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Job Embeddedness: A Theoretical Foundation for Developing a Comprehensive Nurse Retention Plan

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Job Embeddedness: A Theoretical Foundation for Developing a Comprehensive Nurse Retention Plan

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Abstract

Objective: Using a new construct, job embeddedness, from the business management literature, this study first examines its value in predicting employee retention in a healthcare setting and second, assesses whether the factors that influence the retention of nurses are systematically different from those influencing other healthcare workers.

Background: The shortage of skilled healthcare workers makes it imperative that healthcare providers develop effective recruitment and retention plans. With nursing turnover averaging more than 20% a year and competition to hire new nurses fierce, many administrators rightly question whether they should develop specialized plans to recruit and retain nurses.

Methods: A longitudinal research design was employed to assess the predictive validity of the job embeddedness concept. At time 1, surveys were mailed to a random sample of 500 employees of a community-based hospital in the Northwest region of the United States. The survey assessed personal characteristics, job satisfaction, organizational commitment, job embeddedness, job search, perceived alternatives, and intent to leave. One
One year later (time 2) the organization provided data regarding voluntary leavers from the hospital. 

**Results:** Hospital employees returned 232 surveys, yielding a response rate of 46.4%. The results indicate that job embeddedness predicted turnover over and beyond a combination of perceived desirability of movement measures (job satisfaction, organizational commitment) and perceived ease of movement measures (job alternatives, job search). Thus, job embeddedness assesses new and meaningful variance in turnover in excess of that predicted by the major variables included in almost all the major models of turnover. 

**Conclusions:** The findings suggest that job embeddedness is a valuable lens through which to evaluate employee retention in healthcare organizations. Further, the levers for influencing retention are substantially similar for nurses and other healthcare workers. Implications of these findings and recommendations for recruitment and retention policy development are presented.

One of the most disruptive and expensive problems facing organizations today is employee turnover.\(^1,2\) Although firms in most industries struggle at one time or another with recruiting and retaining a talented workforce, retention is particularly critical in the healthcare industry.\(^3\) To keep pace with ongoing changes in governmental regulations, healthcare reimbursements and general medical initiatives, the healthcare industry has seen an increase in mergers, consolidations, and re-engineering activities.\(^4\) Such activities are a few of the unexpected shocks employees may experience that can dramatically influence organizational retention.\(^5\) In addition, beyond the ongoing cost-containment initiatives developed by various governmental entities (eg, local, state, federal), most healthcare facilities also face increasing pressures for cost-containment measures from patients, consumer advocate groups, and insurance companies.\(^4\) In fact, hospitals almost exclusively operate in an environment that stresses cost containment.\(^6\)

The increased pressure to balance cost containment and patient care has implications for both short-term and long-term employee retention. For example, registered nurses experienced a national turnover rate of more than 21% in 2000, with hospitals consistently reporting turnover rates between 10% and 30%.\(^7\) In nursing homes, approximately 80% to 90% of all direct patient care is provided by nursing assistants, and the annual turnover rate among these employees averages approximately 99%.\(^8\) In addition, experts believe that the aging Baby Boomer population will ultimately collide with the
large population of registered nurses nearing retirement age to further increase demands for medical care, thus exacerbating current trends.\textsuperscript{7,9,10}

Although not exhaustive, these factors suggest that the difficulties associated with retaining qualified staff can have serious implications for health-care. This is particularly true for hospitals, which tend to employ the largest number of nurses.\textsuperscript{9} A recent study reported several problems associated with high turnover rates: higher care costs, overcrowding in emergency rooms, insufficient beds to accept new patients, restricted admissions, and threats to quality of care.\textsuperscript{7} In addition, adverse effects on patient care tend to result from cutbacks in hospital nurse staffing. A study sponsored by the US Department of Health and Human Services found that large numbers of patient complications were associated with decreases in nurse staffing levels—up to and including increased risk of death.\textsuperscript{11} Therefore, employee retention in healthcare is far more serious than the costs traditionally incurred with recruiting, socializing, and training replacement employees.

With the combination of a tight labor market for healthcare workers, increasing turnover, staffing shortages and critical patient care needs, it is not unusual for administrators to find themselves in the position of having to be more reactive than proactive relative to staff turnover.\textsuperscript{6} Reactive measures may exacerbate many retention problems, however. In the current article, we draw on research from the business management literature to provide a conceptual framework to assist healthcare administrators in developing a comprehensive plan for retaining employees. Specifically, we examine a new construct, job embeddedness, and evaluate its utility in helping us better understand retention issues among healthcare workers.

**Voluntary Turnover and Job Embeddedness**

The traditional model of voluntary turnover suggests that people become dissatisfied with their jobs, search for alternative jobs, compare their options with the current job, and leave if any of these alternatives are judged better than the current situation.\textsuperscript{3,12} Most turnover models include 2 major categories of predictor variables: one emphasizes job attitudes (such as satisfaction and commitment) and
the other emphasizes the ease of movement (reflected in perceived alternatives and job search behavior).\textsuperscript{12–16}

The research investigating the attitude-driven part of the turnover process and its component parts is extensive.\textsuperscript{16,17} The 2 most frequently tested attitudinal constructs are job satisfaction and organizational commitment. In general, empirical results suggest satisfaction and commitment have consistent, statistically significant, and negative relationships with turnover.\textsuperscript{18,19} Some of the current research modifies the traditional measures or introduces new attitude constructs. For example, Irving et al\textsuperscript{20} provide a new measure of occupational commitment, whereas Shore and Tetrick\textsuperscript{21} develop and test a new measure of perceived organizational support. Other researchers suggest that justice perceptions\textsuperscript{22} and burnout\textsuperscript{23} influence these attitudes, which in turn affect turnover.

