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ABSTRACT

This study attempted to determine the personal and workplace variables which predict a special educator's decision to stay, transfer, or leave the classroom. A stratified random sample of 1,576 special education teachers in Florida was surveyed, resulting in 1,152 usable responses. Two models were estimated with forward stepwise logistic regression methods: the first to differentiate leavers (those no longer teaching in special education) from stayers and transfers, the second to differentiate stayers (teaching in the same school) from transfers (still teaching in special education but in a different school). For the first model, both current certification status and stress were significant predictors of likelihood of leaving special education. An inappropriately certified teacher with high stress had the highest probability of leaving (.43) while an appropriately certified teacher with little stress had the lowest probability of leaving (.11). For the second model, both climate and age were significant predictors of staying or transfer status. The probability of transferring increased with decreases in age or climate. Results raise questions concerning the practice of placing uncertified teachers in special education classrooms, particularly classroom situations where teachers are likely to experience high levels of stress. Attached tables list the independent variables used in the analyses, examples of questions and coding, and probabilities of leaving special education (by certification status and stress levels) or of transferring to another school (by age and climate). (DB)

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Working Paper

Retention and Attrition in Special Education: Analysis of Variables that Predict Staying, Transferring, or Leaving

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Prepared for the National Dissemination Forum on Issues Related to Special Education Teacher Satisfaction, Retention, and Attrition

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Introduction

Teacher attrition in special education is considered a significant problem by many education professionals (NASDE, 1990; Billingsley, 1993; Brownell & Smith, 1992). Until recently, only a few large scale studies existed that examined factors associated with special education teacher attrition. Many of these studies did not compare stayers and leavers and leavers were poorly defined. Consequently, our understanding of the factors associated with leaving the special education classroom is limited and our ability to remediate attrition problems is subsequently limited. Thus, the objective of this study was to determine the personal and workplace variables which predict a special educator's decision to stay, transfer, or leave the classroom.

Methodology

Sample

Using the Florida State data base system, a stratified random sample of 1,576 special education teachers were selected for the study. The stratification variables were years of experience in their current teaching position. Special education teachers were randomly selected across elementary and secondary schools to include 524 first year teachers, 528 teachers with two to five years experience, and 518 teachers with more than five years experience (i.e., career teachers).

Because a random sample of special educators was drawn, teachers across all certification areas (e.g., learning disabilities, serious emotional disturbance), types of service delivery models (e.g., resource room, self-contained), and various demographic profiles (e.g., race, age, sex) were represented. Teachers sampled were employed full-time and teaching on either a emergency or permanent certification. Emergency certified teachers were included because of higher attrition rates among this group.

Instrument

Our survey instrument, *Working in Schools: The Life of a Special Educator* was designed to address many of the variables contained in our conceptual framework. Examples of these variables are as follows: (a) historical factors such as initial commitment to teaching, educational preparation (b) microsystem factors such as relationships with students, reasonableness of work load, personal teaching efficacy, (c) mesosystem factors such as relationships with colleagues, support from building administrators, role conflict, (d) exosystem factors such as salary, service delivery system, job benefits, and (e) external personal factors such as income of family, number of dependents. Measures of job satisfaction, teacher commitment, and intent to remain in special education teaching were also included. Previously validated questions were used in constructing this survey instrument when deemed appropriate. Sample questions are included in Table 1b.

The survey instrument was field tested twice with 51 special educators in Florida. In addition to responding to the survey and providing written feedback, 9 field test participants were selected for follow-up interviews to assess their interpretation of individual items and solicit their feedback on the instrument.

After field-testing the instrument, the large-scale mail out was conducted. Survey packets were sent to each of the 1,576 identified participants. Two follow-up letters and telephone calls were used to increase the response rate.

Response Rate

Response rates for the two groups of teachers were calculated using Dillman's formula (1978). Dillman's formula accounts for those persons who the survey researcher was unable to reach or use because of mistakes in the state data base in terms of job code (e.g., teachers identified as a special educators who were in reality staffing specialists).

Response Rate = [# surveys returned / (sample size - # excluded respondents)] x 100

Of the 1,576 teachers identified, we excluded 69 potential participants from the study because we were either unable to contact those teachers by mail. Of the remaining 1,507 identified respondents, 1,208 returned their surveys for an overall response rate of 80.2%. Because some respondents were inappropriately coded as special education teachers in the state data base, an additional 56 surveys were removed from the data base.

