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STAFF PERCEPTIONS OF RESIDENTS ACROSS THE LONG-TERM CARE LANDSCAPE

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Abstract

Background—While various efforts have described the ramifications of staff-resident interactions in nursing homes, few studies identify the factors that potentially influence staff members' perceptions of residents in multiple long-term care settings.

Aims—This paper reports a study to determine how facility-, resident-, family-, and staff-level indicators are empirically associated with staff members' perceptions of residents in nursing homes, assisted living facilities, and family care homes.

Methods—The participants were 41 care staff located in 5 nursing homes, 5 assisted living facilities, and 16 family care homes randomly selected in the United States of America. Face-to-face and telephone interviews were conducted with care staff, residents in their care, family members of residents, and administrators of participating facilities. Telephone interviews measured staff perceptions of residents on two domains: *cohesion* (perceived feelings of closeness between staff and residents) and *knowledge* of residents' personal lives and care needs.

Results—Regression models found that staff who were married, reported more positive attitudes toward family members, and worked in smaller facilities reported greater staff-resident cohesion. In addition, staff who cared for a higher percentage of residents with learning difficulties indicated greater knowledge of residents.

Conclusion—The findings emphasize the need to consider elements of staff-family relationships when considering staff perceptions of residents. The results also imply that clinical interventions designed to enhance social relationships in nursing homes can be extended across the long-term care landscape to positively influence the staff-resident-family triad.

Keywords

Long-term care; Residential homes; staff; residents; relatives; nursing

SUMMARY STATEMENT

What Is Already Known About This Topic

- The quality of staff-resident relationships in nursing homes is key to a range of resident outcomes.
- Many staff perceive residents in their care as 'surrogate family,' and grieving often occurs following the death of a resident.

- Among those factors that appear to be associated with positive staff-resident relationships include feelings of professional accomplishment and perceived involvement in decision making.

What This Study Adds

- Among care staff in nursing homes, assisted living facilities, and family care homes, perceptions of closeness, or 'cohesion,' among staff and residents is generally high.
- Long-term care staff report moderate knowledge of residents' lives and occupations prior to admission and residents' families.
- Key components of positive staff perceptions' of residents across long-term care settings include positive attitudes toward family members of residents as well as smaller facility size.

INTRODUCTION

Efforts in the public and academic spheres in the United States of America (USA) have long focused on the deficiencies of nursing homes (NHs) and their inability to provide older adults with the choice, control, and independence that is so integral to the American ethos (Institute of Medicine, 2001; Kane et al. 1997; U.S. Congress 1987). Given the key role nursing staff and aides play in the daily lives of residents, the staff-resident relationship in the NH has often served as the fulcrum in quality improvement efforts. Various studies examine the role of staffing levels, turnover, and staff-resident interactions when analyzing outcomes linked to resident quality of life and quality of care (Bravo et al. 1999, Munroe, 1990, Svarstad et al. 2001). While it is clear that staffing issues are key to promoting positive outcomes in residential long-term care, less is known about those factors that are associated with staff members' positive perceptions of residents. The objective of this study was to identify variables that potentially influence staff perceptions of residents across long-term care settings.

BACKGROUND

A number of studies have examined the influence of staff-resident relationships on resident outcomes. For example, 676 senior staff completed a large mail survey that assessed the educational preparation of staff in continuing care facilities and resident autonomy (Davies et al. 1999). Chi-square analyses revealed that frequency of contact with colleges/schools of nursing was significantly associated with resident autonomy. The findings emphasize the potentially important links between continuing education for NH staff and quality of care for residents.

Additional studies have examined the role of NH staffing and its effects on various quality of care indicators, such as environmental, physical, psychosocial, and financial dimensions (Bravo et al. 1999), Medicare-certification violations (Munroe, 1990), or reductions in drug use (Svarstad et al. 2001). These studies generally employ nationally- or regionally-representative samples of facilities and NH staff, and suggest that facilities with a more resident-centered culture as promoted in positive staff-resident relationships (Svarstad et al. 2001), a greater proportion of RN staff (Munroe 1990), and to a lesser extent, greater staff-resident ratios (Bravo et al. 1999) account for improved quality of care in NHs. However, variation in definitions of 'quality,' as well as the weak (albeit statistically significant) associations between staffing and quality of care indicators attenuate further interpretation of how NH staffing procedures and resident-centered policies can potentially influence key outcomes.

