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Predicting Turnover and Retention in Nursing Home Administrators: Management and Policy Implications

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Administrator turnover and its impact on the quality of patient care are important concerns in the nursing home industry. This study evaluates a model to determine which factors, attitudes, and personal characteristics can predict tenure. Responses to a survey from 290 nursing home administrators (NHAs) who furnished data on their previous positions were analyzed using logistic regression methods. The extracted model correlates tenure with the administrator's past patterns of stability, community attachment, organizational commitment, and facility performance. The model is particularly effective (85% accuracy) in flagging NHAs who are likely to depart within their first 3 years of employment. Implications of these findings for recruitment, retention, and licensure policy are discussed.
Key Words: Recruitment, Licensure, Attitudes

Predicting Turnover and Retention in Nursing Home Administrators: Management and Policy Implications

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One of the most serious and persistent problems confronting health care organizations today is that of selecting and retaining employees who will render a long period of service to their organizations (Ulschak & SnowAntle, 1992). Although this problem has received attention, particularly in hospital settings and among nursing and nurse aide staff, concern about turnover and retention among nursing home administrators (NHAs) has not been addressed adequately.

The administrator plays a key role in the operational success of a nursing facility. A model tested by Singh, Amidon, Shi, and Samuels (1996) provided some evidence that certain administrator characteristics and behavioral factors influence the quality of patient care delivered in a nursing facility. This finding underscores the critical role administrator selection can play in improving quality and maintaining consistency in high quality standards. While one would expect a prospective administrator's qualifications and skills—specifically the level of skill development in the key domains of practice established by the National Association of Boards of Examiners for Long Term Care Administrators—to be a primary consideration in the selection process, stability of the administrator is an equally important factor in promoting quality in nursing homes (Singh et al., 1996). Not only have administrator stability, retention, and

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turnover received scant attention in literature, but the extent of annual administrator turnover indicates that the industry has done little to address the problem. Because approximately 40% of facilities change administrators each year (Singh & Schwab, 1998), it is little wonder that quality-of-care issues remain the predominant concern for consumers and the government alike. Nursing home governing bodies, which are ultimately accountable for facility outcomes, can improve quality in their facilities by taking steps to counteract the destabilizing influence of high administrative turnover. To accomplish this goal, greater efforts must be made to select administrators who are both competent to fill the position and likely to remain with the facility.

This study has two main objectives: First, to determine which factors, attitudes, and personal characteristics of NHAs are associated with tenure in the administrator position, and second, to construct a predictive model that can help decision makers avoid hiring administrators who are likely to leave their positions prematurely. We will also discuss implications of the findings for long-term care management and licensure policy.

Factors associated with low versus high tenure are evaluated by studying administrators who held a previous NHA position and subsequently moved to a similar position with another facility. NHAs who left the industry, got promoted to upper management positions within the industry, moved to another state, or retired could not be included in the study. Attitudinal factors related to the administrators' previous job environments, past patterns of job stability, and individual characteristics were evaluated to identify the variables that can help predict future employment stability. For a discussion of factors associated with

length of employment in current positions, we refer the reader to an earlier study (Singh & Schwab, 1998).

Methods

A four-page survey questionnaire was developed by the authors and mailed in 1996 to all 1,035 NHAs in Michigan and Indiana who were employed at that time. The survey was endorsed by the state affiliates of the American Health Care Association (AHCA) and the American Association of Homes and Services for the Aging (AAHSA), but all administrators, regardless of membership or affiliation, were invited to participate in the study. Using administrator rosters from the respective state departments of health in the two states, the mailings were addressed personally to each administrator of record. Although we were not able to verify if someone other than the administrator may have filled out a questionnaire, we have no reason to suspect that this actually occurred. A determinant-choice question was included to identify the exact position of the individual completing the survey. The choices included (a) Nursing Home Administrator ("you are an employee; permanent appointment"), (b) Interim/Acting Administrator ("temporary appointment"), (c) Owner/Administrator ("you are the owner and administrator"), and (d) Other ("specify"). Besides addressing the above concern, this question enabled us to restrict the data analysis to permanently appointed employee administrators. In other words, we excluded interim or acting administrators (temporary appointments) and owner/administrators (nonemployees).

A total of 552 NHAs completed and returned the survey for an effective response rate of 53.3%. The initial mailing, which yielded a 41% response rate, clearly identified each respondent by name and facility. Before the mailing began, some industry representatives had cautioned us that administrators were likely to view as sensitive certain items on the survey, and therefore might not participate even though we had assured confidentiality in the cover letter accompanying the survey. Hence, we did not identify the respondents in the second mailing, which was sent only to the initial nonrespondents and was undertaken 4 weeks after the initial mailing. Another 12.3% of the total target population responded to the second mailing. Because the remaining nonrespondents were unidentifiable, a third mailing could not be pursued.

