Teachers' decisions about staying in a position are influenced by three classes of variables: employment, personal, and external. In a North Dakota study of the relationship between these variables and job retention in rural areas, 42 special education teachers and related service personnel who had left their positions in the past year (leavers) and 44 who had not left their positions (stayers) were interviewed. Town size did not predict staying and leaving, probably because the majority of subjects resided in small towns. Compared to stayers, leavers were less satisfied with housing choices, rated their communities lower as to quality of life, traveled further to centers for services and entertainment, had been in their current positions for shorter periods, and rated themselves as a better match for the teaching profession. No relationship was found between satisfaction or burnout and staying and leaving, and stayers appeared tied to their positions by family, community, and regional ties. "Satisfaction with professional development" was an integral part of the model although its importance as a predictor decreased as other variables came into the model. Job satisfaction in this rural state appeared to be predicted largely by employment related factors, including burnout and satisfaction with the professional development opportunities offered through positions. Administrators should recognize that an active professional development program may serve to increase the satisfaction, performance, and ultimately the retention of qualified staff members. Contains 16 references. (TD)
STAYING, LEAVING, AND JOB SATISFACTION IN A RURAL/REMOTE STATE: A MATTER OF ROOTS
STAYING, LEAVING, AND JOB SATISFACTION IN A RURAL/REMOTE STATE: A MATTER OF ROOTS

It is often difficult to recruit and retain professionals at levels beyond the baccalaureate degree in rural and remote areas. This is true in the medical profession (Pathman, Konrad, & Agnew, 1994) as well as in special education and among related service personnel (c.f., Boe, 1991). For example, in North Dakota a Comprehensive System of Personnel Development report found that up to a quarter of all positions during a recent year in learning disabilities, behavioral and emotional disorders, speech/language, occupational therapy, and school psychology were either open or filled with temporary or in-training individuals.

Billingsley (1993) reported that teachers' decisions regarding staying in a position were influenced by three classes of variables, which she termed employment, personal, and external. Bornfield, Hall, Hall, and Hoover (1997) found limited support for the model, specifically that external factors predicted the attrition of special education teachers and related service personnel in a rural state.

**Employment.** Employment factors are those associated with conditions on the job, including interpersonal climate and workload. Presumably, job satisfaction is a personal or employment-based factor related to decisions to stay in or leave a position. All else being equal, the most capable teachers are more likely to leave positions than their less effective colleagues, probably as a function of mobility (Singer, 1993). A perceived lack of administrative support, inexperience, and excessive paperwork have been tied to attrition. Burnout has been associated with turnover in some studies (Billingsley & Cross, 1991; Lauritzen, 1986).

**External.** Factors external to the job and the person have been associated with attrition. For example, Matthes and Carlson (1987) reported that communities with populations of less than 2,500 experienced more difficulty recruiting and retaining teachers. The lack of, or rather perceived lack of, social and professional opportunities in small towns may affect retention and recruitment (Helge & Marrs, 1982; Stone, 1990).

**Personal.** Age (younger teachers leave at a higher rate; McKnab, 1983) and gender (female teachers leave positions at a higher rate; Billingsley, 1993) both affect turnover rates. Age probably functions as a correlate with years-in-position, which is related to professional retention. An "inertial" factor seems to be in effect: The longer a teacher is in a community, the more involved they become—the more tied they are to that area. Cutchin (1997) developed a model for analyzing the retention of physicians in
small towns in which the tendrils of rooted associations played the central role. It is
difficult, if not impossible, to separate external and personal factors.

In the following study external, employment, and personal factors were
investigated in a rural state for their relationship with retention of special education
teachers and related service personnel. The study is a reanalysis of data first presented
by Bornfield et al. (1997).

Method

Subjects. Subjects were the same as those reported by Bornfield et al. (1997). Approximately half of special education teachers and related service personnel from a
midwestern state who could be identified as leaving a position during one year (1995)
were located and interviewed over the phone. It was estimated that 11.5% of target
individuals turned over that year (N = 105), of whom 42 were located (hereafter
"Leavers"). None of the 42 were asked to leave their positions. It is important to note,
however, that within-state and within-position leaving rates overestimate exits from the
special education field because teachers sometimes move to jobs in neighboring areas or
states. In the present case, 81% of the sample took positions in education for the next
year. Forty-five educators and support persons from similar-sized school districts were
selected at random from the state directory of credentialed teachers and professionals.
It was ascertained that members of the contrast group had not left a position during the
year in question (hereafter "Stayers"). The current investigation may better be thought
of as a study of "Movers" rather than "Leavers."