Several efforts have also sought to describe the nature and process of staff-resident relationships in NHs. For example, Whitler (1998) conducted 1- to 2-hour interviews with 25 registered NH nurses that collected narrative data on care dimensions designed to preserve resident autonomy. They included personalizing (i.e., instructing by use of one's own values and experiences), shaping instrumental circumstances (e.g., delivering resources), providing information, considering (e.g., assessing risks and benefits), assessing decisional capacity (e.g., determining removal of certain behaviors), personalizing (encouraging, suggesting), and monitoring opportunities. While the strategies to assist residents achieve or maintain independence were wide-ranging, a majority of care nurses failed to employ these approaches to foster residents' self-determination.

Research by Sumaya-Smith (1995) examined the surrogate family bonds often forged by NH staff and residents. Following structured and unstructured interviews determining whether 25 nursing staff perceived residents as 'surrogate family,' results found that over 92% of participants reported establishment of surrogate family bonds within their respective facilities, and 30% reported 10–50 family-like relationships with residents and others in the NH. The findings suggest that lack of attachment to others in the NH is a strong predictor of burnout and turnover, as opposed to pay. The results are consistent with earlier work by Heiselman and Noelker (1991), where 95% of the nurses aides sampled expected to serve in a familial role to residents. Unlike prior work which emphasizes the staff-resident relationship as ahistorical and lacking in closeness (Pietrukowicz & Johnson 1991; Robbins et al. 1992), the research by Sumaya-Smith implies that close relationships and bonds are established between residents and NH staff, and in some cases, these bonds continue as 'surrogate grieving' following the death of a resident.

Few studies have attempted to determine the dimensions that account for positive staff-resident interactions in NHs. A recent study of 10 residents, family, and staff from a NH in Finland examined the shift to primary nursing (Laasko & Routasalo 2001). Unstructured interviews with family members suggested that staff became friendlier, were more responsive to resident needs, and experienced stronger motivation following the shift to primary nursing. However, residents and staff did not report differences in their interactions. A quantitative study of 18 staff in two residential care facilities for older adults explored the relationship between quantity and quality of resident-staff interactions and staff burnout (Jenkins & Allen 1998). Correlation analyses found several significant associations that partially supported the study hypotheses; staff reporting higher levels of personal and professional accomplishment indicated more frequent staff-resident interactions, and staff who felt more involved in professional decision-making were less likely to experience negative staff-resident interactions. In an empirical analysis of 102 NH staff, perceived threats of and actual aggression on the part of residents toward staff were strongly linked to nurse stress (Rodney 2000). No factors originally hypothesized to mediate this relationship (e.g., 'hardiness' of staff or coping strategies) were identified. The results of these studies imply that there exists a complex array of factors that potentially predict staff perceptions of long-term care residents.

CONTEXT OF THE STUDY

The role of staff-resident relationships in NH care has received considerable attention in the literature, particularly in studies attempting to describe staff-resident interactions as well as efforts that link staff-resident relationships with important resident outcomes. The present study built on this prior research in several ways. First, its focus was to identify the factors that account for staff perceptions of residents under their care; as indicated above, few studies have ascertained what actually predicts positive or negative aspects of staff-resident relationships, such as staff perceptions. Among those analyses that do, a restrictive approach is often taken that does not consider resident, staff, facility, and family characteristics in concert as potential

indicators of relationship quality. Moreover, even though they are becoming increasingly popular in providing long-term care to older adults in need (e.g., Zimmerman et al. 2001), no studies to date have examined staff perceptions of residents in less intensive care settings such as ASLs or FCHs. In general, ASLs are defined as residential settings not licensed as NHs where personal care and routine nursing services are delivered or arranged on a scheduled and unscheduled basis (Kane 1995, Kane & Wilson 1993). At their most 'homelike,' ASLs are comprised of privately occupied apartments with independence enhancing features such as full bathrooms, kitchenettes, and locking doors. Residents control their space, furnishings, time, activities, and care plans within those apartments. ASLs are also extremely heterogeneous, and vary greatly according to size, services offered, and case mix of clients (Hawes et al. 1999). Similarly, FCHs are generally located in residentially zoned areas, are private residences, and are licensed to provide long-term care to 1–5 individuals with functional and/or cognitive impairments. A 'resident manager' lives in the FCH and provides housekeeping, personal care, and family-style meals to clients. The resident manager may also perform specific nursing services, although the conditions under which such services are performed often vary (Kane et al. 1989).

