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Teacher Retention in American Schools in the East Asia Region: Salary and Leadership Are Key

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Introduction

In 136 countries throughout the world, 121,970 students attend the 196 American overseas schools (AOS) directly sponsored by the United States Government. These schools "receive assistance and support from the U.S. Government under a program administered by the Office of Overseas Schools of the U.S. Department of State" (U.S. Department of State, 2007, ¶1). Of the 121,970 AOS students, 33,361 are U.S. citizens, and receive instruction based on the U.S. curriculum from teachers, most of whom are credentialed in the United States. This system of AOSs also includes thousands of other "non-sponsored" schools not directly supported by the Office of Overseas Schools. The system of AOSs serves over half a million students throughout the world. The AOSs range in size "from small schools, such as the American School of Kolkata, India, with 7 students, to large overseas schools, such as the Singapore American School with 3,747 students" (U.S. Department of State, 2009, ¶4). The student body in AOSs, both sponsored and non-sponsored, consists of U.S. citizens, host country nationals, and usually a diverse international population of the foreign diplomatic and business communities.

Problem Statement and Purpose

Midway through every school year, leaders in American overseas schools face the challenge of recruiting enough teachers to fill classrooms for the following August. Although schools in several US states are downsizing and the teaching job market is

thinning, shortages persist in overseas schools (Keeling, 2010). For this paper, we focused specifically on the East Asia Regional Council of Overseas Schools (EARCOS) conducting a large scale survey querying teachers about their reasons for staying at their current school or setting out for someplace new. We surveyed 744 randomly selected teachers representing 32 schools in nine countries. Our goal was to identify factors that could be pressed into action to improve retention in these schools. Research has shown that students thrive academically when teacher turnover is low (Connors-Krikorian, 2005).

Drawing from Ingersoll (2001) and Mancuso (2010), we created a variable MOVING that sorted teachers into two groups: movers (teachers who were planning to leave their current school at the end of the year) and stayers (teachers who were staying at their current school for another year). In AOSs, teachers are contracted on a yearly basis, and contracts are not normally subject to tenure resulting in a highly mobile population of teachers. The survey included a measurement of variables in each of the following categories: teachers' perceptions of organizational conditions, including salary and leadership; school characteristics, such as population size; and, demographic information of the teachers themselves (see Mancuso, 2010). We then examined the links between each variable and MOVING, ultimately constructing a large model to explain why teachers stay or move. We intended this model to pinpoint specific ways to increase teacher retention.

Theoretical Framework

Sociology of Organizations

According to Ingersoll (2001) it is not enough to study teacher characteristics to explain retention. Researchers obtain greater insights by widening the lens of analysis to include school conditions. More specifically, Ingersoll (2001) claimed researchers must examine teachers' perceptions of the rewards offered in a given school, including such factors as salary, benefits, leadership style, and working conditions. Since Ingersoll's initial work, other authors in the U.S. have examined the predictors of teacher turnover (see Borman & Dowling, 2008, for a review of the literature; McGrath & Princiotta, 2005). Moreover, this work has been extended by Mancuso (2010) and by Odland and Ruzicka (2009) who have examined the predictors of turnover within the AOS context.

Economic Labor Market Theory

Furthermore, we embedded the theory of organizational sociology within the economic labor market theory of supply and demand. The demand for teachers is the number of jobs offered at a given level of compensation. Compensation includes the traditional factors of salary and benefits, but also includes factors such as supportive leadership and working conditions. Supply is the number of teachers willing to accept a job at a given level of compensation. When compensation is too low, demand exceeds supply and teacher shortages occur. That being said, when demand is high and competition strong, schools need to offer enticements to secure and retain teachers. Our

goal in this study was to discover what these enticements are based on the data gathered from teachers in the EARCOS region.

Methods

Sampling Methodology

An electronic survey was distributed in March of 2010 via an online data collection service. We obtained a list of all 116 schools in EARCOS and sent a letter to each school head asking him or her to distribute the electronic link to a random set of teachers in the school. We received responses from teachers in 32 of these schools (28% of the 116 schools) representing nine countries, including China, Japan, Thailand, Indonesia, and Hong Kong. The sample included 744 randomly selected teachers from the population of 2143 overseas hired teachers in the EARCOS region. We calculated the response rate at 35%. However, we have no way of knowing if all school heads did, in fact, distribute the survey link to their teachers. Thus, this response rate could be negatively biased. The sample represented a wide variety of ages, teaching experience, and overseas schools experience, and had a balance of men and women, married couples and singles. Of those who responded, 68 percent were staying at their current schools and 32 percent were moving at the end of their current contracts. If a teacher had been at their current school for less than a year, we did not include them in our analysis. In addition, if a teacher had missing data on any of the key constructs in a given model, we dropped them from the analysis. Thus, the subsample of teachers included in the model building part of our analysis varied between 434 and 463 teachers.