Returns in mail surveys generally do not follow a set pattern. For example, 4 weeks after the mailing, cumulative response rates for two commercial surveys sent to research firms and purchasing departments were found to be close to 25% (Zikmund, 1997). A 2.5-page survey of NHAs in South Carolina produced a cumulative return of 52% after the first 4 weeks, an additional 9% after 8 weeks, and an additional 14% after a third mailing and telephone follow-up, for a cumulative response rate of 75% (Singh, 1997b). In our study, return rates of 41% after 4 weeks and an additional 12% thereafter lead us to believe that participation was not hampered by the nature of questions on the survey. The four-page length

of the survey perhaps had a bearing on people's willingness to take the time to complete the survey.

Research experts have argued that mail surveys may not be reliable unless they either achieve a minimum of 50% response or demonstrate with some form of verification that the nonrespondents are similar to the respondents (Erdos, 1970). This study slightly exceeds the generally accepted minimum response rate, but may still leave some concern regarding inherent response biases. However, comparisons against available indicators for the targeted population provide some evidence that the sample is representative. Proportional responses from the two states were almost identical (52.8% from Michigan; 53.2% from Indiana). The annual job turnover among respondents is 38.5%, compared to 40.1% in the targeted population (see Singh & Schwab, 1998). Facilities experiencing two NHA job changes in one year constitute 7.0% of all facilities in the sample, compared to 6.5% in the population. The proportions of men and women in the sample correspond to those in the population (men in the sample = 44.3%; population = 42.3%; test of proportions = .423, p = .20). However, not-for-profit facilities are overrepresented in the sample (33.1% vs 25.8% in the population; χ^2 = 15.52, p = .000). But, information on past facility affiliation is unavailable in the data set, so any bias on account of affiliation remains unknown.

To study job factors that influence NHA tenure, the survey included 41 questions (rated on a 4-point numerical scale) pertaining to the administrator's job environment in the position held immediately preceding the current position. These attitudinal questions were adapted from literature in organizational theory which suggests that decisions to change employment are associated with a number of perceived individual, organizational, and environmental considerations. Limited by a four-page, letter-sized questionnaire, we included as many pertinent variables in the measurement scale as we possibly could. The survey questions were designed to measure NHAs' perceptions of job satisfaction and organizational commitment (Abelson, 1996; Camp, 1994; Mowday, Porter, & Steers, 1982); job demands, job expectations, and skill compatibility (McEvoy & Cascio, 1985; Mobley, 1982); value congruence (Sims & Kroeck, 1994); decision-making autonomy and discretion (Price & Mueller, 1986; Weil & Kimball, 1995); performance accomplishments, recognition, career progression, and remuneration (Cordero, DiTomaso, & Farris, 1994; Cotton & Tuttle, 1986; Kerr & Slocum, 1987; Porter & Steers, 1973); and family expectations, attachment to the community, and community involvement (Abelson, 1996; Mobley, 1982; Mowday et al., 1982).

A factor analysis reduced the 41 variables to seven principal dimensions that summarized how NHAs viewed their former job environments. The seven factors or perceptual dimensions extracted from the data were named Realized Expectations, Commitment, Skill Compatibility, Career Opportunities and Rewards, Personal Time, Performance Outcomes, and

Community Attachment. Four of the 41 variables did not associate with any of the seven factors. These single, unfactored measures represent market competition, stress, individual effort, and involvement in local community organizations. Six of the 41 questions asked the respondents to evaluate how closely their own values and philosophies matched those of the company in the six domains of practice—resident care, financial management, personnel management, marketing and census development, physical resource management, and overall organizational management. Initial factor analysis results showed little variation among these measures. Therefore, only one of the measures (overall organizational management) was retained in the final factor analysis. The principal components method using varimax rotation provided the most satisfactory solution in view of the theoretical considerations discussed earlier. The dimension scales derived from the 36 questions (five of the 41 questions were deleted) along with their eigenvalues and reliability indicators are reported in Table 1. Scores for some of the measures required reversal to maintain consistency with other questions. The questions requiring this transformation were precoded on the survey and are identified in Table 1. Mean scores and standard deviations for the perceptual dimensions are also reported in Table 1.