As theoretical treatises on quality of life in NHs have emphasized, there is a need to consider multiple stakeholders when examining antecedents of key long-term care outcomes (e.g., Kane 2001), and the present study adopted this theoretically refined approach (see Figure 1). It was anticipated that variables from multiple domains, ranging from the facility-, to family-, to resident-levels, would significantly account for dimensions of staff-resident perceptions across facility venues. For example, at the resident level, increased cognitive and functional impairments may have negative influences on staff perceptions, as barriers to communication and the complexity of care may increase. Moreover, issues such as the socioeconomic status of staff and residents may account for negative perceptions of staff, as staff of different educational or racial background from residents may experience increased tension. Similarly, given the key role family may play in residential long-term care, staff attitudes of family members, level of family involvement, and family distance from the facility are important to consider when examining potential predictors of staff members' perceptions of residents (Gaugler et al. in press; Rowles et al. 1996). For example, staff who must manage families who actively direct and monitor care may be expected to have more problems appraising residents whereas staff who appreciate family input and involvement may have a more positive perception of residents. Finally, as current work on long-term care outcomes suggests, important facility-level factors such as size and family orientation may have integral effects on how staff interact with residents; smaller facilities that engender a greater sense of 'family' may be more conducive to strengthening staff perceptions (Friedemann et al. 1997; Kane 2001).

THE STUDY

Aim

The aim of the study was to determine how facility-, resident-, family-, and staff-level indicators are empirically associated with staff members' perceptions of residents in nursing homes, assisted living facilities, and family care homes.

Design

A cross-sectional study design was employed; telephone interviews with staff served as the primary source of data, and interviews with residents, family members, and administrators provided additional in-depth information.

Participants

Five NHs, 5 ASLs, and 20 FCHs were randomly selected from statewide directories and contacted by the author to represent the array of residential long-term care types in Kentucky. All NHs and ASLs agreed to participate. Sixteen FCHs agreed to participate; reasons FCHs did not participate was because the director refused ($n = 1$), the director was seriously ill ($n = 1$), or the FCH was no longer in business ($n = 2$). Following telephone interviews with administrators/directors to collect data on various facility characteristics, residents were randomly selected from each facility to create a sample that was statistically representative of residents in each setting. Since FCHs in Kentucky are licensed to include up to 3 residents per facility, all FCH residents were selected; up to 10 residents were selected from the ASL and NH settings. In-person resident interviews were then administered to assess residents' cognitive status, and if the resident was not severely impaired (i.e., a score of 3 or less on the Short Portable Mental Status Questionnaire; see Langley 2000 and below), sociodemographic background. If residents were severely impaired, family members were asked to provide information on residents' sociodemographic background. This procedure resulted in a preliminary sample of 48 NH, 41 ASL, and 38 FCH residents. Seven NH and 7 ASL residents refused, resulting in a final sample of 40 NH residents, 34 ASL residents, and 38 FCH residents ($N = 112$). Following in-person resident interviews, telephone interviews were conducted with 'primary' family members and staff persons of each resident that gathered additional facility-, resident-, family-, and staff-level data.

The primary family member was the one family member or friend who visited the resident most frequently. The primary staff person was the individual who provided the most hands-on care to the resident. The primary staff person of each resident was identified and recruited for participation by the administrator or other key senior staff person (e.g., director of nursing) prior to interview. Since nursing aides (also termed 'personal care aides' in ASLs) provided the bulk of one-on-one personal assistance and were most involved in the care needs of residents, these individuals were selected when ascertaining staff perceptions of residents and other domains in ASLs and NHs. An exception occurred in FCHs; since directors of FCHs provided all of the hands-on care to the 1–3 residents in their homes, these individuals were considered 'nursing staff' in the current study. Licensed FCH directors are not required to be registered nurses in Kentucky. In this manner, a total of 41 nursing 'staff' (20 NH, 5 ASL, 16 FCH) were interviewed for the current study.

