Using Job Embeddedness to Explain New Teacher Retention

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The high turnover rates among teachers, particularly novice teachers, is a significant problem in the field of education. This study examines the relationship between teacher turnover and a construct found in organizational literature -- job embeddedness. Job embeddedness is the extent to which an employee connects socially and emotionally to their job and the community in which they work. Data from 143 elementary, middle, and high school novice teachers in three Central California school districts in the San Joaquin Valley indicate that the degree to which teachers are connected to their schools and communities is a substantial factor in whether new teachers stay or leave. The use of multivariate analysis of variance (MANOVA) identified a correlation between embeddedness and retention. The findings suggest that job embeddedness is a useful construct for better understanding novice teacher turnover. Further, practical implications of this study suggest that efforts to enhance the social and emotional links between novice teachers, their jobs and surrounding community may help stem the high turnover rate among new teachers.

Introduction

A strong predictor of student performance is teacher quality (Darling-Hammond, 2000; Rockoff, 2004), yet schools with students with the highest need have the greatest problem with teacher attrition (Boyd, Grossman, Lankford, Loeb & Wyckoff, 2008). Further research indicates teacher turnover is related to subsequently lower student achievement, and this effect is particularly pronounced for low performing schools and schools with a high proportion of minority students (Ronfeldt, Loeb, & Wyckoff, 2013). This problem has become more pronounced since 1994 (National Commission on Teaching and Americas Future, 2010), particularly for novice teachers.

Large numbers of novice teachers leave education or their original school site at alarming rates. Boe, Cook and Sunderland (2008) found that the highest rate of teacher attrition occurs in the first three years of teaching. The National Center for Educational Statistics (NCES, 2010) reports that 12% of new teachers (with 1-3 years of experience), who began in 2007 left the profession within two years and 23% left the profession within 5 years (NCES, 2015). Of the teachers surveyed in 2007, another 10% changed schools the following school year. The NCES (2005) found that certain subject areas are more difficult to staff such as math, science and special education. Furthermore, this study noted that low performing schools have higher proportions of underprepared and/or novice teachers than their counterparts (NCES 2005). Students' race, poverty, language and ethnic make-up, as well as class size, have been related to turnover level (Loeb, Darling-Hammond, & Luczak, 2005).

The negative outcomes caused by a high turnover rate among novice teachers (e.g., transition costs, recruitment costs) are particularly problematic when coupled with the large number of veteran teachers expected to retire in the near future (U.S. Department of Labor, 2010) and the anticipated increased population of K-12 students (NCES, 2014). The Bureau of Labor Statistics reports the overall unemployment rate in the United States to 5.9%, (Bureau of Labor Statistics, U.S. Department of Labor, The Economics Daily, Unemployment, 2014) however an estimated 12% additional teachers will be needed in the K-12 school setting through 2022 (Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, Kindergarten and Elementary School Teachers, 2014; Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, Middle School Teachers, 2014). As teachers leave the work force due to attrition and turnover, student populations increase the most in the southern and western portions of the United States between 2011-2022 (Hussar and Bailey, 2013). Teacher projections for the next decade estimate that California public school enrollment will increase 8.7% with a projected need of 28% more teachers through 2017 (NCES, 2008). The need for qualified teachers combined with the retirement of baby boomers and population expansion make the retention of novice teachers imperative.

Prior educational research has identified that teachers leave education for a variety of reasons including changes in their personal circumstances (Grissmer & Kirby, 1987), dissatisfaction with workplace conditions (Berry, 2008; Billingsly, 1993; Kukla-Acevedo, 2009), and dissatisfaction with students' behaviors (Rochkind, Ott, Immerwahr, Doble & Johnson, 2007). Other studies exist that help to explain why some stay in education. Site leadership (Bogler, 2008; Brown & Wynn, 2009; Pogodzinksi, Youngs, Frank & Belman, 2012), effective mentoring (Brill & McCartney, 2008; Dingus, 2008; Ingersoll & Strong, 201; Kapadia & Coca, 2007), helpful professional development (Eberhard, Reinhardt & Stottlemeyer, 2000) and valued

collegial relationships (Certo & Fox, 2002; Flores & Day, 2006; Warshauer & Appleman, 2009) have been identified as factors that help lead to teacher retention.