This body of research expands our understanding of the attitudes that lead to turnover, as well as the causes of these attitudes. This research is also consistent with healthcare research, in which both job satisfaction and organizational commitment have been found to be important predictors of turnover.\textsuperscript{9}

Traditional turnover models suggest that negative attitudes combine with job search to predict leaving.\textsuperscript{24} Of course, whether a search is successful or not depends partly on the job market. Bretz et al\textsuperscript{25} found that job search is frequently unsuccessful. In addition, Gerhart\textsuperscript{26} concluded that perceptions of the job market (general perception of job opportunities) predicted turnover but that search was not as important. Carsten and Spector\textsuperscript{27} found that the attitude-turnover relationship was higher when unemployment rates were low (jobs are available), rather than high. Because of general nursing shortages and shortages of qualified healthcare workers in many areas, this finding may be especially relevant for healthcare organizations.

In sum, most of the models of turnover developed by management scholars include 2 major categories of predictor variables: one emphasizes job attitudes (such as satisfaction and commitment) and the other emphasizes the ease of movement (reflected in perceived alternatives and job search behavior).\textsuperscript{12–16}
Although much of the research described above found significant results, the results are modest, at best. For example, in their quantitative reviews, Hom and Griffeth\textsuperscript{16} and Griffeth et al\textsuperscript{28} report that attitudinal variables control only about 4% to 5% of the variance in turnover. Steel and Griffeth\textsuperscript{29} and Griffeth et al\textsuperscript{28} report even weaker findings for the effect of perceived opportunities but slightly stronger results for the effect of intention to search on leaving. In their narrative review, Maertz and Campion\textsuperscript{17} conclude that, although the attitude-perceived alternative-search-turnover links are consistent but weak, many other meaningful topics have been neglected.

Within healthcare, only a few studies have gone beyond satisfaction and commitment variables in examining turnover; however, one study suggests the utility of examining topics beyond the traditional turnover links. Taunton and colleagues\textsuperscript{30} found that manager consideration (the degree to which managers consider the comfort, well-being, status, and contributions of their staff) explains a greater variance in turnover of nursing staff than do variables of stress, commitment, job enjoyment, autonomy, or personal power. Another approach focuses on an oft-repeated phrase in healthcare recruiting: “Becoming an employer of choice.”\textsuperscript{4} Although this ideal is worthy, it may create unnecessary escalation in recruiting battles. For example, if the primary changes an organization makes to become an employer of choice focus on salary or bonuses, it may win short-term victories. In the long term, however, the management literature suggests that many of these employees will eventually leave for a higher-paying job if other factors are ignored. One of these important factors in long-term retention is a good fit between the employee and job (eg, knowledge, skills, and abilities required for the job), as well as between the employee and the organization.\textsuperscript{9,31} As discussed later, job embeddedness incorporates this important organizational notion and off-the-job factors that have been shown to influence voluntary employee turnover.

Job embeddedness is a new construct developed to capture a more comprehensive view of the employee-employer relationship than is typically reflected by attitudinal measures such as satisfaction or commitment.\textsuperscript{32} Job embeddedness also differs from the traditional model in that it is aimed at employee retention, instead of employee turnover. Thus, the central focus is how to keep people in an
organization, rather than how to keep them from moving to a different organization, which, as indicated above, is particularly salient for the field of healthcare. Although this change in focus might sound trivial, we believe that the answers to the 2 questions are very different.

Job embeddedness assesses a broad set of influences on employee retention. The critical aspects of job embeddedness are

1. the extent to which an employee’s job and community are similar to or fit with the other aspects in his or her life space;
2. the extent to which employees have links to other people or activities; and
3. the ease with which links can be broken—what employees would give up if they left, especially if they had to physically move to another city or home.

These 3 dimensions are called fit, links, and sacrifice. They are important both on and off the job. This conceptualization suggests a 3 × 2 matrix with 6 dimensions (Table 1).

**Fit**

Fit is defined as an employee’s perceived compatibility or comfort with an organization and with his or her environment. Ensuring that individuals fit well within the organization’s environment is one way for managers to reduce early turnover. What is frequently considered important to healthcare professionals is the value orientation of their particular medical specialty. This could involve a greater interest in the technical aspects of one’s occupation, such as in the field of surgery, or a greater desire for the social aspects of the occupation, such as in the field of geriatrics or pediatrics. Therefore, organizations may enhance both retention and recruitment efforts by directing effort toward and awareness of these value orientations.