Survey Instrument

We selected the International Teacher Mobility Survey (ITMS) a well-validated instrument designed to study teacher retention in American overseas schools (Mancuso, 2010). The ITMS is a modified version of the National Center for Educational Statistic's *Schools and Staffing Survey* (SASS) and *Teacher Follow-up Survey* (TFS) *Questionnaire for Current Teachers 2004-05 School Year*. Marvel, Lyter, Peltola, Strizek, and Morton (2007) and Cox, Parmer, Tourkin, Warner and Lyter (2007) estimated the SASS and TFS instruments' validity and reliability based on a pool of 7,429 current and former teachers (TFS), and 55,000 current teachers (SASS) representing all 50 states plus the District of Columbia. The modifications to the ITMS included adaptations of the instrument for use with the AOSs teacher population.

Results

First, we ran a series of bivariate analyses, pairing turnover with each organizational condition, and with each teacher and school characteristic. Of the organizational conditions, the significant predictors were satisfaction with salary and perceptions of school leadership. None of the school characteristics predicted turnover and age was the only significant predictor among the teacher characteristics. With regard to age, the younger teachers were more likely to move than the older teachers.

We then combined the significant predictors into a set of nested models to obtain a more detailed explanation of teacher turnover. Because the outcome variable was dichotomous (moving versus staying) we applied logistic regression. Our logic was to

enter the teacher characteristic (age) as a control predictor and to enter the organizational conditions sequentially as question predictors. Our goal was to identify specific organizational conditions that could be manipulated to reduce turnover. Turnover was coded 0 for "staying" and 1 for "moving." Results are presented in Table 1. Model 1 (the control model) shows age was a significant predictor when entered by itself into the model ($B = -.04, p < .05$). Model 2 shows satisfaction with salary was a significant predictor of turnover ($B = 2.23, p < .0005$), even after the effect of age was controlled. Lower scores on this variable indicated greater satisfaction with salary. Model 3 shows turnover was lower among teachers who perceived supportive leadership from the principal ($B = -.92, p < .0005$). School heads were not influential. Similarly, Model 4 showed turnover was lower when teachers perceived the principal included them in decision-making ($B = -.90, p < .0005$). Here again, school heads were not influential after controlling for the effects of principals.

Table 1

Integrated Models of Logistic Regression Analyses of the Likelihood of Teacher Turnover in AOS in the EARCOS Region

	Model 1[a]		Model 2[a]		Model 3[b]		Model 4[c]	
	B	*SE*	*B*	*SE*	*B*	*SE*	*B*	*SE*
Age	-.04*	.02	-.05*	.02	-.05*	.02	-.05**	.02
Satisfaction with Salary			2.23***	.26				
Principal SL					-.92***	.25		
School Head SL					.05	.25		
Principal FI							-.90***	.24
School Head FI							-.16	.24

[a]*n* = 463. [b]*n* = 434. [c]*n* = 445. **p* < .05, ** p < .01, *** p < .0005.

Discussion

Scholarly Significance

This research is consistent with sociological theory. Organizational conditions are the most important predictors of teacher turnover. More specifically, teachers tend to stay when they are satisfied with their salary and when they perceive supportive leadership from the principal. Most research on teacher turnover drawing from sociological theory has been conducted in the US. These findings show the theory is also applicable in EARCOS schools. Furthermore, findings from Mancuso, Roberts and White (2010), which include data from the near east/south Asia region, reinforce that this sociological theory is applicable in a wide range of locations throughout the world.

The cultural context of our work continues to be tethered to the west, particularly to the US in that the schools surveyed share a common thread with the US. More specifically, the curricula and educational philosophies of the AOSs are consistent with those in the U.S. In future research, we would like to test whether the theoretical underpinnings of our work on teacher retention (i.e. sociological theory and economic labor market theory) can also provide insight in other cultural contexts.

Practical Significance

As mentioned above, when compensation is too low, demand exceeds supply and teacher shortages occur. Adjustments in the compensation package can drive more people into the teaching market and bring balance to the supply/demand fulcrum. Because EARCOS already provides high salaries and benefits packages, the area with most room for improvement, and thus the most cost effective lever for change, is leadership. When looking to improve leadership, education and training appear to have the best chance of

success. We recommend that school boards in American overseas schools in EARCOS invest in training programs to develop more supportive principals.

Furthermore, schools of education specializing in school administrator preparation and licensing should be using a program design model that includes aspects of training in leadership styles that encourage retention. In this study, the leadership characteristics included aspects of transformational leadership, as described by Hallinger (2003), Leithwood and Jantzi (2005) and by Marks and Printy (2003). Current programs of study that prepare administrators for work in schools often focus on aspects of school management such as finance, human resources, facilities management, curriculum, and instruction. "Advanced leadership preparation programs, especially at the doctoral level, may need to constantly evaluate their program of study to ensure the needs of the students are being met due to an ever-changing educational environment" (Ringler & Rouse, 2007, p. 9). We expect that the investment in better training and support will produce improved teacher retention in EARCOS and ultimately better student learning conditions.

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