Low reliability of the Community Attachment construct (Chronbach's $\alpha = .45$) presents a concern. As expected, a proportionately larger number of married respondents answered the first question, "my spouse had a satisfying job" (Table 1); for the remaining two questions, proportional responses closely follow the proportion of married and unmarried NHAs in the sample. However, the problem of internal consistency in the measurement of this dimension remains even after the first question is deleted from the construct, or when the reliability computation includes only those who are married. The construct, however, was retained due to theoretical considerations (Abelson, 1996; Mobley, 1982; Mowday et al., 1982). Another issue relates to the validity of the self-reported measure, Performance Outcomes. The objectivity of the responses could not be externally verified. This construct has the highest mean score (see Table 1), which is significantly higher than the mean scores for any of the other constructs. This may indicate an upward bias in the reporting of performance outcomes. Another conceivable source of bias relates to problems with recall because roughly 16% of the respondents had been separated from their previous positions for more than 5 years. But, we do not think this presents a major concern because the questionnaire asks for perceptual and attitudinal impressions rather than specific recollection of quantitative information.

Of those who responded, 306 administrators had held at least one NHA position prior to their current position. Elimination of those who were not permanently appointed employee administrators left 290 usable cases. The attitudinal data and personal characteristics of this group were analyzed using logistic regression to extract variables that would predict tenure. The binary dependent variable used in the logis-

tic regression model was whether the NHA stayed in his/her previous position for less than 3 years or at least 3 years. Because our data include the actual length of employment, the derived model could be assessed for accuracy in its classification of NHAs as either "potential leavers" (occupied the position for less than 3 years) or "potential stayers" (stayed in the position for 3 years or longer). During the model-building process, the following variables were evaluated to get the best predictive model: age; gender; marital status; years of experience; education (two dummy variables with bachelor's degree as the reference category); field of academic concentration; number of NHA jobs previously held; nature of separation (voluntary or involuntary); nature of move (two dummy variables with lateral move as the reference category); and the perceptual dimensions obtained by factor analysis. For the "nature of separation" variable, voluntary separations include administrators who either left the organization voluntarily or asked for a transfer within a multifacility organization. Involuntary separations include NHAs who were discharged, forced to resign, or involuntarily transferred to a different facility within the chain and the transfer was viewed as a demotion. Only 1 of the 25 involuntary transfers resulted in a demotion. It is interesting to note that 21 of the 25 involuntary transfers were promotions. Because these involuntary transfers are career advancements that most NHAs would welcome, they are likely to reflect attitudes and motivations that are different from other types of involuntary transfers. Therefore, these promotional transfers were not included in involuntary separations.

The 3-year marker to separate potential leavers and potential stayers was based on actual job changes that occurred in the subject facilities during a 12-month period after the initial data had been collected. Facilities were monitored for a period of one year, and each facility in which change in administrators had occurred was identified using rosters obtained from the respective state health departments in Michigan and Indiana (regulations require nursing facilities to notify their respective state health departments whenever a change in administrator occurs). The dichotomous variable indicating a change or no change was cross-tabulated with the NHA's length of employment obtained on the original survey (the second mailing was blind, so the cross-tabulation includes 385 cases; 124 administrators could not be identified and their tenure could not be cross-tabulated). The odds of leaving versus staying pointed to a marked decrease in the odds of leaving after 3 years of continuous employment (Table 2). Administrators were found to be almost twice as likely to leave sometime during their first 3 years of employment. After 3 years of continuous employment at a facility, the odds of leaving are cut in half.

Results

Descriptive Statistics

Descriptive results for potential leavers and potential stayers are reported in Table 3. Of the 290 ad-

