The Influence of a Principal's Length of Service and School Socioeconomic Classification on Teacher Retention Rates in New Jersey Middle Schools

by Gerard Babo, Ed.D., and Douglas J. Petty, Ed.D.

Abstract

This study investigated the impact of a New Jersey middle school principal's length of service and a middle school's socioeconomic classification on teacher retention rates for the 2016 -2017 school year. Surprisingly, the results of a two-way factorial ANOVA indicated that NJ middle schools with a socioeconomic status classification of middle to upper-middle class had the lowest teacher retention rate (m = 85.55%) in schools that housed principals with 16 or more years of experience ($F(21, 168) = 2.677$; $p < .001$).

Introduction

School building principals make a difference and are essential to the success of the teachers, staff and most importantly the students they are charged with leading (Boberg & Bourgeois, 2016; Branch, Hanushek & Rivkin, 2013; Leithwood & Azah, 2017; Leithwood, Seashore-Louis, Anderson & Wahlstrom, 2004; Waters, Marzano & McNulty, 2003). Yet, approximately 25% of the nation's building principals are leaving our public schools on an annual basis and almost 50% of first time principals resign prior to their third year on the job (Harris Interactive, 2013; Fuller & Young, 2008). This principal retention issue is an even larger problem in school districts where student need is greatest - the poor, urban, inner-city schools (Burkhauser, Gates, Hamilton & Ikemoto, 2012).

Some believe this turnover is a direct result of the principal's job becoming untenable over the past 15 years. District, State and Federal policies have changed at such a rate in this age of accountability that the job of a building principal has become almost impossible to do well (Darling-Hammond, Meyerson, LaPointe & Orr, 2010). Needless to say, this leadership turnover has an effect on overall school success, which manifests itself primarily in both teacher and student efficacy (Boberg & Bourgeois, 2016; Leithwood & Azah, 2017).

Limited research in this area seems to indicate that this principal attrition phenomenon has a growing negative impact on school culture and climate, which quite possibly affects a higher rate of teacher turnover that logically influences student academic achievement and attainment (Ronfeldt, Loeb & Wyckoff, 2013). The effect of a high rate of teacher turnover has broad ranging implications influencing new curricular initiatives and developing a culture of teacher professionalism to name just two key areas, which are essential to school growth and sustainable success (Guin, 2004).

Hughes, Matt & O'Reilly (2015) found that in schools where principals provided ongoing staff supportive services that included emotional, cultural and instructional resources, teacher attrition was minimal. However, in schools where principal leadership is questionable, school culture is deficient and classroom teacher connections are strained and fractured, the rate of teacher turnover is found to be quite high. This phenomenon is specifically more evident in schools where poverty is highly prevalent (Simon & Johnson, 2015). Grissom (2011) posited that effective principals could make a difference in keeping teachers satisfied and on the job, particularly in high poverty schools considered at risk. The need then for not only highly effective principals to remain on the job on a consistent and long-term basis becomes vital.

Purpose of This Study

Consequently, the primary purpose of this study was to determine if the length of time a middle school principal serves in his/her school has an impact on teacher retention and if it might differ based on the overall socioeconomic status of the school. Accordingly, the following research question was addressed: What is the difference in teacher retention rates in New Jersey middle schools based on the length of time a principal serves in his/her school and the school's socioeconomic status and does a significant interaction exist between these two main effects?

Methods

This study was a cross sectional design where the unit of analysis for the study was "school." A sample of 200 New Jersey middle schools with 6th, 7th and 8th grade configurations were selected from a cross section of approximately 590 economically diverse school districts (see **Table 1**).