According to the job embeddedness theory, an employee’s personal values, career goals, and plans for the future must “fit” with the larger corporate culture and the demands of his or her immediate job (eg, job knowledge, skills, and abilities). In addition, a person will consider how well he or she fits the community and surrounding environment. The better the fit, the higher the likelihood that an
employee will feel professionally and personally tied to the organization.

For example, in studying voluntary turnover, O’Reilly et al. found that misfits with the organization values terminated slightly faster than did fits, but only after 20 months of tenure. Chatman later reported that when organizational entry produces poor person-organizational fit, employees are likely to leave the organization. Chan suggests that having one’s personal attributes fit with one’s job may decrease turnover, and Villanova et al. found that lack of job compatibility predicted turnover. It has been consistently found that people self-select jobs based on value congruence and that employers try to hire on that basis. Many socialization practices follow similar processes. More specifically, initial job choice and socialization are related to perceived fit, which in turn affects turnover.

Job embeddedness also recognizes community dimensions of fit. The weather, amenities, and general culture of the location in which a person resides are examples. In addition, outdoor activities (e.g., fishing, skiing), political and religious climates, and entertainment activities (college or professional sports, music, theater) vary dramatically by region and location. Most importantly, these assessments of fit may be independent of job or organization fit (e.g., “I love my job, but I hate the area where it is located”). Relocation obviously would require a recalibration of fit, but even a new job without relocation could disturb a person’s general patterns with a new work schedule or a different commute.

**Links**

Links are conceptualized as formal or informal connections between a person and institutions or other people. The theory of job embeddedness suggests that a number of strands connect an employee and his or her family in a social, psychological, and financial web that includes work and nonwork friends, groups, the community, and the physical environment in which he or she lives. The higher the number of links between the person and the web, the more an employee is bound, not only to the job, but also to the organization. Certain links may be more important than others, and these differences may be population specific. As just one example, for more
experienced nurses, opportunities to represent the organization within the community provide valuable connections that link these employees with educational institutions, professional groups, and community resources that may be seen as career enhancements.

A variety of research streams suggest that there is normative pressure to stay on a job, which derives from family, team members and other colleagues.\textsuperscript{41,42} O’Reilly et al\textsuperscript{43} use the term “social integration” to describe the at-work part of the link process. Furthermore, a study by Abelson\textsuperscript{44} assessed variables related to both on- and off-the-job links. He found that people who are older, are married, have more tenure, and/or have children requiring care are more likely to stay than to leave. In addition, Cohen\textsuperscript{45} specifically mentions hobbies and church-related activities as factors that can influence commitment.

In sum, people have many links among the various aspects of their lives. Leaving their job and perhaps their home can sever or require the rearrangement of some of these links. Those with more links are likely to incur greater costs—whether financial, emotional, or psychological—in leaving their current situation.

**Sacrifice**

Sacrifice captures the perceived cost of material or psychological benefits that may be forfeited by leaving one’s job. For example, leaving an organization likely promises personal losses (eg, leaving well-liked colleagues, a highly effective work team, or unique perks). Work group cohesion was found to be a particularly important way for organizations to increase retention among nursing staff.\textsuperscript{30} The more an employee gives up when leaving, the more difficult it is to sever employment with the organization.\textsuperscript{46} Although comparable salary and benefits may be easily found in the highly competitive healthcare environment, the switching costs (eg, different healthcare benefits, day care programs, or pension plans) are real and relevant. Moreover, nonportable benefits, such as defined benefit pensions or profit sharing, may involve sacrifices. These latter factors have been shown to be negatively related to turnover.\textsuperscript{47}
Less visible, but still important, potential sacrifices incurred by leaving an organization include opportunities for job stability and advancement. In addition, various advantages accrue to an individual who stays. For example, over time a person may acquire influence over the scheduling of work hours, which should lead to greater work status congruence. One of the most frequently cited retention issues among healthcare workers had to do with a desire for increased flexibility in work hours. Healthcare providers who understand what most concerns their staff and what staff want from their jobs are likely to develop a solid reputation among healthcare workers. Research demonstrates that such congruence leads to lower turnover and increased performance and organizational citizenship behavior. However, taking a new job means giving up these accrued advantages.

Community sacrifices (as well as links and fit to some extent) are mostly an issue if one has to relocate. Leaving a community that is attractive, safe, and where one is liked or respected can be hard. You might have to give up the football tickets or ballet seats that took 20 years of seniority to obtain. Of course, one can change jobs but stay in the same home. But even then, various conveniences, such as an easy commute or the ability to be at home during certain times because of flextime (eg, when kids come home from school) may be lost by changing jobs. Perks that affect one’s private life, such as day care or elder care, also may disappear. Although off-the-job embeddedness may be more crucial when relocation is involved, it may still apply in situations requiring only a change in jobs. In addition, if people are embedded they may remove job alternatives that require relocation from the set of job options they consider.