Table 1. Composition of the Seven Dimensions of Job Environment

	Mean (*SD*)	Eigenvalue	Cronbach's α
Realized Expectations	2.86 (.73)	8.88	.90
My supervisor was generally satisfied with my performance			
The overall organizational goals I was expected to achieve were reasonable			
My opinions were considered valuable by my superiors			
I had a great deal of autonomy in my position			
My immediate supervisor was fair and reasonable			
I felt that overall I was fairly treated			
I often feared losing my job [R]			
Expectations of the organization conflicted with my moral/religious beliefs [R]			
My opinions did not harmonize with policies on overall organizational management [R]			
All in all, my job met my expectations			
Commitment	2.76 (.67)	2.98	.84
I placed a high degree of trust in the organization			
I was enthusiastic about the organization as a great one to work for			
I felt very little loyalty to the organization [R]			
I would have done almost anything in order to keep working for the organization			
The organization really inspired the very best in me in the way of job performance			
I really cared about the success of the organization			
I felt that I was fitting quite well into the organization			
Skill Compatibility	3.22 (.54)	2.42	.73
The residents and their families placed reasonable demands on me			
The staff placed reasonable demands on me			
The demands of the job were compatible with my skills			
I was satisfied with the performance of my department heads, Medical Director, and facility staff			
Career Opportunities and Rewards	2.54 (.80)	1.83	.78
The opportunities for my career advancement were reasonable			
The opportunities for educational and professional development were reasonable			
The monetary rewards for my performance were reasonable			
Personal Time	2.30 (.96)	1.58	.95
My responsibilities allowed me enough time for my family			
My job responsibilities allowed me enough time for social/recreational activities			
Performance Outcomes	3.31 (.63)	1.50	.60
During my final twelve months, the operations did meet the budget			
During my final twelve months, the annual certification survey was excellent			
There was little turnover among key department heads and licensed staff			
Community Attachment	3.10 (.71)	1.26	.45
My spouse had a satisfying job			
I (and my family) considered the quality of life in the community I lived to be excellent			
I really wanted to relocate to a different geographical area [R]			
Unfactored measures			
The facility faced fierce market competition [R = low competition]	1.95 (.95)		
I generally experienced a great deal of stress [R = low stress]	1.95 (.93)		
Most of the time I would put in a great deal of effort beyond what was normally expected [R = reasonable effort input]	1.56 (.69)		
I was actively involved in local community/civic/ religious organizations	2.83 (.90)		

Notes: Mean scores are measured on a scale of 1 to 4. [R] = scores are reversed.

Table 2. Odds of Leaving vs Staying for Various Lengths of Employment

Year of job change	Job Change		Odds of Leaving vs Staying	Odds Ratio
	Yes	No		
Within first 2 years	50	84	.60	
Within years 2 and 3	20	33	.61	
Within years 3 and 4	12	31	.39	
Within years 4 and 6	13	38	.34	
After year 6	22	82	.27	
Total	**117**	**268**		
Within first three years	70	117	.60	
After three years	47	151	.31	1.94
Total	**117**	**268**		

ministrators who held a previous NHA position, 174 (60%) left within the first 3 years (potential leavers), and 116 (40%) stayed in their positions for 3 years or longer (potential stayers). Potential stayers have 4.6 years of additional professional experience as NHAs, but have held relatively fewer NHA positions during their careers (mean 3.2 vs 3.6 positions for potential leavers) and, more importantly, have remained longer in each position (mean 4.6 years vs 2.4 years for potential leavers). The mean difference in the number of jobs held by NHAs in the two categories was found to be only marginally significant ($p = .08$) using a simple t test. However, when experience is used as a covariate, a statistically significant difference is found between stayers and leavers. Intuitively, one would expect to find greater job mobility as the career span increases. But the actual results are contrary to what one would intuitively expect to find. It is the potential leavers who, over the course of their careers, hold a significantly higher number of NHA positions, and in each of these jobs they stay for shorter durations compared to the potential stayers.

In our sample, 81% of all separations were initiated by the NHAs, whereas 19% were initiated by upper management. But, when the odds for voluntary and involuntary separations are compared, the likelihood is more than double (odds ratio = 2.3) that an involuntary separation will occur during the first 3 years. Also, separations (both voluntary and involuntary) resulting in a subsequent promotion or demotion are more likely to occur during the first 3 years of employment, whereas a lateral move can occur at any time.

The characteristics of potential leavers are of particular interest, and, within this group, there are some notable differences between voluntary and involuntary separations. Of all voluntary moves among potential leavers, 56.6% resulted in subsequent promotions, 40.7% resulted in lateral moves, and 2.7% led to demotions. When the separation is involuntary, the subsequent position is more likely to be lateral (in 69.4% of cases). A smaller number (19.4%) get promotional opportunities and 11.1% settle for a lesser position. Therefore, it seems that a significant number of voluntary separations are initiated to pursue

career advancement. The profile of administrators who leave voluntarily within the first 3 years of employment in pursuit of promotional opportunities was found to be very similar to those who leave for other reasons, except that voluntary leavers who pursue promotional opportunities have less overall experience (number of jobs held and total years of experience). Approximately 14% of all administrators find advancement opportunities through transfers within the same organization.

