance matrix. Table 2 reports the relationships between indicators and their respective constructs. All indicators loaded significantly onto their corresponding constructs. The amount of variance in each indicator that was accounted for by its latent construct ranged from 0.66 to 0.92.

Nested models. Nested models were created by placing constraints on previous models. This study used the model trimming approach. We began with a just-identified model with equal numbers of known variances/covariances relative to unknown parameters. Nonsignificant paths were removed from the hypothesized model. The χ^2 difference between the nested models (ie, between the measurement and hypothesized models and between the hypothesized and revised/final models) was assessed. Nonsignificant differences in the χ^2 indicated that a more parsimonious model (with nonsignificant paths removed) did not alter the model.

Evaluating model fit. Maximum likelihood estimation was used to estimate parameters optimally. ²⁶ Model fit was evaluated by χ^2 goodness-of-fit index, Bentler-Bonett nonnormative fit index, root mean square error of approximation, and comparative fit index.

Results

Table 3 includes correlations and distributional statistics for the hypothesized model's manifest variables. Table 4 includes the findings from the nested model comparisons. The χ^2 difference test between the measurement and hypothesized structural models indicated no significant loss of fit. Nonsignificant paths between the independent and dependent latent constructs were removed one at a time for the sake of parsimony. However, nonsignificant correlations between latent constructs were retained to provide less biased estimates of predicted paths.

Figure 1 shows the results from the final model. The latent correlation between tuning out and completing actions oneself was low to moderate (standardized coefficient = .39, P < .05), indicating that the constructs are related but distinct. The latent correlations among the constructs representing staff construal of caregiving indicate that they are relatively distinct, as evidenced by the nonsignificant latent correlation between residents as demanding and staff having influence over residents. There was a negative latent correlation between residents as demanding and feeling close to residents (standardized

Table 2. Loading and Intercept Values, Residuals, and R² Values for Indicators in Hypothesized Model.^a

Indicator	Unstandardized Loading (SE)	Loading	Standardized ^b Theta	R ²
Communication difficulties				
Communication I	1.35 (0.12)	0.86	0.26	.74
Communication 2	1.71 (0.13)	0.96	0.08	.92
Communication 3	1.66 (0.13)	0.92	0.15	.85
Repair strategies	,			
Strategy I	1.49 (0.14)	0.87	0.24	.76
Strategy 2	1.50 (0.14)	0.85	0.27	.73
Strategy 3	1.28 (0.13)	0.81	0.34	.66

Abbreviation: SE, standard error.

Table 3. Descriptive Statistics of Manifest Variables and Their Intercorrelations in the Hypothesized Model.

	I	2	3	4	5	6	7
I. Communication difficulties	1.00						
2. Repair strategies	0.15	1.00					
3. Do things yourself	0.08	0.18	1.00				
4. Tune out	0.00	-0.02	0.40 ^a	1.00			
5. Residents place unreasonable demands on me	0.23 ^a	-0.03	0.23 ^a	0.22^{a}	1.00		
6. My role influences the lives of residents	0.05	0.23 ^a	0.08	-0.38^{a}	-0.10	1.00	
7. I am close to residents	0.05	0.30 ^a	0.12	-0.07	-0.16	0.41 ^a	1.00
Mean	2.81	4.36	2.95	1.07	2.43	4.48	4.28
SD	1.62	1.52	2.13	1.60	1.07	0.71	0.76

Abbreviation: SD, standard deviation. a Correlation is significant at P < .05 level.

Table 4. Statistics for Comparison of Nested Models.

Model	χ^2	P	df	RMSEA (90% CI)	NNFI	CFI	$\Delta\chi^2$	Δ df
Measurement	28.44	.42	28	0.0008 (0.0-0.075)	1.00	1.00		
Hypothesized	136.72	.44	31	0 (0.0-0.071)	1.00	1.00	3.03	3, P > .10
Final	174.07	.52	37	0 (0.0-0.064)	1.00	1.00	4.41	6, P > .10

Abbreviations: CI, confidence interval; CFI, comparative fit index; NNFI, nonnormative fit index; RMSEA, root mean square error of approximation.

coefficient = .17, P < .05). Finally, the strongest latent correlation was between staff having influence over residents and feeling close to residents (standardized coefficient = .30, P < .05). These latent correlations are aligned with the correlations of their respective manifest variables (see Table 3).