Data collection

All interviews were conducted in the period from autumn 2001 to spring 2002.

Staff Perceptions of Residents—Two indicators of staff perceptions of residents were considered in subsequent analyses. First, ratings of general closeness and intimacy between staff and residents in the facility were included ('cohesion;' Lemke & Moos 1987) to determine how the staff person perceived overall staff-resident relationships within the facility. As part of the Sheltered Care Environment Scale, the *cohesion* measure has demonstrated reliability and validity when measuring closeness and intimacy in staff-resident interactions; moreover, the use of a general scale (as opposed to assessments of cohesion with specific residents) helped to avoid social desirability and ensured more wide-ranging and accurate responses from staff. The scale consists of 9 yes-no items and was summed, with higher scores indicating greater perceived cohesion between staff and residents in the facility. The measure showed moderate reliability ($\alpha = .62$). The *knowledge* measure determined how well the staff person knew personal and care-related information for specific residents (Kane et al. 1997). The knowledge measure provided more resident-specific information and offered insight as to how well each staff member balanced the care-related aspects of their job with the need to foster personalized care relationships. Casting the questions in terms of 'knowledge' allowed for more instructive

and diverse responses that avoided socially desirable answers, and also provided a reliable, valid, and additional dimension of staff perceptions of residents beyond appraisals of closeness and intimacy. Specifically, staff were asked how well they knew the following information for the residents under their care: lives and occupations before admission, families, tastes and interests, and medical conditions/care plans. Responses range from 'very well' (3) to 'well' (2) to 'some' (1) to 'none' (0); taking the average knowledge score showed good reliability ($\alpha = .85$).

Predictors of Staff Perceptions of Residents—A number of other measures were included in subsequent analyses to determine their empirical relationship with staff perceptions of residents. Descriptive data are presented in Table 2.

Staff: Staff provided information on sociodemographic background information (see Table 2). In addition, all staff completed the 16-item Attitudes Toward Families Scale (ATFS; Maas et al. 2000) that assessed staff appraisals of family involvement. Item responses ranged from (1) 'strongly disagree' to (7) 'strongly agree' and were averaged to create a summary score. The ATFS demonstrated adequate internal reliability ($\alpha = .71$).

Facility: A number of facility-level characteristics were assessed during interviews with administrators. Data were collected on facility *type* (NH, ASL, or FCH), *size* (number of clients), *resident to staff* ratio (i.e., number of residents divided by number of employed staff), percentage of diverse ethnic and racial residents in the facility (*facility diversity*), range of services provided (*level of care*), whether residents are admitted or retained if they suffer from 13 medical conditions (e.g., resident is bedridden, incontinent, wanders or screams, etc.; *admit and retention*), *geographical location*, and *family orientation* (an 18-item questionnaire, see Friedemann et al. 1997: $\alpha = .89$).

Resident and family: In some facilities (such as FCHs or ASLs), staff provided primary hands-on care to more than one resident who participated in the study. In these instances, residents' characteristics (as well their primary family members') were averaged to provide general information on the care demands a primary staff person of 2 or more residents typically managed. Specific resident and family background information is presented in Table 2. Residents were administered the 10-item Short Portable Mental Status Questionnaire in-person to measure cognitive status (SPMSQ; Kahn et al. 1960). The SPMSQ showed good internal reliability ($\alpha = .90$). Telephone interviews with staff collected information on resident activity of daily living (ADL) dependencies (Lawton & Brody 1969) and showed strong internal reliability ($\alpha = .90$). Staff also completed a 27-item dichotomous checklist derived from the National Long-Term Care Survey (see Manton et al. 1998) to determine whether residents suffered from a series of chronic and acute health conditions (for descriptive information on health conditions, please contact the authors). The *Family Involvement Interview* (FII) collected data on how frequently family members visited (frequency of visits), the duration of a typical visit, and whether or not the primary family member engaged in ADL assistance, instrumental ADL assistance, socioemotional support, monitoring and discussing care with staff, and directing care (Maas et al. 2000). Each dimension of the FII showed moderate or stronger internal reliability ($\alpha > .65$).