Despite the amount of research attention given to this important problem, we have more to learn about why novice teachers leave or stay, as well as how we can use this information to improve retention rates. Based on the negative effects, including cost and loss of human capital of turnover and heightened concerns about employee retention, it is urgent to identify reasons why some employees stay and others leave (Van Dyk, 2012). Educational research has identified factors leading to retention, yet another potential strategy is to examine the relevance of research on employee retention outside the field of education. This study integrates the broader human resource management literature to examine the utility of job embeddedness, as it relates to novice teacher turnover. Job embeddedness is a construct that focuses on organizational attachment factors that may keep employees in their current position (Mitchell, Holtom, Lee & Erez, 2001). For the purpose of this study, two of the three links originally developed by Mitchell et al. (2001) have been examined to determine if those novice teachers who demonstrate a higher level of connection are more likely to remain in their positions.

Next we discuss the economic case for reducing teacher turnover, the education research that has examined teacher turnover, and then the job embeddedness construct and how it may be used to examine teacher turnover.

Teacher Turnover: Human and Economic Capital

The economic argument for the importance of reducing teacher turnover is compelling. Since 2007, school districts have faced diminishing state and national funding based on the national economic crisis (Hull, 2010). On top of the costs of the economic downturn, the expenses accrued from teacher attrition are substantial, yet differ among districts and states. Recent estimates of turnover costs per teacher range from $10,000 to $18,300. The NCTAF has estimated that the cumulative total of turnover costs to districts is $7.2 billion dollars a year (Barnes, Crowe, & Schaefer, 2007).

School site costs associated with voluntary turnover and migration of teachers continues to pose numerous problems in education (Barnes, et al. 2007; NCTAF, 2010; Shockley, Guglielmino & Watlington, 2006). Sites must expend resources each time a new teacher is added on staff. This is particularly problematic for urban public schools which lose up to 20% of their teachers each year. Los Angeles Unified spends $94,211,250 annually for training, resources, administrative time to recruit, interviewing and hiring (Barnes, et al. 2007). Turnover costs reduce scarce resources and create additional tasks for site and district level administrators, further taxing an already overburdened system (Texas Center for Educational Research, 2000).

High teacher turnover cost is further exacerbated by a concurrent emphasis on narrowing the student learning gap by ensuring the acquisition and maintenance of high teacher quality. In 2002, educational legislation passed through the United States Congress, "No Child Left Behind" (NCLB). This statute outlined the standards for "highly qualified" educators (P.L. 107-110. 115 STAT 1425). Darling-Hammond (2000) argues that well-prepared teachers are critical and can be a stronger influence on student achievement than a student's background. In spite of reform efforts, achievement gaps between the highest and lowest performing students persist (Haycock, 2001). One factor in the deficit may be a "teaching quality gap" (Useem, et al., 2007) created by a yearly influx of novice teachers. High turnover in some schools, particularly urban schools, contributes to the inequity (Haycock, 1998).

Predictors of Teacher Turnover

Given the importance of teacher retention to student success and the prohibitive costs of teacher turnover, the research literature has examined a number of possible predictors of teacher turnover. In particular, researchers have primarily focused on demographic characteristics of those who are more likely to exit the field of teaching as well as relevant predictive characteristics of schools and students.

Teacher Characteristics

Years of study on teacher attrition has identified multiple variables that are associated with turnover. Research has found that teachers who are the least experienced (Billingsley, 1993; Boe et al., 2008; Guarino, Santibañez, & Daley, 2006) as well as the most academically able as demonstrated by college entrance scores (Billingsley, 1993; Feng, 2005; Murnane, Singer, Willett, Kemple, James, & Olsen, 1991) leave the profession at higher rates. Billingsley found that one of the most common problems was an inaccurate view of teacher responsibilities; disconnection between perceived and actual teacher duties. In terms of other demographic characteristics, teachers who leave education are predominately young, female, Caucasian, secondary teachers (Murnane et al., 1991) without graduate degrees and who teach in specialized areas such as special education, math, or science (Borman & Dowling, 2008). Men, who previously worked in another industry, are over 35 and work in secondary schools, also leave education at relatively higher rates (STRDC, 2000).

The Voice of the New Teacher

Many teachers enter the field of education with a strong desire to make a difference. A recent study on self-efficacy and retention examined the desire to make a difference among its preschool-to-high school teacher participants (Redman, 2015). These same educators relayed concerns they had previously experienced within their first five years of teaching. Some stated that the perceptions of their colleagues were an issue due to their lack of experience in the classroom. The author goes on to enumerate other concerns of the novice teachers such as: inadequate professional development, inconsistent mentoring experiences and overwhelming feelings in relationship to teaching standards and trying to accomplish leadership, state and national expectations within the classroom. Although none of these teachers stated that any of the above enumerated led to an exit from the field, the level of on and off campus factors that create anxiety can further enhance other stresses found within the profession.