Greater distress associated with dementia-related communication difficulties was linked positively with feeling burdened by resident demands (standardized coefficient = .20, P < .05). Repair strategies were linked with relationship closeness and influence over residents (standardized coefficient = .31 and .19, respectively, P < .05). It is noteworthy that these 2 constructs measuring ineffective communication strategies had differential effects. Specifically, doing things yourself was linked to both higher levels of role demand and more influence over residents (standardized coefficient = .23 and .20,

respectively, P < .05). Participants who rated tuning out as a helpful strategy were less likely to feel like their role influenced the residents (standardized coefficient = -.44, P < .05).

Discussion

The aim of the study was to examine the relationship between staff-resident communication and its impact on role demand and role satisfaction for staff caregivers. In support of the Theoretical Model of Stress in Nursing Home Staff,⁷ the findings demonstrated that staff who were distressed by dementiarelated communication difficulties were more likely to experience poor person-job fit and, consequently, view residents as demanding. Dementia-related communication difficulties, including problems with expression and comprehension, make

^aEach indicator (eg, communication 1, strategy 1) is a random parcel created from the respective measure. Each of the 3 random parcels under communication difficulties contains the mean of randomly selected items from section 1 of the Perception of Conversation Index–Dementia of the Alzheimer's Type (PCI-DAT). Each of the 3 random parcels under repair strategies contains the mean of randomly selected items from the 7 items that reflect effective repair strategies from the PCI-DAT.

^bCommon metric completely standardized solution.

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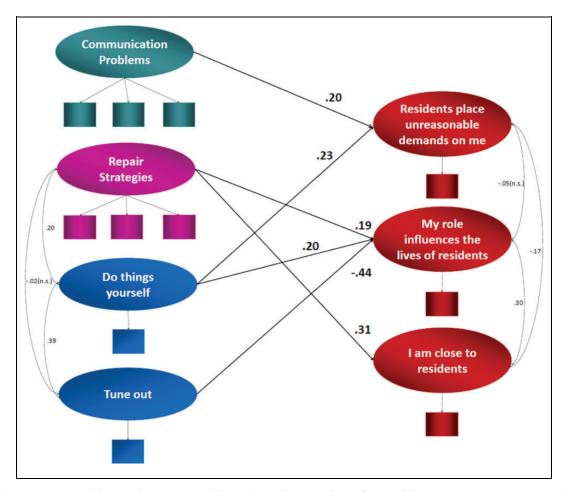


Figure 1. Communication problems and strategies and their relationships to job satisfaction. All parameter estimates are standardized and significant, unless otherwise stated.

interactions and care provision challenging.²⁷ Indeed, participants in the current study felt that the residents' impaired communication abilities made care provision increasingly difficult.

In contrast to staff appraisals of residents' communication difficulties, staff appraisals of their own use of repair communication strategies were linked with role satisfaction. Specifically, participants who appraised repair strategies as helpful in resolving misunderstandings with residents were more likely to report that their role influenced the lives of residents. The use of effective repair strategies may contribute to staff empowerment.²⁸ Using strategies that are perceived to be helpful can result in staff feeling more in control of the caregiving encounter. Consequently, they may feel that their contributions help the residents. Staff empowerment and the amount of control that staff have within their role have been linked to role satisfaction. 6,29 The Theoretical Model of Stress in Nursing Home Staff offers insight into the relationship between feelings of empowerment and role satisfaction. Within the model, work resources (such as caregiving experience or education about dementia) act as an intervening variable between stress and the staff perceptions of person-job fit. Empowerment occurs when staff caregivers are able to use repair strategies, thereby improving communication with residents.

Staff caregivers' appraisals of effective repair strategies were also linked with feeling close to the residents. Repair strategies enable reciprocity between staff and residents. For example, strategies like "show what you mean" and "rephrase" help residents comprehend what staff caregivers are stating and, consequently, increase opportunities for residents to sustain or contribute to conversations. This reciprocity in a communication encounter can contribute to feeling closer to residents, which strengthens the staff–resident relationship.^{2,5}