Table 1
Demographic Information on Sample of NJ Middle Schools (n = 200)

School District SES Ranking (low SES = 1; high SES = 8)	Number of Schools (Overall percentage of sample)	Principal Length of Service to School Mean in years (SD)	Teacher Retention Mean percentage (SD)
1 (Poorest)	19 (9.5%)	11 (8.9)	87% (5.7)
2 (Poor)	25 (12.5%)	18 (11.1)	88.5% (3.8)
3 (Lower Middle)	14 (7%)	12 (8.5)	89% (1.5)
4 (Middle)	26 (13%)	13.5 (7.6)	90% (2.7)
5 (Middle)	29 (14.5%)	13 (9.5)	86% (13)
6 (Upper Middle)	31(15.5%)	12 (9)	90% (2.6)
7 (Affluent)	43 (21.5%)	11.4 (8.8)	89% (4)
8 (Most Affluent)	13 (6.5%)	11 (9.6)	88% (3.2)
TOTAL	**200**	**12.8 (9.2)**	**88.5% (6.2)**

School data was obtained from primarily two sources, 1) The New Jersey Department of Education's School Report Card website (http://www.state.nj.us/education/data) and 2) DATA UNIVERSE (php.app.com/agent/educationstaff/search), an independent public record website sponsored and posted by Asbury Park Press, which is part of the USA TODAY network of publications.

Teacher retention data for the 2016 - 2017 school year, and the number of years a school principal had been assigned to and servicing his/her school as of the 2016 - 2017 school year, were collected and analyzed by way of a Two-Way Factorial ANOVA. A Two-Way Factorial ANOVA was used to determine if there were significant differences in teacher retention based on each main effect, principals' length of service and schools' socioeconomic status (SES), and most importantly, the interaction between these two main effects. **Table 2** displays the results of this analysis.

Table 2
Two-Way Analysis of Variance for Teacher Retention as a Function of Principal Length of Service and School District Socioeconomic Status

Variable and Source	*df*	*MS*	*F*	*p*	Partial η^2
Principal Service	3	30.401	.967	.410	.017
District SES	7	32.360	1.026	.415	.041
Principal Service*District SES	21	84.171	2.677	.000	.251
Error	168	31.438			

The results displayed in **Table 2** indicate that no significant difference could be found in teacher retention rates based solely on each main effect, principal length of service or school district socioeconomic status alone. However, the interaction between these two main effects was found to be statistically significant ($F(21, 168) = 2.677$; $p < .001$) with an effect size that would be considered larger than normal, partial $\eta^2 = .251$ (Leech, Barrett & Morgan, 2015).

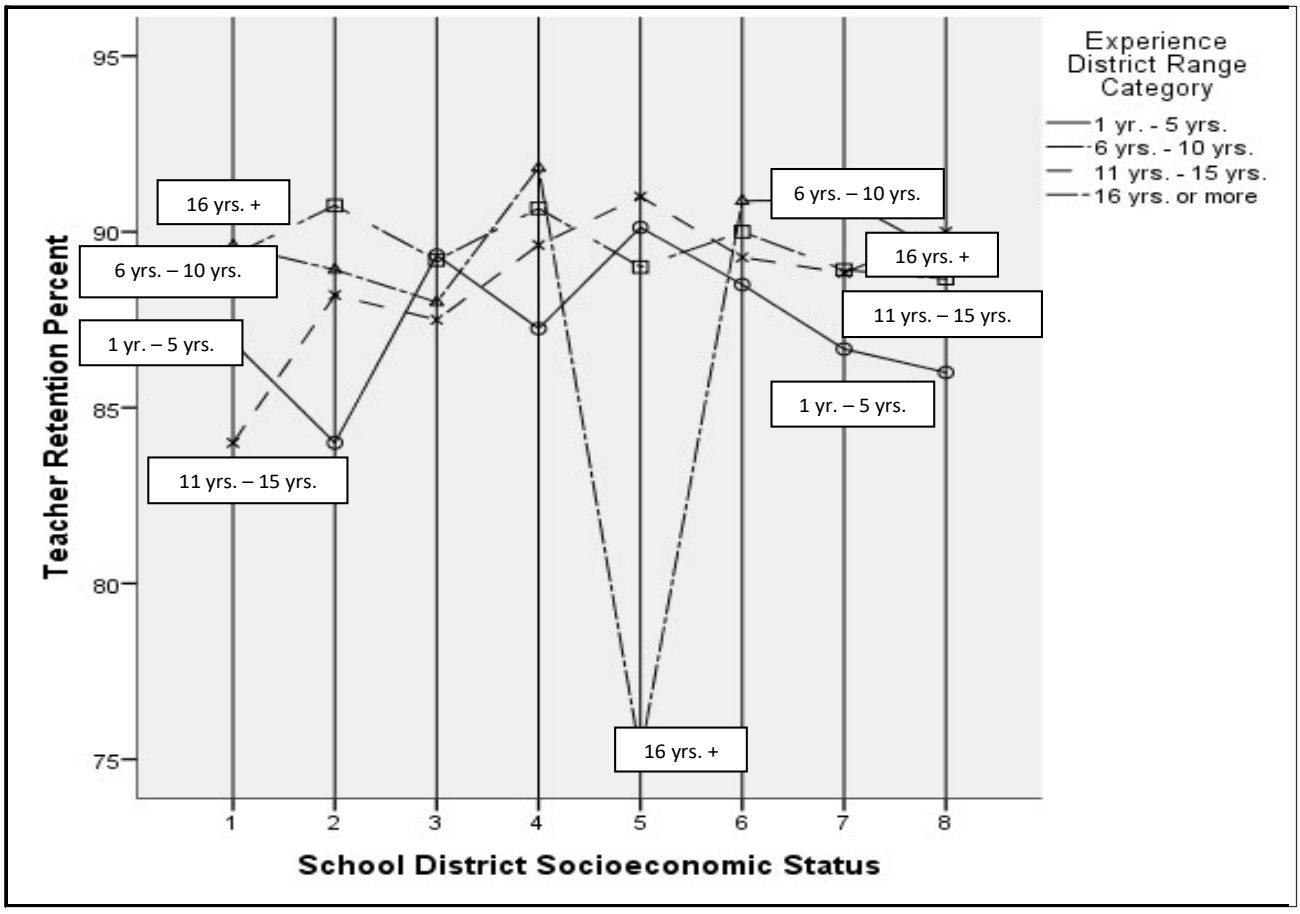
Interestingly, in schools where principals had served 16 or more years with a socioeconomic status classification of 5, which would be considered a typical middle class NJ school district, the lowest teacher retention rate (m = 85.55%) was recorded indicating greater teacher mobility within a school climate or culture that one would assume was stable. The profile plot in **Figure 1** displaying the interaction between these two main effects clearly provides a visualization of these differences.