Data Analysis

The main purpose of the analyses was to determine the historical, microsystem, and mesosystem variables which predict a special educator's decision to stay, transfer, or leave the classroom. The variables were selected based on variables included in the three urban attrition projects and the literature. Table 1a contains a list of the predictors used in the analyses. With the exception of current certification, years teaching, gender, race, and age, the independent variables represent teachers perceptions on likert scales. The outcome measures were the teachers' professional status two years after the survey data were collected. At the time of the survey, all teachers were teaching in special education classrooms. A total of 1,152 teachers were included in the data base. As shown in Table 1a, the average teacher was female (86%), white (87%), 36 years old, and had 11.5 years of teaching experience.

Two models were estimated with forward stepwise logistic regression methods. The first model was used to differentiate leavers (those no longer teaching in special education) from stayers and transfers. The second model was used to differentiate stayers (teaching in the same school) from transfers (still teaching in special education but in a different school).

Results

The first logistic regression model had 738 stayers/transfers and 197 leavers with complete data. The stepwise logistic regression entered two predictors with significant effects. Both current certification status (p=.0002) and stress (p=.0003) were significant. After controlling for stress and certification, no other variables were significant. In Table 2, the probability of being a leaver is shown for teachers who were appropriately certified and not appropriately certified and by stress level. The stress levels represent teachers at the mean (15.59) and at 1 or 2 standard deviations from the mean. For example, at the mean for stress, an inappropriately certified teacher has a 31% chance of becoming a leaver while a appropriately certified teacher has a 18% chance of becoming a leaver. As shown, an inappropriately certified teacher with high stress has the highest probability of leaving (.43) while an appropriately certified teacher with little stress has the lowest probability of leaving (.11).

Those variables that have greater than a .30 correlation with stress are satisfaction with student relations (r=-.37), satisfaction with workload (r=-.46), interaction with colleagues (r=-.30), autonomy (r=-.35), role conflict (r=.40), satisfaction with professional opportunities (r=-.34), satisfaction with benefits (r=-.39), and school climate (r=-.38).

The second logistic regression model had 189 transfers and 549 stayers with complete data. The stepwise logistic regression entered two predictors with significant effects. Both climate (p=.0001) and age (p=.0008) were significant. After controlling for climate and age, no other variables were significant. In Table 3, the probability of being a transfer is shown for teachers at age 25, 35, and 45 (about the mean and 1 SD from the mean) and by climate level. Climate levels represent teachers at the mean (8.97) and at 1 or 2 standard deviations from the mean. As shown in Table 3, the probability of transferring increases with decreases in age or climate. For example, a 25 year old teacher in a poor climate has the highest probability of transferring (.50) while a 45 year old teacher in a good climate has the lowest probability of transferring (.13).

Those variables that have greater than a .30 correlation with school climate are satisfaction with workload (r=.32), frequency of recognition (r=.31), interaction with colleagues (r=.41), support from community and parents (r=.30), support from building administrator (r=.53), autonomy (r=.39), role conflict (r=.40), satisfaction with professional opportunities (r=.41), satisfaction with benefits (r=.39), and stress (r=-.38).

Discussion

Our results question the practice of placing uncertified teachers in special education classrooms, particularly classroom situations where teachers are likely to experience high levels of stress. Many vacancies in special education, particularly those in serious emotional disturbance, are filled by general education teachers. General education teachers are unlikely to have the skills to educate students with disabilities, especially those with serious behavior problems.

Stress experienced by special education teachers, however, cannot be lowered simply by improving workplace conditions. Correlations calculated in this study for stress and various workplace variables indicate that stress is an independent construct. It may be the case that stress is mediated by a person's ability to cope and leavers may be persons with less effective coping strategies. Clearly, more research is needed in this area.

At the district and school level, attrition can be reduced through attempts to improve school climate. The variables contributing to a positive school climate, however, need to be more clearly delineated. Although we identified several variables that contributed significantly to school climate, such as building administrator support, it is also an independent construct.