Logistic Regression Model

Independent variables in the logistic regression model explain about 33% of the variability in the dependent variable (Table 4). In other words, average length of employment in each of the previous positions held, nature of past separation (voluntary or involuntary), commitment to the organization, facility performance outcomes, and community attachment together account for 33% of the variation in whether an administrator would stay for at least 3 years. Based on observed length of employment, the model makes accurate predictions about future tenure approximately 72% of the time. However, the model was more successful in predicting potential leavers than potential stayers. The model uses a threshold predictive value of .50. In the classification table (Table 5), the probability is at least .50 that 110 (72.4%) of the 152 cases predicted to be potential leavers (i.e., tenure of < 3 years) are classified correctly. From a plot of estimated probabilities (not shown), the probability of accurate prediction was found to be .75 or greater in 55 of the 152 cases (36%) classified as potential leavers. For the remaining 42 cases predicted as potential leavers, the probability is < .50 that they are in fact potential leavers (10 of the 42 cases [24%] had a predicted probability of < .25). In predicting potential stayers (i.e., tenure of ≥ 3 years), 25 out of the 72 cases (35%) classified as potential stayers have a probability of .75 or greater for being correctly classified. Hence, it can be said that overall the model correctly predicts with a probability of .75 both potential leavers and stayers in 80 of the total 224 (≈36%) cases. One of the reasons why the model does not have greater predictive power is extraneous variables that could not be included in this study but have a relationship to tenure.

According to the model, three predictor variables are of particular significance. Based on the value of the R statistic (used to evaluate the partial correlations between the dependent variable and each of the independent variables; see Norusis, 1994, p. 5), average length of employment in previous positions is the strongest variable predicting the likelihood that an NHA will stay 3 years or longer (Table 6). In other words, a pattern of past job stability is likely to predict future stability. Community attachment and nature of separation (voluntary vs involuntary) are two other variables that are statistically significant at $p \leq .05$.

Facility operational outcomes and the NHA's organizational commitment appear in the model at

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Table 3. Characteristics of Potential Leavers and Stayers (N = 290)

	Tenure in Previous NHA Position		
	<3 Years[a] n = 174 (60%)	≥3 Years[b] n = 116 (40%)	Test and Significance
Job Stability and Nature of Separation			
Years in previous position (mean)	1.3	5.9	t test = 13.11, p = .00
Number of NHA jobs held (mean)	3.6	3.2	t test = 1.79, p = .08
Years in each job (mean)	2.4	4.6	t test = 7.75, p = .00
Nature of separation			χ^2 = 5.29, p = .02
Voluntary	115 (56.9%[c], 76.2%[d]	87 (43.1%; 87.9%)	
Involuntary	36 (75.0%; 23.8%)	12 (25.0%; 12.1%)	
Nature of move from old to new job			χ^2 = 6.9, p = .03
Lateral	73 (53.7%; 42.4%)	63 (46.3%; 55.8%)	
Promotion	91 (65.0%; 52.9%)	49 (35.0%; 43.4%)	
Demotion	8 (88.9%; 4.7%)	1 (11.1%; 0.9%)	
Personal Characteristics			
Gender			χ^2 = 0.45, p = .50
Male	82 (62.1%; 47.1%)	50 (37.9%; 43.1%)	
Female	92 (58.2%; 52.9%)	66 (41.8%; 56.9%)	
Age (mean years)	42.7	45.8	t test = 2.68, p = .01
Marital status			χ^2 = 1.53, p = .22
Married	122 (57.8%; 70.1%)	89 (42.2%; 76.7%)	
Other	52 (65.8%; 29.9%)	27 (34.2%; 23.3%)	
Experience (mean years)	8.3	12.9	t test = 6.36, p = .00
Highest education			χ^2 = 6.14, p = .05
<Bachelor's degree	45 (51.7%; 25.9%)	42 (48.3%; 36.2%)	
Bachelor's degree	88 (67.7%; 50.6%)	42 (32.3%; 36.2%)	
>Bachelor's degree	41 (56.2%; 23.6%)	32 (43.8%; 27.6%)	
Field of academic concentration			χ^2 = 4.93, p = .18
Business and/or management	57 (62.6%; 32.9%)	34 (37.4%; 29.6%)	
Health administration	36 (62.1%; 20.8%)	22 (37.9%; 19.1%)	
Nursing	15 (41.9%; 8.7%)	20 (57.1%; 17.4%)	
Other	65 (62.5%; 37.6%)	39 (37.5%; 33.9%)	
Nursing or non-nursing preparation			χ^2 = 4.92, p = .03
Nursing	15 (42.9%; 8.7%)	20 (57.1%; 17.4%)	
All others	158 (62.5%; 91.3%)	95 (37.5%; 82.6%)	
Perceptual Job Dimensions[e]			
Realized expectations	2.79	2.86	t test = 0.72, p = .47
Commitment	2.66	2.82	t test = 1.94, p = .05
Skill compatibility with the organizations	3.15	3.27	t test = 1.82, p = .07
Career opportunities and rewards	2.47	2.52	t test = 0.43, p = .67
Personal time	2.28	2.24	t test = 0.33, p = .74
Performance outcomes	3.21	3.44	t test = 3.01, p = .00
Community attachment	2.97	3.20	t test = 2.70, p = .01
Market competitiveness	3.14	2.96	t test = 1.56, p = .12
Job stress	3.05	3.03	t test = 0.18, p = .86
Job effort	3.43	3.46	t test = 0.36, p = .72
Involvement in community organizations	2.79	2.88	t test = 0.90, p = .37