Ethical considerations

The study was approved by the University of Kentucky Office of Research Integrity. Following verbal assent from residents, an in-depth cognitive assessment of residents took place. If they scored in the cognitively intact range (see above), informed consent was collected. If they had cognitive impairments, resident data were not used until proper consent was gathered from the person having power of attorney or a responsible family member. Similarly, no interview

procedure occurred with administrators, families, and staff until informed consent was collected. The principal investigator/author conducted all resident and administrator interviews and the majority of family and staff telephone interviews.

Data analysis

Predictors of staff perceptions of residents (i.e., cohesion, knowledge) were determined through multiple regression model techniques. The sample size was relatively small to consider all of the potential predictors simultaneously in a regression model due to threats to statistical power (see Cohen 1992). Therefore, we initially explored whether each covariate was independently and significantly correlated with staff-resident cohesion or knowledge ($p < .05$). If so, the covariate was included as a predictor variable in two final parsimonious regression models to identify factors that reliably accounted for cohesion and knowledge scores, respectively, among the 41 NH, ASL, and FCH care staff.

RESULTS

Predictors of Staff Perceptions of Residents

Specific item information for the knowledge and cohesion measures is presented in Table 1. Initial bivariate analyses found several variables significantly ($p < .05$) correlated with staff members' perceptions of cohesion and knowledge of residents. These variables were entered into multiple regression equations to identify, in more rigorous empirical fashion, predictors of staff perceptions. Table 3 presents the final regression models.

The final predictive model of cohesion accounted for a considerable amount of variance in staff members' perceptions of closeness with residents ($R^2 = .46$). All three entered variables were significant predictors of cohesion. Staff members who were married were more likely to report higher cohesion with residents in their particular facility ($\beta = .32, p < .05$). Moreover, staff who reported positive attitudes toward family members were more likely to indicate strong feelings of cohesion with residents ($\beta = .37, p < .01$). Staff in larger facilities appeared much less likely to report cohesion in their particular residential settings, as well ($\beta = -.49, p < .001$).

The final predictive model of staff knowledge also accounted for a considerable amount of variance in the dependent variable ($R^2 = .42$). However, of the six variables that were individually correlated with staff knowledge, only one emerged as a significant predictor in the final regression model. Staff who cared for a higher percentage of residents with learning difficulties were more likely to report greater knowledge of residents under their care ($\beta = .39, p < .05$).

LIMITATIONS

There are several important limitations in the current study. Although the data were derived from a random sample of long-term care facilities in the state of Kentucky, the sample of staff persons included in subsequent empirical analyses was small. The small sample may have obscured potentially significant empirical relationships due to lack of statistical power (e.g., predictors of staff-resident knowledge). The design was also cross-sectional, attenuating any interpretation of causal relationships. A full-scale longitudinal study, with a more diverse and larger sample, is expected to corroborate these findings and yield other predictors of staff appraisals. Specifically, such efforts would allow for more extensive analysis of staff perceptions of residents not only across long-term care facilities, but also within NH, ASL, and FCH settings. Such research is currently underway by the author (RO1 HS012181-01).

The analysis was also restricted to only one aspect of the staff-resident relationship: staff perceptions. The goal of the parent study was to examine the prevalence and implications of

family involvement in residential long-term care (e.g., Gaugler et al. in press) and since many residents included in the study were cognitively impaired to the extent that they could not reliably provide subjective ratings, resident perceptions of staff were not considered. Future efforts that attempt to discern the nature of staff-resident relationships could incorporate information not only from staff, but residents and possibly even key family members as well. Such data would provide a more comprehensive picture of the staff-resident relationship dynamic and fully inform subsequent nursing practice. As above, a large-scale project underway (RO1 HS012181-01) will capture, in multi-faceted fashion, the complex nature of the staff-resident relationship.

