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Abstract

The study reported here examined Job Embeddedness theory, as introduced by Mitchell, Holtom, Lee, Sablynski, and Erez (2001), which offers a method of discovering why people stay in an organization. Extension agents in two states (N=454) reported significantly different levels of job embeddedness during the study period. Regression analyses showed that job embeddedness was significantly correlated with and predicted unique variance in intent to stay.

Keywords: job embeddedness, retention, Extension agents

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Introduction

According to the United States Department of Agriculture, National Institute of Food and Agriculture (2010), there are approximately 8,000 Extension agents employed in the U.S. Extension System, which includes the 50 states, Washington, DC, and the territories of Northern Marianas, Guam, Federal States of Micronesia, American Samoa, Puerto Rico, and the Virgin Islands. The retention of talented employees is at a critical juncture as low retention represents a potentially large, yet controllable, organizational expense. Although no national retention statistics for the Extension System are calculated, the fiscal benefits of increasing retention are substantial. For example, research suggests that a 1-percentage-point increase in the overall retention rate of Extension agents nationwide (80 agents x $80,000 agent replacement cost) could reduce organizational expenses by $6.4 million dollars annually (Kutilek, 2000). At a time when economic factors significantly influence the delivery of services, retention seems, at a minimum, a salient focus.

Moreover, recent studies have shown that "86% of employers experience difficulty attracting new employees and 58% experience difficulty retaining their employees" (Ramlall, 2003, p. 63). Research on employee turnover is exhaustive. Two primary perspectives of study dominate this research stream: 1) the employer perspective, which some organizations use to examine and leverage the reasons people leave an organization. This is a deficit approach focusing on fixing what is wrong; and 2) the employee perspective, which focuses on leveraging retention; here the focus is on why people stay and capitalizes on the strengths of a job or work environment. Job embeddedness theory (Mitchell, Holtom, Lee, Sablynski, & Erez, 2001), an innovative and emerging research construct, offers a method of discovering why people stay in an organization. Understanding the relationships between job embeddedness and retention within the Extension agent population could assist administrators in formalizing policies and procedures which capitalize on the organizations strengths.

The purpose of the research reported here was to understand retention among Extension agents through the lens of job embeddedness. The research also examined the relationships between job embeddedness, intent to stay, discretionary effort, job satisfaction, organization commitment, employee engagement, and background information among comparison group's agents in two states (e.g., State A and State B). The choice of these two states was based on the reported high retention rates in pre-study data and the willingness of both organizations to participate in the study. As such, this study was exploratory in nature and intended to extend the research of Mitchell et al. (2001) into the public employee sector, of which Extension is a small subset.

Overview of Job Embeddedness Theory

Job embeddedness refers to a relatively new construct that examines an individual's:

- Links to other people, teams, and groups
- Perceptions of their *fit* with the job, organization, and community
- Beliefs about what they would have to *sacrifice* if they left their jobs

Job embeddedness is defined as the on-the-job and off-the-job factors associated with individual links, fit, and sacrifice (Mitchell et al., 2001, pp. 8-9). The following sections examine these three domains of embeddedness.

Links

Links are defined as "discernible connections between people and institutions" (Mitchell, et al., 2001, p. 8) and are separated into two factors: organization links and community links. The more links to the workplace or community, in theory, the more highly embedded individuals will become. Links can be social, psychological, or financial and associated with age, marital status, number of children and their ages, years of service, hobbies, church or religious-related activities, and/or membership in community or professional organizations**.** The authors acknowledge that the relative importance of each of the previously mentioned factors could differ by population. And there are inherent pressures to stay at one's present work. These pressures can come from family members, team members at work, or other people at work (Maertz, Stevens, Campion, & Fernandez, 1996). Alternatively, the lack of marital or parental responsibilities or the failure to develop meaningful work relationships could indicate that employees are less likely to stay with their present work situation.

Fit

Fit is defined as an "employee's perceived compatibility or comfort with an organization and with his/her environment" (Mitchell et at., p. 9) and also splits into two factors: fit organization and fit community. The closer one's personal views, values, and goals are aligned with those of the organization and/or community cultures, the "higher the likelihood that an employee will feel professionally and personally embedded" (Mitchell et al., 2001, p. 9). Tangible examples of organizational fit include "job knowledge, skills and abilities" (Mitchell et al., 2001, p. 9). Factors related to how individuals fit within the community include items such as weather, available and convenient access to outdoor activities and entertainment, community culture, and individuals (neighbors and nonwork friends) who share similar political and religious views. It is important to note that how individuals perceive their fit within the community can be inversely related to how they perceive their fit within the organization. For example, an individual may love the community, but dislike working for the organization.