School and Student Characteristics

Certain school site conditions have also been identified as factors related to novice teacher turnover (Rochkind, Ott, Immerwahr, Doble, & Johnson, 2007). School characteristics associated with higher rates of teacher attrition include urban schools, private schools, schools with high rates of student discipline problems and large numbers of English language learners (Feng, 2005; Ingersoll, 2001; Loeb, Darling-Hammond, & Luczak, 2005). Schools with fewer resources, lower teacher salaries (Kelly, 2004), or lower spending on instructional materials also have higher attrition rates (Borman & Dowling, 2008). Lack of professional development

opportunities is another factor factored in teacher attrition. Rochkind et al. (2007) reported that teachers complained of insufficient training to work with students with diverse needs and students who have behavior problems. In California, working conditions such as large class sizes and student needs are related to turnover (Loeb et al., 2005). Ingersoll (2001) identified that excessive demands on new teachers contribute to attrition, as do unstable organizational conditions. Salary complaints are rarely cited as the only reason for leaving (Certo & Fox, 2002). Also, a combination of factors identified in turnover research suggests that students, classroom, school site, and administrative factors may lead to higher turnover (Borman et al., 2008; Feng, 2005; Ingersoll, 2001; Loeb, et al., 2005).

Research to this point is informative. Although some of these factors are outside the control of school districts, other factors serve to provide suggestions for how novice teacher turnover could be curbed. Turnover may be slowed by providing: more realistic scenarios to those pursuing teaching professions, as well as, increased professional development opportunities and expanding resources and increasing salaries for teachers. However, current economic conditions and other budget restraints limit the viability of some of these solutions. The education literature has not fully examined relevant retention literature from the human resource management field. Next, we introduce and discuss one particular construct, job embeddedness that has demonstrated validity in the broader human resource management literature.

Job Embeddedness: The Theory of Staying

In 2001, Mitchell et al. introduced job embeddedness as a combination of organizational attachment factors that offered an alternative explanation of employee retention. Job embeddedness is the degree to which employees are integrated into the employment organization and the community where they reside. Research outside of education suggests that turnover is lower when job embeddedness is relatively high (Mitchell, Holtom & Lee, 2001; Yao, Lee, Mitchell, Burton, & Sablynski, 2003; Zhang, Fried, & Griffeth, 2012). Job embeddedness has been coined as "the theory of staying" (Holtom & Inderrieden, 2006).

Job embeddedness is a collection of six dimensions related to one's integration into an organization. These dimensions are found in organizations and also in the outside community. They are referred to as "links, fit, and sacrifice" (Mitchell, et al., 2001; Ramesh & Gelfand, 2010). Job embeddedness is the product of these elements (Mitchell, et al., 2001).

Table 1
The Six Dimensions of Job Embeddedness

Organization	Community
Fit	Fit
Links	Links
Sacrifice	Sacrifice

The job embeddedness dimensions of links, fit, and sacrifice explain the attachments to work (Mitchell, Holtom, & Lee, 2001; Mitchell, et al., 2001). Links are connections developed

in relationship to the employee and the institution or others associated with the organization. Linked employees may be connected through formal or informal means. Examples of work linkages are work-related teams or co-worker relationships. Out of work links include hobbies, service activities, church or community organizations the employee is involved with that create a network of associations that tie the employee to the community (Mitchell, Holtom & Lee, 2001; Mitchell, et al., 2001).

Fit differs from links as it relates to the perception of shared values and goals with the organization and environment. Mitchell, Holtom and Lee (2001) found that a better fit leads to an employee who experiences a greater bond. If the employees' goals, values, and future plans are aligned with the organizations' goals, values and future plans, the likelihood of the employee remaining with the organization is very high.

Sacrifice is the perception of psychological or financial stress from leaving the institution. Employees who leave may uproot family, leave friends, or change their children's school. These on and off the job connections create a perceived sacrifice for the employee, thus a difficult psychological break from the organization. Studies have found that the more connected an employee is, both in and out of the organization, the more difficult it is to depart (Hom, Mitchell, Lee, & Griffeth, 2012).