Summary and Hypotheses

Job embeddedness was developed to be a key mediating construct between specific on-the-job and off-the-job factors and employee retention. It represents a focus on the accumulated, affective, and nonaffective reasons why a person stays in a job. Each of the 3 dimensions—fit, links, and sacrifice—has an organizational and community component. The effects of these 6 different factors may vary across people, jobs, or circumstances, such as one’s age or the organization’s size. People can become embedded in many ways.
focus is more on the totality of embedding forces that keep a person on the job than the negative attitudes that prompt one to leave. From this perspective, job embeddedness may be seen as a “higher order” aggregate of forces for retention. This overall focus on the factors that lead to employee retention give rise to the following hypotheses:

- Hypothesis 1. Job embeddedness is negatively correlated with employee intent to leave and subsequent voluntary turnover.
- Hypothesis 2. Job embeddedness improves the prediction of voluntary turnover in a healthcare organization above and beyond that predicted by variables representing the desirability of movement (ie, job satisfaction and organizational commitment) and variables representing ease of movement (ie, perceived alternatives and job search).

Many benefits accrue to organizations that are able to manage nursing turnover. For example, improved retention may lead to more stable patient care and less disruption in service delivery. Improved retention of nurses will likely save organizations considerable money. It is estimated to cost 150% of a nurse’s annual salary to hire and train a replacement. Couple these costs with rising demand for nurses and dwindling supply and the outlook is bleak. Job opportunities for nurses are expected to grow more than 21% during the next 10 years, compared with an expected 14% growth rate for all professions nationally. At the same time, the current nursing workforce is aging, the effects of which are expected to intensify during the next 10 years as nurses from the Baby Boom generation begin to retire. According to the American Association of Colleges of Nursing, enrollments in entry-level baccalaureate programs in nursing increased by 15.9% in fall 2003 compared with 2002. Although this increase continues a 3-year upward trend, the growth is still not sufficient to address the current registered nurse shortage, which is expected to intensify during the next 10 years.

In sum, the successful recruitment and retention of skilled nurses is a critical issue for healthcare administrators. Although many studies have looked specifically at the retention of nurses, none have assessed whether the broad set of influences on retention included in the job embeddedness construct vary systematically between nurses and other healthcare workers. Thus, a critical contribution of the
current study is to test this. Because the wide-range of issues addressed by job embeddedness generally transcend occupational choice or commitment, we do not expect significant differences to emerge. Specifically,

- Hypothesis 3. Retention factors influencing job embeddedness will not vary between nurses and other healthcare workers.

**Method**

**Overview and Samples**

The research strategy employed was to assess personal characteristics, job satisfaction, organizational commitment, job embeddedness, job search, perceived alternatives, and intent to leave at time 1, and actual turnover at time 2. The first author contacted, visited, and gained access to data at a community-based hospital in the Northwest region of the United States. The labor market was exceptionally tight for nearly all positions, with overall unemployment well below 5% during the period of the study.

Surveys were mailed to a random sample of 500 employees of the hospital in June 1998 (150 were nurses and 350 were from administration, maintenance, admitting, cafeteria and special services). Self-addressed stamped envelopes were provided. Confidentiality of responses was guaranteed to all participants via a letter sent in advance of the survey. Follow-up letters also were sent to remind employees to participate. Two hundred thirty-two surveys were sent back by hospital employees, yielding a response rate of 46.4%; however, not all respondents identified themselves (thus allowing a match between survey response and organizational records documenting continuing employment). Consequently, for calculations involving turnover, 208 surveys were analyzed.

The average age of respondents was 43.10 years (SD = ±10.21); 84% were female, and 60% were married. They had worked in their current position for 6.22 years (SD = ±6.39), for the organization for 7.92 years (SD = ±7.18), and in the industry for 16.82 years (SD = ±10.41). To test for response bias, we compared the 208 respondents who provided their names on the questionnaire.
with the other 940 employees of the hospital. The respondents do not seem to be different from nonparticipants in terms of gender, tenure with the organization, job level, or job type. Thus, sample respondents are fairly similar to the population of employees with respect to their major demographic attributes.

**Measures**

**Personal Characteristics**

We measured age, gender, marital status, job level, and tenure in their jobs with their organization and industry. Simple, fill-in-the-blank type questions were used.

**Job Embeddedness**

We measured job embeddedness using the instrument developed by Mitchell et al. All items, except the fill-in-the-blank questions, were measured using 5-point Likert-type scales (1 = strongly disagree, 2 = disagree, 3 = neither agree nor disagree, 4 = agree, 5 = strongly agree). The items are listed in Figure 1. The alpha reliability (using all the items) for the overall measure was .87. Table 2 shows the means, standard deviations, and correlations for all variables in this study.

**Job satisfaction.**

Overall satisfaction was measured with an averaged composite of the following 3 items: “All in all, I am satisfied with my job,” “In general, I don’t like my job (reverse scored),” and “In general, I like working here” (alpha = .85).

**Organizational Commitment**

Meyer and Allen’s 3-dimensional measure assessed organizational commitment. To assess overall organizational commitment, an averaged composite of all items was used (alpha = .87). For the 3 dimensions, Meyer and Allen’s subscales were used. Their alpha reliabilities were: .89 for affective commitment, .81 for continuance commitment, and .81 for normative commitment.
Job Alternatives

These 2 items were adapted from a study by Lee and Mowday. The items are “What is the probability that you can find an acceptable alternative to your job?” and “If you search for an alternative job within a year, what are the chances you can find an acceptable job?” These items were averaged to reflect one’s perceived alternatives (alpha = .93) and use a 5-point response format.