[a]Potential leavers.
[b]Potential stayers.
[c]Row percentages.
[d]Column percentages.
[e]Mean score on a scale of 1–4.

marginal levels of statistical significance. It should be pointed out, however, that the significance levels in logistic regression are based on the Wald test, which behaves in an aberrant manner, often failing to reject the null hypothesis when the regression coefficients are significant (Hosmer & Lemeshow, 1989, p. 17). Hence, we employed the likelihood ratio test comparing the full model with these two variables present to a reduced model with the two variables removed. The change in log likelihood was found to be statistically significant (χ^2 = 7.665, df = 2, p = .02) and it also improved the predictability of the model providing evidence that performance outcomes and com-

mitment should be retained in the model. The dichotomous variable representing formal education in nursing was also tried, but it was nonsignificant (p = .80). Other variables tried in the model (age, gender, marital status, years of experience, education, field of academic concentration, nature of move, number of NHA jobs previously held, and the remaining perceptual dimensions obtained by factor analysis) were also found to be nonsignificant. Also, specific inclusion of the nature of past separation (voluntary or involuntary) variable controls for any implicit assumptions that having an administrator stay for 3 years or longer is beneficial in all cases. Results of the model

Table 4. Logistic Regression Results—Goodness of Fit ($N = 224$)

Dependent variable values	0 = NHA stayed for <3 years in previous postion 1 = NHA stayed for ≥3 years in previous position
Goodness-of-fit statistics	−2 log likelihood = 242.03 Goodness of fit = 218.80 $\chi^2 = 62.69$, $df = 5$, $p = .000$ Nagelkerke $R^2 = .328$

Table 6. Regression Equation

	Coefficients	SE	Wald	p	R	Change in Odds
Average number of years in each job	.46	.10	23.09	.00	.26	1.59
Nature of separation (voluntary = 1, involuntary = 0)	.90	.44	4.27	.04	.09	2.47
Commitment	.45	.26	2.96	.09	.06	1.57
Performance outcomes	.45	.25	3.09	.08	.06	1.56
Community attachment	.69	.23	9.01	.00	.15	2.00
Constant	−7.40	1.42	27.12	.00		

are specifically in reference to NHAs who separate voluntarily; that is, given that the administrator leaves a position voluntarily, tenure of ≥ 3 years is influenced by the predictors in the model. Table 7 gives a correlation matrix for the variables of interest.

Discussion

Administrator turnover and retention are serious problems in the nursing home industry. A short tenure can create uncertainty and instability for the facility. Perhaps the most serious consequence of administrative instability is the negative influence it has on the quality of patient care (Christensen & Beaver, 1996; Singh, 1997b). During the first 3 years of employment, the probability that a newly hired administrator will separate, voluntarily or involuntarily, is 37% (70/187—Table 2). But, as discussed later, identifying potential leavers during the hiring process and use of retention strategies after hiring can improve overall administrative stability in nursing facilities.

It should be pointed out that, in a few cases, turnover may actually be desirable. For instance, when an administrator is not performing, nursing home governing bodies may decide to initiate change. According to this study, management initiatives to remove an NHA occur 75% of the time during the first 3 years; only 25% of involuntary separations take place later. For involuntary separations occurring within the first 3 years, the NHA's average length of employment is 1.3 years. Hence, upper management's assessment of a poor fit between the administrator and the facility is acted upon relatively quickly in most cases. This is a positive indication because NHAs who do not perform competently are unlikely to help improve the operations or maintain facility performance at desired levels.