Job embeddedness reflects the "totality of embedding forces that keep a person on a job rather than on the negative attitudes that prompt the person to leave the job" (Mitchell et al., 2001, p. 1109). Job embeddedness is shown to be a robust predictor of retention across diverse groups of employees including law enforcement officers, military personnel, informational technology personnel, hospital, retail, bank employees, and coaches at the collegiate level (Mallol, Holtom & Lee, 2007).

New studies on job embeddedness further supports the original supposition of factors that help employees stick within an organizational setting. Recently, Jiang, Liu, McKay, Lee, and Mitchell (2012) conducted a meta-analytic review of over 65 job-embeddedness studies. The technique of meta-analysis is often used to explore multiple studies that examine the statistical significance of pooled data. Results indicate that "on-the-job and off-the-job embeddedness negatively related to turnover intentions and actual turnover" (p. 1077). Further analysis of the data provided evidence that the link between job embeddedness and turnover is stronger in females than their counterparts (Jiang, et al., 2012).

After over a decade of analysis, the construct of job embeddedness continues to further illuminate strategies to help with employee retention. If job embeddedness is relevant in the education context it provides a different way to explain why teachers leave. It may also suggest how circumstances must change if educators are to be induced to stay. Thus, this study examines the following research question:

Research Question: Does job embeddedness predict novice teacher retention?

Method

Surveys were sent to two groups of potential respondents: current and former K-12 teachers in three Central California school districts. The districts surveyed are located in two rural agricultural areas and one suburban region all within the San Joaquin Valley of California. Teachers with fewer than five years of teaching experience who were hired between 2006 and 2010 were targeted. Surveys were sent to 500 currently employed K-12 teachers who had been working for their district for less than 5 years. 154 surveys were returned (30.8 % return rate),

but 26 of these returned surveys were unusable because the teachers, while new to the district, were not novice teachers. Sixty-seven percent were females under 30 years of age. Of the respondents, 57% had taught 4-years and 58% taught at the elementary school level. Forty-one percent of the sample worked in a rural district and 43% of respondents work in rural, Title 1 schools. Additionally, 86% were categorized as general education teachers and 67% work in schools where the Academic Performance Index (API) score is over 800. The API is an indicator used in California to determine if schools and districts are performing at the state benchmark.

Surveys were also sent to an additional 100 novice teachers who had voluntarily left one of these three districts during that same period. Of these 100 surveys, 29 were returned due to an incorrect address and 15 were returned and usable, resulting in a 21 % return rate. Similar to the first group, 67% were females but 60% were between the ages of 31 and 50. Seventy-four percent had taught four years, 53% as K-6 teachers and 47% as 7-12th grade teachers. General education teachers make up 73% of the sample and a large number worked in non-Title 1 schools (67%). Sixty-percent of these respondents were from rural schools and 47% of their schools had an Academic Performance Index (API) scores over 800 which was previously used in California to determine if a school was academically performing at the designated benchmark.

Instrumentation

Mitchell et al. (2001) developed a 42 item survey in Likert-type, fill-in-the-blank and yes/no format of the different facets of job embeddedness. Items focus on the respondent's fit into the school culture, their linkages to co-workers and members of the community, and the sacrifices they would need to make if they were to leave. Total scores indicate the degree of job embeddedness which is calculated by computing the mean of the six aspects of the overall construct (Mitchell, et al., 2001).

The analysis of data for this study focused on the areas of Organizational and Community Fit in relationship to Organization and Community Sacrifice. Thirty Likert-type questions were asked to all respondents surveyed in order to determine if individuals perceived connections to the organization and community led to a higher level of embeddedness. In order to evaluate embeddedness differences between those who remained and those who left, three items were added regarding respondents' intentions to leave their schools within a year.

Several demographic variables were added including the respondent's grade level assignment, whether the classroom teacher was in general or special education, and whether the school was a Title 1 institution. A general school-wide descriptor of academic performance was also included. In California, an Academic Performance Index (API) indicates whether school performance meets the statewide target of 800 for all schools.

Procedure

Two lists of novice teachers were provided by each district's Human Resources department. One list of individuals continuing to teach in the district, and second list of those who had left. Each of the novice teachers was sent a copy of the embeddedness survey with items adjusted to the past tense to accommodate those who had left. Each of the teachers in both groups were contacted multiple times with the incentive of a gift card provided by lottery to one of the participants in each group.