Job Search Behavior Index

This composite is designed to measure actual search activity. We used the 10-item scale used by Kopelman et al. It includes questions such as: “During the past year have you (1) revised your resume, (2) sent copies of your resume to a prospective employer, (3) read the classified advertisements in the newspaper, (4) gone on a job interview, and (5) talked with friends or relatives about getting a new job?” Responses are yes or no and the alpha was .82 for the sample.

Intention to Leave

These items were adapted from Hom et al. The 3 items were “Do you intend to leave the organization in the next 12 months,” “How strongly do you feel about leaving the organization within the next 12 months,” and “How likely is it that you will leave the organization in the next 12 months?” An averaged composite was used in the analysis (alpha was .97).

Voluntary Turnover

The hospital provided a list of all voluntary and involuntary leavers for a 12-month period after the survey administration. Maertz and Campion define voluntary turnover as, “Instances wherein management agrees that the employee had the physical opportunity to continue employment with the company, at the time of termination.” To confirm this volitional nature from both the organization and the employee, we attempted to contact every leaver to confirm the voluntariness of departure. In the hospital sample we were able to contact 20 of 27 “voluntary leavers.” Each of the persons contacted reported leaving voluntarily. In addition, none of these people retired.
Thus, the turnover rate during the year under study was approximately 13%.

Results

Tests of Hypotheses

Hypothesis 1 posits that embeddedness is negatively correlated with employee intent to leave and turnover. As noted in Table 2, the product-moment correlation between embeddedness and intent to leave is -0.47 (P < .01) and the point-biserial correlation between embeddedness and voluntary turnover is -0.25 (P < .01). These results suggest that a negative relationship exists between being embedded in an organization and one’s intent to leave, as well as actual voluntary leaving. Hypothesis 1 is supported.

In Hypothesis 2, job embeddedness is predicted to improve prediction of turnover above and beyond that predicted by job satisfaction and organizational commitment (perceived desirability of movement) and perceived alternatives and job search (perceived ease of movement). Among hospital workers, job embeddedness significantly improved prediction (improvement of fit chi-square = 6.15, P < .01; Wald = 5.56, P < .05) after controlling for perceived ease of movement and desirability of movement variables (Table 3). In sum, Hypothesis 2 is supported.

Hypothesis 3 asserts that the factors that influence retention will not vary across nurses and other healthcare workers. As can be seen in Table 4, the only statistically significant differences between nurses and other workers is in the links-in-the-community subdimension, which we suspect will drive a difference in the strength of the job embeddedness in the community dimension. On the basis of this finding, we performed a follow-up logistic regression and found support (improvement of fit chi-square = 9.82, P < .001; Wald = 4.00, P < .05), suggesting that the community dimension of job embeddedness is especially salient for nurses (Table 5).
Discussion

The foregoing results obtained in a healthcare setting indicate that job embeddedness predicts turnover over and beyond a combination of perceived desirability of movement measures (job satisfaction, organizational commitment) and the perceived ease of movement measures (job alternatives, job search). Thus, job embeddedness assesses new and meaningful variance in turnover in excess of that predicted by the major variables included in almost all the major models of turnover.

The implications of thinking about job embeddedness issues are quite different from thinking about increasing satisfaction or commitment. That is, the levers or factors that leaders need for managing turnover within a healthcare environment are conceptually very different. Remember that according to job embeddedness, different people become enmeshed in different ways. Thus, job embeddedness focuses on a wide range of coordinated efforts to increase employee attachment to the organization and ultimately retention. Table 6 gives basic ideas about how to increase job embeddedness by focusing on the different dimensions.

As demonstrated in Table 6, many things can be done by healthcare organizations beyond simply changing pay or instituting programs designed to raise job satisfaction. By capitalizing on the particular motivating interests of existing staff and future applicants, healthcare administrators can address retention at all career stages and levels of tenure. By offering opportunities for mentoring relationships, providing more flexible work arrangements, and developing managerial leadership skills, employers may increase retention and thus lower costs. Organizations that increase their ability to retain valuable employees may soon develop a reputation that allows them to pick from the best new healthcare workers who enter the work place. Or perhaps, with the ability to be more proactive, healthcare providers may be able to “grow their own” employees to fill difficult or highly technical jobs, rather than being reactive and remaining at the mercy of the external market.

Although the focus of job embeddedness is on its aggregate effect, we believe that the finding that for nurses, embeddedness in
the community is a significant factor in their retention is important. First, it suggests that paying to relocate nurses away from their home communities may have hidden long-term costs in the form of higher probability of eventual turnover. Second, it reinforces earlier discussion about the importance of creating links in the community. Put differently, supporting employee involvement in the community has multiple benefits. Finally, the difference in strength of “links in the community” notwithstanding, we interpret the overall pattern of results to indicate that organizations do not need to develop independent, specialized plans to retain nurses. Instead, a comprehensive focus on the wide range of connections suggested by job embeddedness will prove beneficial for retaining all types of employees.