Doing things yourself was a strategy that had a differential influence on role demand and role satisfaction. Participants who endorsed doing things on their own as a helpful strategy were more likely to feel that residents placed unreasonable demands on them. For example, a CNA needs to get a resident dressed in time for breakfast. The CNA chooses the clothing for the resident without consulting her. The resident prides herself in how she presents herself and gets upset when the CNA does not consult her about her preferences. The resident's reaction (eg, getting upset) may result in the CNA perceiving the resident to be too demanding and making the task of getting the resident dressed difficult. Completing tasks without resident participation may stem from the stereotypic assumption that the individual with dementia is unable to engage in a

partnership with the staff member. Alternatively, nursing home staff may not know how to engage the resident and need specific training on communication strategies that encourage collaboration within the staff–resident dyad. However, staff who appraised doing things by themselves as a helpful strategy were also more likely to report that their role influenced the lives of residents. Staff may perceive that doing things by themselves is one way to feel in control of their work situation. As previously discussed, control in care provision is linked to staff empowerment. 6,29 Although the staff member may feel in control of the situation, it is at the expense of person-centered care. It reinforces dependency and is dehumanizing to residents.

Unlike the strategy of doing things by oneself, which had a differential impact on role demand and role satisfaction, the strategy of tuning out had a negative impact. Specifically, participants who endorsed tuning out as an effective strategy were less likely to feel like their role influenced the lives of residents. As with doing things yourself, tuning out may be informed by stereotypes about the communicative ability of residents with dementia.³⁰ Staff may assume that residents are unable to participate in meaningful communication, due to the progressive nature of dementia. Tuning out occurs when staff members fail to recognize that repeating words, acting out, and physical reactions are attempts by the person with dementia to communicate. 10,11 Tuning out depicts an underdevelopment of the relationship between staff and residents. The Communication Enhancement Model suggests that rather than ignoring the resident's attempts at communicating, staff caregivers should adopt a personalized approach to communicating with the resident. 17 However, the model is predicated upon using past information about the resident and learning to recognize his or her specific cues. When staff consistently tune out residents, they risk missing important information that could inform positive communication encounters. More broadly, staff may miss changes in residents' health status and indicators of distress when they tune out residents, thereby affecting the quality of resident care.

This was the first study to examine directly the relationship between communication problems and strategies and role demand and role satisfaction. However, there are limitations within this study that require consideration. The current study did not investigate the role of potential intervening variables that influence the outcome variables. This could be the focus of future research. For example, the current study did not examine whether the specific professional role influences role demand and satisfaction. Certified nursing assistants bear the bulk of care tasks with residents. Their increased interactions with residents during some of the most difficult times of the day may result in increased communication predicaments with residents.

Additionally, the difference in educational attainment between staff in various professional roles may also act as an intervening variable. It is important to consider how a staff caregiver's level of education will influence interactions with residents. Individuals who have dementia-specific training may be more aware of the impact of dementia on communicative abilities of residents. Furthermore, increased levels of education may have offered greater exposure to topics in person-centered communication. The timing of educational attainment may also play a role. Staff members who sought education more recently will have been exposed to the shifting focus in long-term care toward person-centered initiatives.

It would be beneficial to control for the amount of experience of each staff member. This is important to consider, as being in the field for a longer amount of time might contribute to higher levels of accumulated stress and role demand and, perhaps, lower role satisfaction. Alternatively, being in the field for a longer time may positively affect role satisfaction. Working in long-term care for extended periods of time may indicate that an individual effectively uses and understands individualized approaches to communication and has a passion for working with persons with dementia. Moreover, the number of years at a specific long-term care facility should be considered. If a staff member has worked at the same home for a number of years, they may be more familiar with the residents. They may know the residents' life histories and be better at recognizing and responding to cues from residents.

The findings provide preliminary support for understanding the mechanisms by which the appraisals of communication problems and communication strategies influence job satisfaction. They highlight the importance of enhancing communication skills of long-term care staff. By using repair strategies that encourage participation from residents with dementia, staff are more likely to experience greater resident-related job satisfaction. However, tuning out residents and doing things themselves will negatively impact communicative attempts within the dyad, thereby contributing to lower resident-related role satisfaction.

Authors' Note

M. Y. Savundranayagam designed the study, collected, analyzed, and interpreted the data, and wrote the manuscript. C. Lee contributed to data interpretation and revisions to the manuscript.

Acknowledgments

The authors are grateful to all staff caregivers and residents with dementia who participated in this study.

Declaration of Conflicting Interests

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The authors disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This research was supported by an Academic Development Fund grant and a Faculty of Health Sciences Faculty Development grant to the first author from Western University.

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