Procedure. Two graduate student interviewers phoned each Stayer and Leaver
in order to conduct a twenty-minute interview. All located Leavers and 44 of 45
randomly selected Stayers agreed to be interviewed.

Instruments and Variables. Interviewers administered the Maslach Burnout
Inventory (MBI; Maslach & Jackson, 1993), and a short form of the Minnesota [Job]
Satisfaction Questionnaire (MSQ; Vocational Psychology Research, 1977). The MBI
produces three non-independent measures related to burnout: emotional exhaustion,
depersonalization, and sense of personal accomplishment (SOPA), the latter being a
negative correlate of burnout. Depersonalization reflects the respondent's propensity to
attribute job dissatisfaction to characteristics of clients (students, in the present case).
The MSQ consists of a series of statements whereby respondents report their degree of
satisfaction or dissatisfaction with items related to daily experiences at school.

The four measures (three burnout variables and job satisfaction) were produced
by summing across items within scales and dividing by the number of items. In
addition, internal consistency reliability was calculated for each measure, with the
following results: Depersonalization = .90, Emotional Exhaustion = .55, SOPA = .88
(Cronbach, 1951). Items on the MSQ were highly intercorrelated, with an α of .90.
Items related to isolation (N = 3), marital status and dating (N = 3), services and cultural opportunities (N = 8), professional development (N = 3), and personal demographics were developed. Responses to these latter sets of items consisted either of numerical values ("How many friends do you have in the local community?") or a 10-point satisfaction scale ("On a 1-10 scale, how satisfied are you with housing where you teach? Let 1 = very dissatisfied and 10 = very satisfied."). Community size (of the teaching location) was dummy coded as follows: Towns with population below 5,000 were coded as -1, scores of 0 and +1 were coded for towns from 5,000 to 25,000 and greater than 25,000, respectively. The latter variable was not analyzed in the original Bornfield et al. (1997) paper.

Results: Predicting Staying vs. Leaving

When entered into a logistic regression, the variable "town size" as coded did not predict staying and leaving. This is probably due to an attenuated variance problem, as the majority of subjects resided in small towns (60%). Approximately 63% of school districts in the target state are located in the smaller communities. Thus, the solution reported by Bornfield et al. (1997) seems to best organize the data. Specifically, five variables added significantly to the regression solution: satisfaction with community as a place to live, housing satisfaction, miles/month traveled for services and entertainment, years teaching in current community, and self-reported match with teaching.

The solution indicated that leavers were less satisfied with housing choices (M = 2.45 [s = 4.79] vs. 7.27 [2.45]), rated their communities lower as to quality of life (5.87 [2.38] vs. 7.22 [1.52]), traveled further to centers for services and entertainment (304.20 [359.8] vs. 236.3 [434.7]), had been in their current positions for shorter periods than had stayers (5.23 years [4.68] vs. 11.59 [6.66]). Leavers also rated themselves as a better match for the teaching profession (M = 8.5, s = 1.27) than did stayers ( M = 8.0, s = 1.68).

Via examining open-ended responses by subjects, Bornfield et al. (1997) added two points to the above analysis. First, no relationship was noted between satisfaction or burnout on the one hand and Staying vs. Leaving on the other. In open ended comments, Stayers reported as many frustrations with positions and no more elements of satisfaction than did Leavers. Second, the pattern emerging from both statistical and qualitative analyses was that Stayers appear tied to their positions by family, community, and regional ties. "My husband farms in the area and it's a job," sighs a representative respondent. Elderly parents, spouses' jobs, and other family considerations were the most commonly-voiced external factors leading to staying.

Results: Predicting Satisfaction

If individuals are tied to rural location by external and personal factors and not job-related factors, it is important to determine which of these variables predict job satisfaction. If these variables are malleable, then perhaps the quality of work life for educators in rural states, tied to positions by family considerations, could be increased.
Presumably, professionally-satisfied educators evidencing higher rates of satisfaction would provide better services to youngsters with disabilities.

A true-stepwise regression was calculated with the MSQ job satisfaction variable serving as the criterion. Otherwise, the same variables as noted above were entered into the model (Norusis, 1994). Stepwise was appropriate in the present case for two reasons. First, the analysis was exploratory. No theoretical model with sufficient a priori support was available which would justify more directed solutions such as path analysis or structural equation modeling. Second, insufficient numbers were available to power complex multivariate methods.