This study suggests some new and intriguing ways to think about employee retention. Apparently, being embedded in an organization and one’s community is associated with reduced intent to leave and actual leaving. These findings appear to support the current emphasis in the academic and popular press on the need for organizations to be concerned with employees’ lives both on and off the job. It also suggests that the focus on money and job satisfaction as the levers for retention may be limited in scope. Many nonfinancial and nonattitudinal factors serve to place people in a network of forces that keep them in their job. It is hoped that additional pursuit of these ideas will increase our understanding of why people stay, why they leave, and how those actions can be influenced.

Acknowledgment

The authors acknowledge the research assistance of Juliet Rackl, Georgetown University.

References


Appendix

Table 1: Dimensions of Job Embeddedness

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Organization</th>
<th>Community</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fit</td>
<td>Fit-organization</td>
<td>Fit-community</td>
</tr>
<tr>
<td>Links</td>
<td>Links-organization</td>
<td>Links-community</td>
</tr>
<tr>
<td>Sacrifice</td>
<td>Sacrifice-organization</td>
<td>Sacrifice-community</td>
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Table 2: Means, Standard Deviations, and Correlations

<table>
<thead>
<tr>
<th>Variables*†</th>
<th>Mean</th>
<th>SD</th>
<th>Scale</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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</thead>
<tbody>
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<td>1. Voluntary takeover</td>
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<td>0.34</td>
<td>0-1</td>
<td>-0.46</td>
<td>-0.53</td>
<td>-0.52</td>
<td>-0.40</td>
<td>-0.34</td>
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<td>2. Intent to leave</td>
<td>2.36</td>
<td>1.20</td>
<td>1-5</td>
<td>-0.26</td>
<td>-0.46</td>
<td>-0.52</td>
<td>-0.34</td>
<td>-0.25</td>
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<td>3. Job satisfaction</td>
<td>3.94</td>
<td>0.75</td>
<td>1-5</td>
<td>-0.11</td>
<td>-0.46</td>
<td>-0.52</td>
<td>-0.34</td>
<td>-0.25</td>
</tr>
<tr>
<td>4. Organizational commitment (OC)</td>
<td>3.01</td>
<td>0.52</td>
<td>1-5</td>
<td>-0.09</td>
<td>-0.10</td>
<td>-0.23</td>
<td>-0.18</td>
<td>-0.06</td>
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<tr>
<td>5. Job alternatives</td>
<td>3.97</td>
<td>1.10</td>
<td>1-5</td>
<td>-0.13</td>
<td>-0.45</td>
<td>-0.67</td>
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<td>6. Job search behavior</td>
<td>3.17</td>
<td>2.93</td>
<td>0-10</td>
<td>-0.31</td>
<td>-0.50</td>
<td>-0.45</td>
<td>-0.33</td>
<td>-0.23</td>
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<td>7. Job embeddedness (JE)</td>
<td>2.90</td>
<td>0.40</td>
<td>1-5</td>
<td>-0.25</td>
<td>-0.47</td>
<td>-0.57</td>
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<td>8. Fit—community</td>
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<td>0.63</td>
<td>1-5</td>
<td>-1.17</td>
<td>-0.12</td>
<td>-0.21</td>
<td>-0.12</td>
<td>-0.11</td>
</tr>
<tr>
<td>9. Fit—organization</td>
<td>3.79</td>
<td>0.61</td>
<td>1-5</td>
<td>-1.12</td>
<td>-0.15</td>
<td>-0.27</td>
<td>-0.18</td>
<td>-0.14</td>
</tr>
<tr>
<td>10. Links—community</td>
<td>1.32</td>
<td>0.86</td>
<td>1-5</td>
<td>-1.46</td>
<td>-0.20</td>
<td>-0.36</td>
<td>-0.26</td>
<td>-0.21</td>
</tr>
<tr>
<td>11. Links—organization</td>
<td>1.52</td>
<td>0.61</td>
<td>1-5</td>
<td>-0.17</td>
<td>-0.12</td>
<td>-0.21</td>
<td>-0.12</td>
<td>-0.11</td>
</tr>
<tr>
<td>12. Sacrifice—community</td>
<td>3.82</td>
<td>0.66</td>
<td>1-5</td>
<td>-0.17</td>
<td>-0.15</td>
<td>-0.27</td>
<td>-0.16</td>
<td>-0.15</td>
</tr>
<tr>
<td>13. Sacrifice—organization</td>
<td>3.09</td>
<td>0.66</td>
<td>1-5</td>
<td>-0.13</td>
<td>-0.45</td>
<td>-0.67</td>
<td>-0.24</td>
<td>-0.20</td>
</tr>
<tr>
<td>14. JE—community</td>
<td>2.90</td>
<td>0.46</td>
<td>1-5</td>
<td>-0.20</td>
<td>-0.19</td>
<td>-0.30</td>
<td>-0.24</td>
<td>-0.17</td>
</tr>
<tr>
<td>15. JE—organization</td>
<td>2.99</td>
<td>0.51</td>
<td>1-5</td>
<td>-0.21</td>
<td>-0.44</td>
<td>-0.67</td>
<td>-0.27</td>
<td>-0.24</td>
</tr>
<tr>
<td>16. OC—effective</td>
<td>3.18</td>
<td>0.76</td>
<td>1-5</td>
<td>-0.18</td>
<td>-0.41</td>
<td>-0.67</td>
<td>-0.24</td>
<td>-0.20</td>
</tr>
<tr>
<td>17. OC—continuance</td>
<td>2.93</td>
<td>0.73</td>
<td>1-5</td>
<td>-0.05</td>
<td>-0.29</td>
<td>-0.47</td>
<td>-0.18</td>
<td>-0.14</td>
</tr>
<tr>
<td>18. OC—normative</td>
<td>2.93</td>
<td>0.63</td>
<td>1-5</td>
<td>-0.01</td>
<td>-0.29</td>
<td>-0.39</td>
<td>-0.26</td>
<td>-0.21</td>
</tr>
</tbody>
</table>