Most NHAs (81%) depart from their positions voluntarily. However, it is surprising to observe the high

Table 5. Logistic Regression—Classification Table (threshold value = .50)

	Predicted			
Observed	<3 years	≥3 years	Totals	% Correct
<3 years	110	20	130	84.6
≥3 years	42	52	94	55.3
Overall	152	72	224	72.3

proportion of voluntary leavers who find promotional opportunities after an average length of employment of only 1.3 years in the previous position. There are no differences in the patterns of job stability between advancement seekers and those who depart voluntarily for other reasons. There are also no differences between the two groups on the various attitudinal dimensions. The only conclusion we can draw from this is that advancement seekers very likely get offers of promotional opportunities they find hard to resist. The extent of voluntary turnover in pursuit of promotions after relatively short tenures suggests a limited pool of adequately trained NHAs to select from in order to fill vacancies created by rapid turnover in the industry.

After controlling for voluntary and involuntary separations, logistic regression results show that NHAs who have evidenced a pattern of short tenures and frequent job changes in the past are also likely to be potential leavers in future positions. Hence, instability appears to be an administrative trait that can be easily assessed by reviewing the tenure history on a prospective administrator's resume and verifying this information through reference checks. Interestingly, this "tendency to turnover" as a personality characteristic has been observed in other studies (Casio, 1992; Kettliz, Zbib, & Motwani, 1998; Mowday & Lee, 1987), but the strength of this variable in our logistic regression model was quite surprising. It was clearly the most significant independent variable predicting tenure.

A community environment that is compatible with personal lifestyle and overall satisfaction with the quality of life a community offers contributes to job stability. The correlation between performance outcomes and administrative tenure is not surprising. A relationship between performance outcomes and turnover has been reported in studies of general managers (Kerr & Slocum, 1987; Porter & Steers, 1973). Positive performance results, such as facility meeting its budget commitments, compliance with certification regulations and standards, and low turnover among department heads and licensed staff (see Table 1), contribute to the NHA's sense of accomplishment and job satisfaction. Performance is also closely

Table 7. Correlation Matrix for Interval Measures

	AGE	STAY	EXPER	JOBS	EXPECT	COMMIT	SKILL	REWARD	TIME	PERFORM	COMMUN	COMP	STRESS	EFFORT	INVOLVE
AGE	1.00														
STAY	.36**	1.00													
EXPER	.26**	-.01	1.00												
JOBS	.18**	-.23**	.54**	1.00											
EXPECT	-.08	.02	-.09	-.13	1.00										
COMMIT	.00	.07	-.08	-.15	.61**	1.00									
SKILL	.09	.02	.07	-.03	.16**	.19**	1.00								
REWARD	-.06	.06	.02	-.06	.58**	.52**	.13*	1.00							
TIME	.17**	.02	.08	.05	.29**	.17**	.23**	.20**	1.00						
PERFORM	.12*	.07	.18**	.11	.28**	.20**	.41**	.11	.10	1.00					
COMMUN	.21**	.05	.09	-.03	-.12*	-.05	-.17**	-.03	.05	.07	1.00				
COMP	.03	.03	.05	-.03	.13*	.03	-.01	.00	.18**	.15*	.04	1.00			
STRESS	.06	.00	.06	.04	.37**	.17**	.13*	.24**	.34**	.14*	.04	.18**	1.00		
EFFORT	-.09	.01	.02	.05	.08	-.04	-.18**	.06	.17**	-.03	-.14*	.06	.15**	1.00	
INVOLVE	.09	.00	-.03	.02	.03	.15**	.22**	-.02	.03	.13*	.18**	.11	.13*	-.10	1.00

Notes: EXPECT = realized expectatons; STAY = average length of stay in each of the previous jobs; EXPER = experience; JOBS = number of NHA jobs previously held; COMMIT = commitment; SKILL = skill compatibility with organizational demands; REWARD = career opportunities and rewards; TIME = personal time; PERFORM = facility performance; COMMUN = community attachment; COMP = market competition (low); STRESS = job stress (low); EFFORT = job effort (reasonable); INVOLVE = community involvement.
*Correlation is significant at the .05 level; **Correlation is significant at the .01 level.

associated with upper management's desire to retain a well-performing administrator. Hence, good facility performance fosters a win-win situation by minimizing both voluntary and involuntary separations. It should be noted that from the results of this study we cannot conclude that an administrator's past performance is an indicator of future performance in a different facility, although such a conclusion makes intuitive sense.