Sacrifice

Sacrifice is the third domain of job embeddedness. In the study, sacrifice refers to the "material" and "psychological" benefits that an employee would lose at any given time if he or she chose to leave the organization. Similar to the previous domains of embeddedness, sacrifice is separated into two factors: sacrifice organization and sacrifice community. The greater the sacrifice, the more difficult the decision to leave will be (Shaw, Delery, Jenkins, & Gupta, 1998).

Organizational sacrifices might include the loss of health and retirement benefits, sports tickets, coworker relationships, educational benefits, advancement opportunities, convenience and proximity to the work location, and perhaps even a loss of security due to downsizing. Community sacrifices are usually only an issue only if relocation is required with a new position. In many cases, an individual's loss of community can represent too great a sacrifice, and thus the employee is embedded. Other examples of community sacrifice, including the length of time and improvements in one's home or the ability to sell a home, convenience and proximity to the local amenities, community safety, and leadership positions in the community, often represent losses workers are unwilling to bear, even though links to the organization might be minimal. See Table 1 for an overview of the job embeddedness components.

Table 1.
Job Embeddedness Components

	Links	Fit	Sacrifice
Organization	Links organization	Fit organization	Sacrifice organization
Community	Links community	Fit community	Sacrifice community

Method

Two research questions were examined. The questions were:

A. Does job embeddedness differ between the Extension agents of the two states examined? and

B. Can job embeddedness predict unique variance in the outcome variables intent to stay and/or discretionary effort, after controlling for job satisfaction, organization commitment, and employee engagement?

The instrument used in the study was composed of six different scales that related to the study's research questions. The six scales and the demographic background items were incorporated into one online instrument. The questionnaires were selected because of their previous use and reliability. Scales that made up the survey instrument included:

- Job Embeddedness Scale (Mitchell et al., 2001),
- Intent to Stay Scale (Hoisch, 2001),
- Discretionary Effort Scale (Lloyd, 2008),
- Job Satisfaction Scale (Luthans, Avilio, Avey, & Norman, 2007),
- Affective Commitment Scale (Allen & Meyer, 1990), and
- Job Engagement Scale (Rich, Lepine, & Crawford, 2010).

The study used a census survey of Extension agents. Census was used as the sampling approach because it allows for all elements of a population to be studied and can be useful in discovering the desired descriptive characteristics of a population (Johnson & Christensen, 2010). Dillman, Smyth, and Christian's (2009) four-stage method and interval-scheduling framework were used in preparation to maximize response rates among potential participants. For the study, the total survey population consisted only of current agents in State A and State B's Extension programs. These agents worked in one or more of the following program areas: agriculture and natural resources, horticulture, family and consumer sciences, 4-H youth development, or other areas such as fine arts. 454 Extension agents responded to the survey, representing a 71.95% response rate. The high response rate can be at least partially attributable to following Dillman' s (2009) proven survey techniques and the work of Miller and Smith (1983) in regard to comparing responders and nonresponders. Table 2 shows a description of the study respondents by state.

Table 2.

Population Description (Column Percentages)

	State A (%)	State A (n)	State B (%)	State B (n)	Total (%)	Total (n)
Gender						
Male	36.4	84	39.2	157	38.2	241
Female	63.6	147	60.8	243	61.8	390
Education						
Bachelor's	62.8	145	37.0	148	46.4	293
Master's	36.8	85	62.2	249	52.9	334
Ph.D.	< 0.1	1	< 0.1	1	< 0.1	4
Race						
Asian	0		< 0.1	2	< 0.1	2
Black	< 0.1	2	4.2	17	3.1	19
Hispanic	< 0.1	1	< 0.1	1	< 0.1	2
White	98.7	228	95.0	380	96.3	608
Average age (years)	44.9		43.0		43.9	

State A, *N* = 231; State B, *N* = 400

Comparisons of respondents with pre-survey data (provided by two participating institutions) showed no significant differences in gender, education level, and age. Respondents did differ in terms of race, but further analysis indicated no practical significance.

Findings

The research questions focused on differences in the job embeddedness of State A and State B's Extension agents and the relationships among the six components of job embeddedness and their ability to predict intent to stay and overall discretionary effort.