* N = 208 for column 1 (turnover); N ranges from 221-232 for all other variables.
† Column 1 reports point-biserial correlations; all other columns report product-moment correlations.
‡ P<.05.
§ P<.01.
Table 3: Logistic Regression of Voluntary Turnover Among Hospital Workers

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Exponentiated $b^*$</th>
<th>Wald</th>
<th>Change in Pseudo $R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job satisfaction</td>
<td>0.58</td>
<td>2.29</td>
<td>.12</td>
</tr>
<tr>
<td>Organizational commitment</td>
<td>5.05</td>
<td>5.07†</td>
<td>.00</td>
</tr>
<tr>
<td>Job alternatives</td>
<td>2.14</td>
<td>3.07</td>
<td>.06</td>
</tr>
<tr>
<td>Job search</td>
<td>1.27</td>
<td>5.42†</td>
<td>.05</td>
</tr>
<tr>
<td>Job embeddedness</td>
<td>0.16</td>
<td>5.56†</td>
<td>.05</td>
</tr>
</tbody>
</table>

Improvement of fit $\chi^2$ for job embeddedness: 6.15‡

* Exponentiated $b$ values > 1.0 indicate a positive effect; values = 1.0 indicate no effect; and values < 1.0 indicate a negative effect.
†P<.05.
‡P<.01.

Table 4: Comparison of Nurses and Other Hospital Employees

<table>
<thead>
<tr>
<th>Variables†</th>
<th>Other Hospital Employees</th>
<th>Nurses</th>
<th>T Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean SD</td>
<td>Mean SD</td>
<td></td>
</tr>
<tr>
<td>1. Voluntary turnover</td>
<td>0.14 0.35</td>
<td>0.09</td>
<td>0.29</td>
</tr>
<tr>
<td>2. Intent to leave</td>
<td>2.42 1.32</td>
<td>2.12</td>
<td>1.11</td>
</tr>
<tr>
<td>3. Job satisfaction</td>
<td>3.92 0.76</td>
<td>4.04</td>
<td>0.70</td>
</tr>
<tr>
<td>4. Organizational commitment (OC)</td>
<td>3.02 0.49</td>
<td>2.96</td>
<td>0.64</td>
</tr>
<tr>
<td>5. Job alternatives</td>
<td>3.03 0.75</td>
<td>3.06</td>
<td>0.83</td>
</tr>
<tr>
<td>6. Job-search behavior</td>
<td>3.12 2.59</td>
<td>3.38</td>
<td>2.81</td>
</tr>
<tr>
<td>7. Job embeddedness (JE)</td>
<td>2.89 0.40</td>
<td>2.93</td>
<td>0.40</td>
</tr>
<tr>
<td>8. Fit—community</td>
<td>4.02 0.62</td>
<td>4.13</td>
<td>0.66</td>
</tr>
<tr>
<td>9. Fit—organization</td>
<td>3.77 0.61</td>
<td>3.86</td>
<td>0.60</td>
</tr>
<tr>
<td>10. Links—community</td>
<td>1.27 0.62</td>
<td>1.53</td>
<td>0.53</td>
</tr>
<tr>
<td>11. Links—organization</td>
<td>1.54 0.62</td>
<td>1.41</td>
<td>0.51</td>
</tr>
<tr>
<td>12. Sacrifice—community</td>
<td>3.61 0.64</td>
<td>3.64</td>
<td>0.81</td>
</tr>
<tr>
<td>13. Sacrifice—organization</td>
<td>3.11 0.65</td>
<td>3.00</td>
<td>0.72</td>
</tr>
<tr>
<td>14. JE—community (off the job)</td>
<td>2.97 0.49</td>
<td>3.10</td>
<td>0.55</td>
</tr>
<tr>
<td>15. JE—organization (on the job)</td>
<td>2.81 0.46</td>
<td>2.76</td>
<td>0.48</td>
</tr>
<tr>
<td>16. OC—affective</td>
<td>3.19 0.74</td>
<td>3.13</td>
<td>0.93</td>
</tr>
<tr>
<td>17. OC—continuance</td>
<td>2.94 0.71</td>
<td>2.89</td>
<td>0.83</td>
</tr>
<tr>
<td>18. OC—normative</td>
<td>2.95 0.61</td>
<td>2.85</td>
<td>0.71</td>
</tr>
</tbody>
</table>