The matrix was conditioned via examining the set for highly correlated independent variables, thus reducing the possibility of losing significant effects to multi-collinearity. In addition, plots of residuals for selected models against predicted values were examined for correlated error. One variable, 'miles to services and entertainment per month,' which proved significant in an initial model (adjusted R² = .55) was extremely negatively skewed. Many subjects scored 0 or near 0 (if they lived very close to or in the community where they sought services). This caused errors to accelerate at higher levels of the variable. Thus, a log₁₀ transformed version of the variable and miles was employed in analyses. In the second model (in any of its permutations), 'miles to services and entertainment' no longer proved significant.

Steps were calculated until no more variables met the criterion for entry or removal (using p = .05 for entry [PIN] and p = .10 [POUT] for removal). Aside from the intercept, four variables predicted MSQ. These are shown in Table 1, in order of their selection. No variables were removed from the regression once entered.

<table>
<thead>
<tr>
<th>Term/Variable</th>
<th>Stand. Estimate (α or β)</th>
<th>T</th>
<th>p</th>
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<tr>
<td>Intercept</td>
<td>1.780</td>
<td>4.35</td>
<td>.0001</td>
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<tr>
<td>Satis/professional development</td>
<td>.340</td>
<td>3.19</td>
<td>.0025</td>
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<tr>
<td>Emotional exhaustion</td>
<td>-.371</td>
<td>-3.55</td>
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<td>Sense/personal accomplishment</td>
<td>.257</td>
<td>2.87</td>
<td>.0061</td>
</tr>
<tr>
<td>Satisfaction with community</td>
<td>.238</td>
<td>2.59</td>
<td>.0127</td>
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The Multiple coefficient of determination for the model was .787, while the adjusted R² was calculated at .5881. The F testing the null hypothesis that the entire solution was 0 was 19.56. The null was rejected with a p of less than .0001.

As was true of Staying vs. Leaving, town size did not appear as a predictor; once more, this may have occurred because of a floor effect, the great majority of stayers and leavers working or having worked in small towns. The only variable related to communities (existence) was the last entered into the model, 'satisfaction with the community.'
The importance of 'satisfaction with professional development' as a predictor decreased as other variables came into the solution, though it ended up as an integral part of the solution. Emotional exhaustion (Maslach & Jackson, 1993), a negative correlate, added most variability to the model. Sense of personal accomplishment, a significant variable, is also one of the three Maslach burnout indices.

Job satisfaction in this rural state appears to be predicted largely by employment-related factors, including burnout (or the lack thereof, more accurately) and satisfaction with the professional development alternatives offered through positions.

The three professional development variables (amount of inservice; support for out-of-district conferences, and satisfaction) were highly intercorrelated (average $r_{xx} = .61$). In future studies the three variables together may serve as a better predictor if entered as a set in setwise regression or combined to form an overall professional development variable. It is useful for special education administrators to recognize that an active professional development program may serve to increase the satisfaction, performance, and ultimately the retention of qualified staff members.

The only external or community variable which predicted job satisfaction was ratings of satisfaction with the community [in which one worked]. Even this variable, however, could be seen as a personal variable as the community's quality was quantified as perceived by respondents. This variable is the only one related to both job satisfaction and Stayer vs. Leaver status.

A [very] tentative adjustment of the model first proposed by Billingsley may be posited, given the present results. First, it appears that external (i.e., community and family) variables are most directly related to attrition, while employment factors (burnout and professional development) are most closely related to job satisfaction. External factors (including ties to the community) more directly predict recruitment and retention. At the same time, personal and employment variables predict job satisfaction. Job satisfaction's impact on attrition is indirect, probably mediated by mobility-based issues such as employability, willingness to move, or ability to move.

With a greater number of subjects, we would expect to observe a weak relationship between job satisfaction and retention, mediated by such variables as ratings of teaching skill and mobility (Billingsley, 1993). A weak predictive relationship between retention and job satisfaction would also be observed because the decision to stay (predicted by external and community factors primarily) would cause educators to report slightly higher satisfaction scores in order to reduce cognitive dissonance. External variables (i.e., familial and community associations) would also affect on job satisfaction, albeit weakly, as working in a community to which one feels tied would be expected to increase job satisfaction.
References


I. DOCUMENT IDENTIFICATION:

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<th>Coming Together: Preparing for Rural Special Education in the 21st Century 1998 Conference Proceedings: American Council on Rural Special Education</th>
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