DISCUSSION

Descriptive data about staff perceptions of cohesion and knowledge revealed several important insights. When asked about the closeness of staff to residents in their particular facilities, respondents generally reported high levels of cohesion. For example, over 80% of staff reported that residents received a lot of individual attention, that a considerable amount of social interaction and activities existed between residents and staff, and that requests made by residents were taken care of by staff right away. Moreover, negative indicators of staff perceptions were not widespread; 17% or less of respondents reported that staff talked down to or criticized residents. In general, staff felt positive about the level of staff-resident closeness in their given facilities, although some variation did exist. For example, over a quarter of respondents reported that staff members did not spend a lot of time with residents, and over a third indicated that residents were simply 'passing time' or kept to themselves. The findings infer that there was recognition of the potential for boredom or for residents to withdraw from meaningful social interaction. Staff members' knowledge of residents' under their care was also somewhat lower. In particular, few staff appeared knowledgeable of the lives or occupations of residents prior to admission to the facility (on average, less than 'some'). Although staff were, on average, slightly more attuned to residents' families, knowledge ratings on this particular dimension remained on the lower end of the scale. Staff ratings' of knowledge appeared considerably higher for the day-to-day aspects of residents' lives, such as the residents' tastes and interests as well as residents' medical conditions. The results suggest the potential need for increased staff knowledge of residents' identity and familial situations. As research in the gerontological nursing discipline emphasizes (e.g., Bowers 1988, Hepburn et al. 1997, Kelley et al. 1999), more nurturing, sensitive long-term care is likely to result in situations where staff appreciate residents' past lives and interests. In this manner, a sense of 'preservative care' is achieved, where the residents' cherished identity and role prior to placement in a long-term care facility is effectively maintained and integrated in care plans, which could result in greater quality of life on the part of residents.

Several factors appeared predictive of positive staff perceptions of residents in the current study. First, staff members who were married were considerably more likely to indicate feelings of closeness between staff and residents in a given facility. There were several possible interpretations of this finding. Perhaps given their experience establishing their own familial bonds and navigating through challenges in marriage or other family relationships, married staff may have carried their relationship skills to the daily responsibility of caring for residents. It was also possible that married staff, with their experience of starting families, perceived residents as surrogate family (e.g., Heiselman & Noelker 1991, Sumaya-Smith 1995) and were more inclined and expect to treat residents as their own family members.

Another important indicator of staff-resident cohesion was staff perceptions of family members. Specifically, those staff who reported more positive attitudes toward family members were also more likely to indicate positive perceptions of residents in a given facility. As prior work has indicated, family members often play a key role in fostering positive resident

outcomes in long-term care (e.g., Greene & Monahan 1982, Noelker & Harel 1978, Kiely et al. 2000, Penrod et al. 2000). It was possible that positive involvement on the part of family members, in terms of working collaboratively with staff to provide effective, individualized care to residents (e.g., Bowers 1988, Duncan & Morgan 1994) proved particularly beneficial to staff appraisals of residents under their care. As the results here suggest, the pathway to staff perceptions of residents may extend beyond aspects of life in the facility and entail relationship dynamics between staff and family, as well. Understanding the triadic process of staff-resident-family relations may be vital to the development of successful nursing care practice for institutionalized older adults.

One facility-level indicator appeared predictive of staff perceptions in the current study; staff in smaller facilities indicated greater staff-resident cohesion. Smaller facilities may have been able to create strong, cohesive relationships with families and staff through a number of mechanisms. For example, unlike larger facilities where extensive staff rotation took place, smaller settings may have allowed staff and residents to become more closely acquainted, thus providing staff with opportunities to socially connect. In this manner, staff members' feelings of personal responsibility and closeness with residents were enhanced in smaller facilities. Smaller facilities may have also offered more 'homelike' environments that encouraged the formation of personal staff-resident relationships as well as the promotion of effective involvement of residents' family members (e.g., Rowles et al. 1996). Staff in smaller facilities may have become more aware not only of the residents' needs but those of family members' as well, thus allowing families to reduce 'monitoring' types of involvement (e.g., watching and supervising staff care) and instead focus on involvement more oriented to the socioemotional needs of the resident.