The NHA's commitment to the organization is also a significant variable. Commitment is indicated by a high degree of trust in the organization, enthusiasm and loyalty toward the company, willingness to make one's best contribution to the organization, and personal feelings of a good fit with the organization (see Table 1). Compared to the factors discussed earlier, commitment is less tangible and more difficult to assess. However, our results show that past patterns of instability also reflect lower levels of commitment. In addition, commitment is correlated with several other dimensions (see Table 7) and thus reflects these dimensions, notably realized expectations ($r = .61$) and career opportunities/rewards ($r = .52$). Realized expectations point to the leadership style of the NHA's supervisor, autonomy in decision making, degree of harmony between the NHA's and the organization's ethical/moral values and management philosophies, and reasonableness of corporate expectations (see Table 1). Assistance and support from upper management in dealing with problem areas in the facility can improve outcomes and also contribute to fulfillment of the administrator's own expectations, foster commitment, and eventually lead to greater retention. These factors underscore the responsibility of the nursing home corporation in creating a leadership environment that will help promote greater retention of its administrators. NHAs are more likely to leave an organization when their job expectations are not met and when opportunities for growth and advancement are not available.

Management Implications

Findings in this study have implications for screening and recruitment of administrators as well as for achieving higher retention once a new NHA has been appointed to fill a vacancy.

- The recruitment process should screen not just for competency skills and compatibility with the organization's management philosophy and organizational demands, but also for the administrator's likelihood of staying at the facility. During the hiring process, upper management can screen out potential leavers by focusing on demonstrated patterns of past stability. Based on our results, an average length of employment of approximately 4.5 years in past positions can substantially reduce the risk of hiring potential leavers.
- If the appointment of a new NHA requires relocation, the recruitment process should include a match between the prospective administrator's lifestyle and the community where the administrator

would reside. Because individual lifestyles can vary considerably, one approach would be to let the administrator describe the community he or she would consider most desirable from a quality of life standpoint, and evaluate whether there is a close match.

- Patterns of past instability also indicate lower levels of loyalty and commitment. On the other hand, commitment is not something a corporation can unilaterally expect from its administrators. The administrator's internal motivations are shaped by a variety of external factors. Commitment, for example, is influenced by the quality of leadership from upper management. Therefore, it is critical for nursing home operators to evaluate how they manage their NHAs and provide support and direction with the objective of achieving high performance outcomes in the facility.
- A shortage of well-qualified, skilled NHAs should be of concern to the nursing home industry. A program of skills assessment should be combined with actions toward developing administrative skills. We recommend collaboration with local colleges and universities to develop industry-specific programs and to assist practicing administrators with enrollment in such programs.

Policy Implications

The supply of well-trained nursing home NHAs may be inadequate to meet current demands. Licensure policies directly impact the supply of administrators, and have a strong influence on the level of training and skills NHAs possess in the relevant domains of practice (Singh, 1997a). Current policies need to be reevaluated and refocused toward the objective of creating an adequate pool of well-trained administrators. Without appropriate policy interventions designed to rectify existing problems, the future outlook for any major improvements in administrator retention and quality of care in nursing facilities is likely to remain grim.

Limitations and Future Recommendations

Facility-related measures, such as independent versus chain ownership and nonprofit versus for-profit operation, are correlated with NHA turnover and retention (Singh & Schwab, 1998), but this study did not obtain information on such variables for past positions. Perceptual measures obtained from rating scales sometimes have inherent shortcomings, as reflected in the relatively low reliability values obtained on two of the constructs (Performance Outcomes and Community Attachment) appearing in the logistic regression model. Even though these constructs are theoretically sound, their interpretation may be open to some question. For future studies, we recommend including additional relevant variables in the measurement of these dimensions. Finally, the NHA survey did not include administrators who left the nursing home industry altogether. If such career changers largely leave due to burnout or disenchantment with the NHA profession, their exclusion from the study slants the results in favor of those who either like to stay in the field or lack transferable skills needed for a career change.

For future studies of this kind, we recommend a longitudinal design in which attitudinal dimensions are measured at an initial stage, and then measured at yearly intervals to be correlated with turnover and retention. Above all, such a design will minimize recall bias. A longitudinal design will require scales that are more sensitive than the 4-point scales used in this study.

Conclusions

There is high instability among NHAs, especially during the first 3 years of employment. In the selection of new administrators, past patterns of job hopping with short tenures is a strong indicator that the administrator will be unlikely to stay for at least 3 years. Geographic compatibility in relocating a new administrator is also an important factor. However, the industry presents a dilemma because of an apparent shortage of skilled NHAs who, once recruited, quickly find advancement opportunities at other facilities. Hence, retention of well-performing administrators and ongoing training and development are just as critical as the initial screening and selection. In anticipation of loyalty and commitment from NHAs, upper management should simultaneously evaluate its own commitment to its well-performing administrators. Management styles that promote support, personal growth, and achievement of facility performance objectives can help improve retention. Finally, licensure policies need to be refocused to ensure that the industry has an adequate supply of qualified administrators.

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