Research Question 1

To explore if any statistically significant differences existed between the job-embeddedness mean responses of State A and State B agents, ANOVA tests were employed. Results of the ANOVA test revealed a statistically significant difference in the level of job embeddedness between the agents in the two states. Table 3 illustrates the mean participant scores of total job embeddedness and does indicate that State (A) Extension agents (3.14 mean) were somewhat less embedded than were State (B) Extension agents (3.24 mean). An examination of means can show general trends but cannot indicate strength or significance of differences.

Table 3.

ANOVA Summary Table: Job Embeddedness and State

	N	Total mean (*SD*)	State (A) mean (*SD*)	State (B) mean (*SD*)	*F* (sig.)
Total Job Embeddedness	454	3.21	3.14	3.24	6.10**
		(.41)	(.42)	(.36)	(.014)

Note. **p < .01; Eta2 = .014.

** Significance at .01 alpha level (2-tailed).

These results parallel the 5-year average Extension agent retention rates (provided by participating institutions) of State A (95.40%) and State B (96.34%) and support the proposition that higher job embeddedness corresponds to higher retention rates.

To provide a richer context, a multivariate analysis of variance (MANOVA) test was used to examine the relationship among state and the six independent components of job embeddedness. Tests of between-subject effects showed that states differed significantly on fit, community, and links organization. Of these, links organization had the higher *F* value and observed power. Sacrifice community had the highest mean score of the six job-embeddedness components for both states (although no statistically significant differences in sacrifice community between states were indicated by the ANOVA results). See Table 4.

Table 4.

MANOVA Summary Table: Job Embeddedness Components and State

	Total	State A	State B					
Source	*M (SD)*	*M (SD)*	*M (SD)*	*df*	*F*	Sig.	Part. Eta2	Observed power
SACCOM	4.02	4.01	4.02	1,452	.04	.85	.000	.054
	(.62)	(.53)	(.65)					
SACORG	3.65	3.66	3.65	1,452	.11	.74	.000	.063
	(.54)	(.54)	(.54)					
FITCOMM	3.89	3.78	3.94	1,452	4.86	.03**	.011	.595
	(.72)	(.67)	(.74)					
FITORG	3.93	3.96	3.92	1,452	.37	.55	.001	.093
	(.62)	(.61)	(.62)					
LNKCOM	1.86	1.80	1.90	1,452	3.16	.08	.007	.426
	(.48)	(.44)	(.50)					
LNKORG	1.90	1.62	2.02	1,452	28.32	.00**	.059	1.00
	(.76)	(.56)	(.80)					

Note. **$p < .01$; SACORG is Job Embeddedness Sacrifice Organization Subscale. SACCOM is Job Embeddedness Sacrifice Community Subscale. FITORG is Job Embeddedness Fit Organization Subscale. FITCOM is Job Embeddedness Fit Community Subscale. LNKORG is Job Embeddedness Links Organization Subscale. LNKCOM is Job Embeddedness Links Community Subscale. $N = 454$.

These results could support Mitchell et al.'s (2001) position that community plays an important role in an individual's intent to stay. In summary, the ANOVA tests indicated that the job-embeddedness indices for Extension agents were significantly different between the two participating states. Furthermore, MANOVA testing was able to more specifically identify that the statistically significant difference in job embeddedness by state was found in the factors links organization and fit community. Finally, sacrifice community showed consistently high means in both states.

Research Question 2

To examine the ability of the six job embeddedness components to predict intent to stay, correlation and linear-regression analyses were performed (Johnson & Christensen, 2010). First, Pearson correlations between the variables job-embeddedness links (organization and community), job embeddedness fit (organization and community), job embeddedness sacrifice (organization and community), intent to stay, job satisfaction, employee engagement, and organization commitment were examined. Almost all variables were significantly correlated, except that intent to stay was not correlated with links organization and links community.

Next, linear regression analysis between the dependent variable intent to stay and the six components of job embeddedness was examined. A step-wise entry method was completed. Job satisfaction, employee engagement, and organization commitment were held constant to measure the unique effect of job embeddedness components on intent to stay. Descriptive statistics and beta coefficient values for each variable are listed in Table 5.

Table 5.
Regression Analysis of Employee Engagement, Organization Commitment, Job Satisfaction, Sacrifice Community, Sacrifice Organization, Fit Community, Fit Organization, Links Organization, and Links Community on Intent to Stay

Source	Mean	*SD*	β	R^2	Adj. R^2	R^2 Δ
Step 1						
Organization commitment	4.02	.71	.19**			
Block				.13	.13	.13
Step 2						
Job satisfaction	4.08	.64	.09**			
Employee engagement	4.23	.47	-.02			
Block				.14	.14	.01
Step 3						
Job embeddedness						
Sacrifice community	4.02	.62	-.75			
Sacrifice organization	3.65	.54	.16**			
Fit community	3.89	.72	-.02			
Fit organization	3.93	.62	.04			
Links organization	1.89	.76	-.05**			
Links community	1.86	.48	-.07			
Block				.19	.18	.04

Note. **p < .05; The dependent variable was intent to stay.