Items were tabulated into one of four categories: items dealing with how well the individual fit the organization (OrgFit), how connected they felt to the community (ComFit), the work-related sacrifices they would make if they were to leave the organization (OrgSac), and the community-related sacrifices incurred by leaving (ComSac). Once the 30 items were scored, subtotals were created for each of the four categories. These four categories were selected due to their use of Likert type responses (the other two dimensions used fill-in answers and, thus, were not used for this study).

Analysis

The initial question is whether embeddedness scores from the instrument would distinguish between those who remained in the districts, and those who left. Descriptive statistics and frequency distributions were calculated for responses. The internal consistency of the data was determined by Cronbach's alpha. The analytical approach was multivariate analysis of variance (*MANOVA*). The second question is whether embeddedness is inversely related to turnover, a correlation issue.

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Results

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Coefficient alphas were calculated for the survey measures. Internal consistency coefficients for response data ranged from .726 for items related to "sacrifice" to .865 for the degree of "fit" in the organization.

The correlation values in Table 2 suggest that, with the exception of the OrgFit/OrgSac correlation, the items associated with the subcategories measure distinct characteristics.

Table 2
Correlation between 4 dimensions of job embeddedness

Variable	OrgFit	ComFit	OrgSac	ComSac
OrgFit	1			
ComFit	.180*	1		
OrgSac	.669**	.197*	1	
ComSac	-.130	.-221**	.085	1

Note. *.Correlation is significant at the 0.05 level (2-tailed). **.Correlation is significant at the 0.01 level (2-talied).

The fundamental question is whether embeddedness scores serve to distinguish between novice teachers who have chosen to remain in the classroom and those who elected to leave. The *MANOVA* results are in Table 3.

Table 3
Summary of Multivariate Results for Job Embeddedness in Relationship to Stayers and Leavers

Procedure	F Value	Sig	Partial *Eta* Square
Hotelling's Trace	228.044ª	.000	.869

The *MANOVA* results, Hotelling's Trace, in this case since there were two groups, indicate that the aggregated scores created from the subtests is significantly different for those who remain in education and those who leave ($F = 228.044$; $p < .001$); the embeddedness scores can distinguish between "stayers" and "leavers."

The significant result leaves unanswered the related question of the practical importance of this outcome. The partial *eta*-squared value (h_p^2) indicates that about 87% of the variance in whether the novice remains or leaves can be explained by differences in the level of embeddedness.

Univariate analyses (Table 4) indicate that organization fit, community fit, and community sacrifice scores are all significantly different for "stayers" and "leavers." The organizational sacrifice scores are not significant.

Table 4
Summary of Univariate Results for Job Embeddedness in Relationship to Stayers and Leavers

Source	SS	df	MS	F	p
OrgFit	328.224	1	328.224	11.162	.001
Error	4146.238	141	29.406		
ComFit	148.300	1	148.300	13.083	.000
Error	1598.330	141	11.336		
OrgSac	26.140	1	26.140	.780	.379
Error	4724.517	141	33.507		
ComSac	29877.280	1	29877.280	726.510	.000
Error	5798.538	141	41.124		

SS=Sum of Squares, MS=Mean Square

Discussion

The tendency for novice teachers to leave the classroom during their early years of teaching has been examined in a number of different ways. Prior research has been informative, identifying characteristics of those that stay or leave the profession. Even though research has been extensive, the most recent teacher attrition and mobility data from the U. S. Department of Education shows that 7% of novice teachers surveyed left the profession and another 13% moved to another school (Goldring, & Riddles, 2014). The classroom is a complicated place to work and human aspects are if anything, variable. The approach taken in this study was to incorporate a construct in the human resource management field, job embeddedness, to examine teacher retention in the education context. The theory maintains that turnover is lowest where employees are most completely integrated into their positions and community. Integration, or embeddedness, is operationally-defined in terms of how well the individual fits in the position

and the community, how linked the individual is to position and community, and the level of sacrifice required if the individual were to leave. The theory predicts that turnover will be lowest where job embeddedness is highest. It was tested here by examining two of the three potential connections and whether job embeddedness scores are significantly different for novice teachers who indicate an intention to remain in their positions, compared to those who that had left.