Table 1a

Independent Variables Used in Stepwise Logistic Regression Analyses

Variable	Mean	SD
Current Certification (1=Appropriate, 0=Not)	.83	.37
Caseload--students taught directly	24.17	19.67
Satisfaction with Teaching Load	36.96	8.11
Satisfaction with Relationship with Students	15.71	2.98
Personal Teacher Efficacy	18.47	2.25
Perceived Support from Parents/Community	15.36	3.52
Perceived Support of Building Administrator	32.45	7.59
Perceived Support of District Administrator	29.04	9.51
Perceived Frequency of Recognition	20.56	4.29
Perceived Importance of Recognition	25.22	4.76
Perceived Autonomy	21.65	4.45
School Climate	8.97	2.54
Perceived Role Conflict	9.92	2.57
Professional Satisfaction	15.33	3.34
Perception of Adequate Preparation for Job	24.67	4.41
Satisfaction with Benefits	20.73	3.81
Perceived Stress	15.59	5.34
Commitment to Teaching and Special Education	32.81	6.23
Satisfaction with Special Education Teaching	2.26	1.08
Interaction with Colleagues	20.91	5.06
Years of Teaching Experience	11.51	9.16
Gender (1=Male, 0=Female)	.14	.35
Race (1=White, 0=Other)	.87	.33
Age	36.21	9.85

Table 1b

Examples of Sample Questions and Coding of Variables Used in Analyses

Variable	Sample Question	Coding
Caseload--students taught directly	How many students on your caseload do you teach directly?	1 item - blank box for respondent input
Satisfaction with teaching load (Range 14-56)	I am teaching with adequate resources and materials to do my job properly	Sum of 14 items on 4-point Likert scale where 4=agree; 1=disagree
Satisfaction with relationship with students (Range 6-24)	How satisfied are you with your students' motivation to learn?	Sum of 6 items on 4 point Likert scale where 4=satisfied; 1=dissatisfied
Personal teaching efficacy (Range 5-20)	If I really try hard, I can get through to even the most difficult or unmotivated students	Sum of 5 items on 4 point Likert scale where 4=agree; 1=disagree
Perceived support from parents/community (Range 5-20)	Most of my student's parents respect and support the things I do	Sum of 5 items on 4 point Likert scale where 4=agree; 1=disagree
Perceived support from building administrator (Range 10-40)	My building administrator supports my actions and needs	Sum of 10 items on 4 point Likert scale where 4=agree; 1=disagree
Perceived support from district administration (Range 10-40)	My district administrator supports my actions and needs	Sum of 10 items on 4 point Likert scale where 4=agree; 1=disagree
Perceived frequency of recognition (Range 8-32)	How often do you receive formal or informal recognition from special education colleagues?	Sum of 8 items on 4 point Likert scale where 4=often; 1=never or almost never
Perceived autonomy (Range 8-32)	I am satisfied with the current level of decision-making power I have in my current position	Sum of 8 items on 4 point Likert scale where 4=agree; 1=disagree
Perceived role-conflict (Range 7-28)	In your job, how often do you experience conflict between trying to match your students' academic needs versus attending to their social and behavioral needs?	Sum of 7 items on 4 point Likert scale where 4=often; 1=never or almost never

Variable	Sample Question	Coding
Professional satisfaction (Range 7-28)	How satisfied are you with the intellectual challenge in your job?	Sum of 7 items on 4 point Likert scale where 4=satisfied;1=dissatisfied
Perceptions of adequate preparation for various aspects of the job (Range 8-32)	How well prepared do you feel you are in behavior management?	Sum of 8 items on 4 point Likert scale where 4=well prepared;1=not at all prepared
Satisfaction with benefits (Range 8-32)	How satisfied are you with your salary?	Sum of 8 items on 4 point Likert scale where 4=satisfied;1=dissatisfied
Perceived stress (Range 6-30)	I worry about school problems while at home	Sum of 6 items on 5 point Likert scale where 5=almost always;1=almost never
Commitment to teaching, and to special education (Range 13-52)	I would become a teacher if I had it to do over again I would transfer to another field if I had the opportunity	Sum of 13 items on 4 point Likert scale where 4=agree;1=disagree
Satisfaction with teaching special education (Range 1-4)	Overall, how satisfied are you with teaching special education?	1 item on 4 point Likert scale where 1=very satisfied;4=very dissatisfied

Table 2

Probability of Leaving Special Education

	Certification	
Stress	Inappropriate	Appropriate
4.91	.21	.11
10.25	.25	.14
15.59	.31	.18
20.93	.37	.22
26.27	.43	.27

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Table 3

Probability of Transferring to Another School

	Age		
Climate	25	35	45
3.89	.50	.42	.35
6.43	.42	.35	.28
8.97	.34	.28	.22
11.51	.27	.21	.17
14.05	.21	.16	.13

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