In Step 1 of the regression models, the independent variable organization commitment was found to be a significant predictor of intent to stay. In Step 2, job satisfaction was significant and added to the regression equation; however, employee engagement was not. These variables were held constant in order to evaluate any unique variance produced by the job embeddedness

components. In Step 3, the six components of job embeddedness were entered in the regression equation. Of the six job embeddedness variables, only sacrifice organization and links organization were shown to significantly predict intent to stay and added to the model summary. Sacrifice organization was the stronger predictor, while links organization was weaker and has negative predictive value.

A summary of the regression statistics revealed that sacrifice organization and links organization explained 4% of the unique variance in the dependent variable intent to stay. In total, the independent variables explained 18% of the variance in intent to stay. The addition of the variable discretionary effort had no significant effect on the regression equation or model summary.

Conclusion

While the results of the study reported here cannot be generalized to other states because of the many unique and valuable differences that exist in Extension Service organizations, the findings provide evidence of relationship between job embeddedness and retention indicators and demonstrate the predictive value of the job embeddedness construct.

An important point brought to light in the study was that in spite of a consistently high mean retention rate between the two states over the past 5 years (95.9%), the mean value of the variable intent to stay was unexpectedly low (3.25 on a 5-point Likert Type scale). It would seem that high organizational retention rates may be masking issues regarding Extension agents' intent to stay. It is quite possible that Extension agent retention will decrease if economic conditions improve and more job opportunities become available. These events and opportunities are described as shocks and are mediated by higher job embeddedness levels (Holtom, Mitchell, Lee, & Inderrieden, 2005). Mowbray (2001, p. 142) noted the need for Extension administration to consider the following actions that were related to the retention of Extension agents:

- Explore ways to share or shift workloads. Suggestions included shared positions, flexible work time, and compensatory time.
- Explore new and creative delivery methods to decrease the number of night and weekend activities.
- Keep starting salaries competitive with benchmark institutions and similar jobs.
- Do a better job in providing recruits with realistic expectations about the job.
- Develop a formal exit interviewing process. (p. 142).

Moreover, sacrifice organization had the highest predictive ability on the variable intent to stay. Sacrifice organization captures the perceived cost of material or psychological benefits forfeited by leaving one's job. For example, leaving an organization likely promises personal losses (e.g., giving up colleagues, projects, or benefits). The more an employee gives up when leaving, the more difficult it is to sever employment with the organization. Extension agents indicated that the perceived costs of leaving their community would be greater than the perceived costs of leaving their organization. Given the high profile that most Extension agents occupy within their local communities, this observation was not unexpected.

Extension administrators could work to increase the perceived organization sacrifice of Extension agents; however, the scope of options available in public organizations can be more limited than in private organizations, especially in the area of salaries (M = 2.73) and promotional opportunities (M = 2.54). The mean scores for the two survey questions related to salaries and promotions were the lowest within the job-embeddedness component sacrifice organization.

A contributing factor to the preceding low means could be that the average salaries for Extension agents, in both participating states, are lower than the national average. According to the 2010 USDA – Agricultural Research Service's *Salary Analysis of Extension Service Positions* report, the average Extension agent salary in the U.S. and its territories was $54,442. This compares to $51,200 for State A Extension agents and $46,737 for State B Extension agents.

This may suggest that Extension administrators should emphasize health and retirement benefits (M = 4.23), freedom to pursue professional goals (M = 4.04), the respect that Extension agents experience (M = 3.89), and prospects for continuing employment (M = 3.75) in marketing Extension to potential employees.

As a final note, successful hiring is a key factor in how employees view themselves in an organization. The fit-organization item "I feel like I'm a good match for Extension" (M = 4.26, SD .656) yielded an R^2 change of .12; that is, this item explained 12% of the variance in discretionary effort.

In sum, the study reported here found that Extension agents "fit" well within the Extension organization and their local communities. Participants also indicated that their "sacrifice" would be high if they chose to leave.

The area of alarm for Extension Human Resource professionals is the relatively low levels of "links" that Extension agents expressed through the survey instrument. Although retention rates have been both high and stable for Extension agents across various economic conditions, it is still quite possible that Extension agent retention rates will decrease once the economy improves and more job opportunities become available.

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