* N (nurses) = 45, N (other employees) = 163 for row 1 (turnover)
†N (nurses) = 45, N (other employees) ranges from 180-187 for all other variables.
‡P<.05.
Table 5: Logistic Regression of Voluntary Turnover Among Nurses

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Exponentiated b*</th>
<th>Wald</th>
<th>Change in Pseudo R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job satisfaction</td>
<td>0.003</td>
<td>3.37</td>
<td>.10</td>
</tr>
<tr>
<td>Organizational commitment</td>
<td>26.104</td>
<td>0.32</td>
<td>.04</td>
</tr>
<tr>
<td>Job alternatives</td>
<td>0.366</td>
<td>0.26</td>
<td>.00</td>
</tr>
<tr>
<td>Job search</td>
<td>1.869</td>
<td>2.42</td>
<td>.00</td>
</tr>
<tr>
<td>JE—organization</td>
<td>307.849</td>
<td>1.36</td>
<td>.00</td>
</tr>
<tr>
<td>JE—community</td>
<td>0.001</td>
<td>4.00†</td>
<td>.16</td>
</tr>
</tbody>
</table>

Improvement of fit χ² for JE

JE, job embeddedness.
* Exponentiated b values > 1.0 indicate a positive effect; values = 1.0 indicate no effect; and values < 1.0 indicate a negative effect.
†P<.05.
‡P<.01.
Table 6: Application of Job Embeddedness

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Application</th>
</tr>
</thead>
</table>
| Fit—organization| • Provide extensive information to recruits about career opportunities within the organization.  
• Use realistic job previews.  
• Select employees whose values fit with the organizational values.  
• Provide socialization opportunities to newcomers that allow them to meet and get to know other employees, especially group or team members.  
• Encourage employee input into decisions that directly affect them. |
| Fit—community   | • Recruit most heavily in markets or communities surrounding facilities.  
• Avoid relocating employees as much as possible. |
| Links—organization| • Allow employees to choose on which teams or projects they would like to participate.  
• Provide mentors to sponsor and coach new or young professionals.  
• Promote career-path planning within the organization and train employees for these opportunities.  
• Provide opportunities for knowledge sharing among professional employees to increase patient care and professional skills. |
| Links—community | • Support community service by employees (e.g., 2 days off per year for community service).  
• Volunteer in local student programs as mentors or preceptors.  
• Encourage professional involvement in community-based professional organizations. |
| Sacrifice—organization| • Involve employees in developing schedules that fit their needs (status, shift, schedule).  
• Provide creative benefit alternatives or cafeteria plans, tailoring benefits to meet individual needs and enhance work-life balance.  
• Provide incentives or perquisites based on tenure. |
| Sacrifice—community | • Allow employees input in designing work environment.  
• Promote people without requiring transfer.  
• Provide home-buying assistance. |
Figure 1: Job embeddedness items.

<table>
<thead>
<tr>
<th>Fit: Community</th>
<th>Links: Organization*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I really love the place where I live.</td>
<td>1. How long have you been in your present position?</td>
</tr>
<tr>
<td>2. The weather where I live is suitable for me.</td>
<td>2. How long have you worked for this company?</td>
</tr>
<tr>
<td>3. This community is a good match for me.</td>
<td>3. How long have you worked in this industry?</td>
</tr>
<tr>
<td>4. I think the community where I live as home.</td>
<td>4. How many coworkers do you interact with regularly?</td>
</tr>
<tr>
<td>5. The area where I live offers the leisure activities that I like.</td>
<td>5. How many coworkers are highly dependent on you?</td>
</tr>
<tr>
<td>Alpha coefficient for composite (.79).</td>
<td>6. How many work teams are you on?</td>
</tr>
<tr>
<td>7. How many work committees are you on?</td>
<td>7. How many work committees are you on?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sacrifice: Community</th>
<th>Sacrifice: Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Leaving this community would be very hard.</td>
<td>1. I have a lot of freedom on this job to decide how to pursue my goals.</td>
</tr>
<tr>
<td>2. People respect me a lot in my community.</td>
<td>2. The perquisites on this job are outstanding.</td>
</tr>
<tr>
<td>3. My neighborhood is safe.</td>
<td>3. I feel that people at work respect me a great deal.</td>
</tr>
<tr>
<td>Alpha coefficient for composite (.59).</td>
<td>4. I would sacrifice a lot if I left this job.</td>
</tr>
<tr>
<td>5. My promotional opportunities are excellent here.</td>
<td>5. The benefits are good on this job.</td>
</tr>
<tr>
<td>6. I am well compensated for my level of performance.</td>
<td>6. The healthcare benefits provided by this organization are excellent.</td>
</tr>
<tr>
<td>7. The benefits are good on this job.</td>
<td>9. The retirement benefits provided by this organization are excellent.</td>
</tr>
<tr>
<td>8. The healthcare benefits provided by this organization are excellent.</td>
<td>10. The prospects for continuing employment with this company are excellent.</td>
</tr>
<tr>
<td>Alpha coefficient for composite (.50).</td>
<td>Alpha coefficient for composite (.62).</td>
</tr>
</tbody>
</table>

* Items 1-3 for links: community and links: organization were standardized before being analyzed or being included in any composites.