The purpose of this study was to determine if job embeddedness is related to novice teacher retention. Teachers were asked a series of questions in relationship to organizational "fit," "links," and "sacrifice." The MANOVA results support the use of job embeddedness in this context. Not only were scores significantly different, but most of the difference can be attributed to stated intention. A relatively high effect size (h^2=.869) should be interpreted with caution, representing as it does the first application of this construct to educators but it is difficult to ignore nevertheless. Employees' perceptions of their level of integration to their positions and their communities have a great deal to do with their intentions to remain. The results of this study are consistent with empirical findings in the human resource management literature and provide further support for the Theory of Staying (Mitchell et al., 2001). Further, these findings underscore the relevance of the job embeddedness construct to the education context.

Implications for Practice

The findings have intriguing implications for addressing a chronic problem in education -- novice teacher retention. Teachers with less than five years of experience leave the field at a higher rate than more veteran educators (NCES, 2010). The NCTAF claims that teacher turnover may cost more than 7.3 billion dollars per year (2007). Based on high turnover and costs, new strategies to retain teachers are needed. Because job embeddedness is related to novice teacher retention, efforts to improve embeddedness may pay dividends in higher rates of retention. By applying the job embeddedness model to education, leader practitioners can review the "links", "fit" and "sacrifice" model to retain more teachers. That is, if those charged with inducting and retaining new teachers develop procedures designed to enhance the connections new educators feel to the culture of the school and the community, turnover may decline and the costs and disruptions associated with replacing those who leave, substantially reduced. More completely embedding teachers appears to be one promising strategy to improve the quality of schooling that students receive. If those who leave are disproportionately among the academically most able, (Murnane et al., 1991) these findings take on unusual importance. They may give rise to at least a partial strategy for addressing disappointing academic performance.

The use of Professional Learning Communities, mentoring structures, site-based management with collegial interactions, teacher administrator collaboration and decision making are a few of the organizational structures that may be beneficial in enhancing job embeddedness (Bogler, 2008; Brown & Wynn, 2009; Inmann & Marlow, 2004; Kapadia & Coca, 2007). Harris, Wheeler and Kacmar (2011) found that the interactions between leadership and employee called leader-member exchange was a "predictor of organizational embeddedness." Other efforts, such as providing opportunities to network and engage with the broader community, perhaps through education partnerships or civic service, are promising strategies as well. Also, by developing work teams, using collaborative decision making, creating a family atmosphere, and engaging staff in extra-curricular activities, leaders can help create the webs of interconnectivity leading to increased opportunities for embeddedness to develop.

Enhancing job embeddedness may result in other positive outcomes as well. New studies on generational work attitudes have found that when younger employees feel connected or fit within their work environment they are more likely to enjoy their work (Westerman &Yamamura, 2007). Weiss concluded that in institutions where new teachers were part of a learning system, where input was sought regarding decisions affecting student achievement, and were made to feel a part of the school leadership, autonomy and participation increased (1999).

Limitations

The relatively low return rate in this study suggests that when surveying younger generations, perhaps an alternative contact might be more fruitful. Web-surveys have become common and provide an alternative, or a supplement to conventional mail (Cook, Heath, & Thompson, 2000; Kaplowitz, Hadlock & Levine, 2004). In future analysis, it is recommended that a degree of qualitative investigation be included in the research model in order to obtain more in depth participatory responses. By incorporating a focus group interview or case study, the researcher can "seek answers to questions" (Berg, 2007) that require a more detailed response than a Likert-type question.

One final limitation in this particular study may be the effect of the economic down-turn in the country. Turnover rates are likely affected by high rates of unemployment. According to the Job Openings and Labor Turnover Survey (March 11, 2011), the recent recession ended in June 2009, however as of 2010, there were still 6 unemployed persons for every job opening and fewer employees quitting their positions due to job scarcity (US Department of Bureau of Labor Statistics, 2011). The results here may not be as generalizable for these reasons.

Summary and Future Research

This analysis began with a question, "Can job embeddedness help to predict novice teacher retention?" This study supports the use of this construct to explain turnover in K-12 education and to help practitioners make thoughtful decisions. This body of research will give insight to scholars and leaders that continue to look for new means to retain the important resource of human capital. However, this is the first study to examine this construct as it relates to novice teacher retention. Future research is needed to examine its relevance to other critical jobs in the education context as well. Also, studies that tie individual items on the survey specifically to education-related issues hold the promise to develop the relationship yet further (Crossley, et al., 2007; Cunningham, Fink & Sagas, 2005; Wilson, 2010). As with this study and others, there is a mounting body of research that points to embedded employees translating to retained employees. School and district administrators can look at the 6 dimensions of on-the-job and off-the-job factors in their fight to retain the best and brightest in order to educate all kids at high levels.

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