The empirical analysis was less successful in identifying multiple predictors of staff knowledge of residents, although the final regression model did account for a considerable amount of variance in staff knowledge (i.e., 42%). Staff who cared for a larger percentage of residents with learning difficulties appeared more likely to report greater knowledge of residents' care needs and personal lives. It was possible that the unique challenges of those with learning difficulties or similar developmental disorders required a greater amount of time to address on the part of care staff. In addition, those with learning difficulties may have also remained in the facility for longer periods of time, thus providing care staff with greater opportunities to learn more about these residents. For such reasons, staff insight into the particular needs of residents with learning difficulties may have been greater.

CONCLUSION

The findings have several implications for nursing practice in residential long-term care. The results offered some support to the importance of facility size in fostering positive staff perceptions of residents. Prior ethnographic research has emphasized how strong social connections between residents, staff, and the outlying community are possible by enhancing a sense of 'permeability,' or community connection and integration, within smaller NHs (Rowles et al. 1996). The findings here build on this prior work by demonstrating similar patterns of staff-resident connections across the long-term care continuum (e.g., NHs, ASLs, and FCHs). Although the size and scope of this study preclude extensive policy recommendations, the findings support other research and philosophical perspectives, such as the Green House Project (<http://thegreenhouseproject.com>) that emphasize the need for smaller, more community-oriented long-term care facilities as opposed to the traditional large, medically-oriented NH model (e.g., Kane 2001, Thomas 1999).

The results also demonstrated the potential to consider family, staff, and resident relationships simultaneously while exploring or improving outcomes in long-term care nursing. Conceptual

models in both the gerontological and nursing disciplines are key to determining the process and implications of staff-resident relations in long-term care and guiding the development of effective programs to improve such dimensions. For example, a possible model of staff-resident relationships that incorporates elements of the family-staff relationship, resident functional status, resident perspectives, and facility environment may demonstrate effectiveness in conceptually grounding subsequent research. Time would be an important component of such a model, where family-resident-staff relationships may develop, improve, or deteriorate as a resident's length of stay progresses. The manifestation of the facility-staff-family-resident dynamic could be key to intervening and improving outcomes in a range of long-term care environments.

The findings also supported current interventions that attempt to promote strong family-staff partnerships when improving a variety of outcomes (e.g., Anderson et al. 1992, Maas et al. 2000, Pillemer et al. 2003). These approaches are built around the establishment of family-staff care plans designed to strengthen the responsibilities and standards of staff and family care in NHs. Evaluations of these programs suggest they have potentially strong effects in facilitating family involvement (Maas et al. 2000), improving staff job satisfaction (Pillemer et al. 2003) and enhancing quality of care for residents (Anderson et al. 1992). The results of the current study emphasized that nursing interventions which build on the relationships between staff, families, and residents may have success not only in NHs, but also in newly emerging models of residential long-term care.

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Figure 1.
Conceptual Model: Predictors of Staff Perceptions of Residents

Table 1
Descriptive Data: Staff Cohesion With Residents (N = 41)

<i>Item</i>	<i>% = yes</i>
<i>Please answer these questions yes or no. Ask yourself which answer is generally true:^a</i>	
Do residents get a lot of individual attention?	85.4%
Do staff members spend a lot of time with residents?	73.2%
Do staff members sometimes talk down to residents?	17.1%
Are there a lot of social activities?	87.8%
Do a lot of the residents just seem to be passing time here?	56.1%
Do staff members usually take care of requests made by residents right away?	87.8%
Do staff members sometimes criticize residents over minor things?	12.2%
Do residents tend to keep to themselves here?	36.6%
Are the discussions very interesting?	95.1%
<i>Average Cohesion Score (sum of yes responses)</i>	<i>M = 7.07</i> <i>SD = 1.56</i>
<i>Item</i>	<i>M</i> <i>SD</i>
<i>How well do you know the following information about —?^b</i>	
—'s life and occupation before admission?	<i>M = .93</i> <i>SD = 1.16</i>
—'s family?	<i>M = 1.28</i> <i>SD = 1.01</i>
—'s tastes and interest?	<i>M = 1.55</i> <i>SD = 1.18</i>
—'s medical conditions and care plans?	<i>M = 1.75</i> <i>SD = 1.21</i>
<i>Average Knowledge Score</i>	<i>M = 1.21</i> <i>SD = .79</i>

NOTE: *M* = mean; *SD* = standard deviation

^aResponse range: 0 = no; 1 = yes

^bResponse range: 0 = not at all; 1 = some; 2 = well; 3 = very well

Table 2

Descriptive Information

Variable	<i>M (SD)</i>	<i>N (%)</i>
<i>Staff</i>		
Age	47.73 (15.93)	
Race (Caucasian)		37 (90.2%)
Marital status (married)		27 (65.9%)
Education ^a	3.18 (1.13)	
Length of employment (in months)	101.44 (85.42)	
Attitudes Toward Family Members Scale ^b	4.95 (.81)	
<i>Facility</i>		
Type		
Nursing homes		5 (19.2%)
Assisted living facilities		5 (19.2%)
Family care homes		16 (61.6%)
Size (number of clients)	26.15 (46.93)	
Resident: staff ratio	6.94 (12.42)	
Facility diversity (percentage of non-Caucasian residents)	6.24 (20.84)	
Level of care	11.15 (3.38)	
Admit criteria	15.19 (5.97)	
Retention criteria	15.77 (5.94)	
Percent rural		17 (65.41%)
Family orientation ^c	39.73 (8.22)	
<i>Resident (average)</i>		
Age	77.37 (12.35)	
Percent Caucasian	75.29% (35.86)	
Education ^a	2.52 (1.49)	
Percent married	6.14 (18.62)	
Number of living children	1.68 (1.37)	
Length of stay in facility (in months)	41.43 (35.31)	
Percent admitted from community	61.21% (40.41)	
Mental Status Questionnaire	5.40 (2.97)	
ADL dependence ^d	4.17 (3.48)	
<i>Family (average)</i>		
Age	59.23 (9.70)	
Percentage Caucasian	82.57% (32.02)	
Percentage married	59.90% (38.09)	
Number of living children	2.30 (1.36)	
Education ^a	4.41 (1.47)	
Percent employed	45.40% (39.57)	
Percent spouse of resident	3.95% (17.94)	
Traveling distance to facility (in minutes)	33.72 (38.89)	
Frequency of visits (past month)	8.94 (9.10)	
Duration of typical visit (in minutes)	60.33 (50.03)	
Family help: ADL assistance ^d (6 items)	1.20 (.91)	
Family help: IADL assistance ^d (5 items)	1.97 (1.31)	
Family help: Socioemotional (8 items)	3.53 (1.73)	
Family help: Monitoring care (5 items)	2.71 (1.68)	
Family help: Directing care (4 items)	0.68 (0.94)	

NOTE:

^aResponse range: 1 = did not complete junior high; 8 = graduate degree^bResponse range: 1 = strongly disagree; 7 = strongly agree; higher score = more positive attitude^c19-item scale summed; response range: 1 = 'not encouraged'; 2 = 'available but not encouraged'; 3 = 'encouraged'^dADL = activities of daily living; IADL = instrumental activities of daily living

Table 3

Final Regression Model: Predictors of Staff Cohesion and Knowledge

Predictor	B	SE	β	P	R ²
<i>Cohesion</i>					.46
Staff marital status (married)	.95	.37	.32	.01	
Staff attitudes toward family members	.67	.22	.37	.00	
Number of clients in the facility	-.01	.00	-.49	.00	
<i>Knowledge of Residents</i>					.42
For-profit facility	-.08	.29	-.05	.78	
Family care home vs. nursing home	.11	.33	.07	.75	
Family orientation of facility	-.01	.02	-.11	.56	
Percentage of residents with multiple sclerosis	.02	.01	.32	.19	
Percentage of residents with mental retardation	.01	.00	.39	.02	
Percentage of residents with emphysema	.01	.01	.15	.65	

NOTE: IADL = instrumental activities of daily living; B = unstandardized regression coefficient; β = standardized regression coefficient