Based on the Profile Plot displayed in **Figure 1**, it appears that teacher retention is the most stable across all SES strata for principals who have been assigned to their respective school for six (6) to ten (10) years. For principals assigned 11 - 15 years there appears to be a slight increase in teacher retention from the poorest to the most affluent school district. Principals servicing their schools from one (1) to five (5) years appear to vary quite a bit from poorest to most affluent but wind up in the same spot across all strata, which could be an effect of the dynamics of school leadership and developing a new culture.

However, **Figure 1** clearly demonstrates the large variance in teacher retention across SES strata where principals have been assigned to the same school for 16 or more years. In the poorest school district, the retention rate is approximately 89.60% with a drop off to 75.11% for middle-income districts and then an increase to 89.33% for the most affluent districts. Although this phenomenon could be attributed to what might be considered a small sample size for the category (n =19), more research needs to be conducted to explain this curious anomaly.

Figure 1

Profile Plot for Two-Way Analysis of Variance for Teacher Retention as a Function of Principal Length of Service and School District Socioeconomic Status



Conclusions

Trying to postulate a reason for this study's unique finding is a conundrum. One would assume that schools where principals have served the longest should maintain a high level of teacher retention, yet this study reports the opposite. Additionally, school districts where this seems to be the most prevalent are located in average, middle class communities where poverty is not an issue and working conditions are more than likely not to be a factor that contribute greatly to teacher attrition (Simon & Johnson, 2015).

Excluding any methodological issues, one could make the supposition that this finding might be attributed to several sources - leadership complacency, mid-level teacher career advancement, and early retirement to name just a few. Some researchers posit that two major contributors to teacher turnover are a school's organizational structure and the working conditions teachers have to deal with on a daily basis (Ingersoll, 2002; Luczak & Loeb, 2013). The findings reported here strongly suggest a need for follow-up studies using a case study methodology to investigate the reasons as to why teacher turnover is highest among schools that are generally considered the most stable with regards to organization and working conditions. Regardless, with teacher turnover increasing annually and teacher need at its greatest, decreasing teacher attrition is vital to student success. Understanding what contributes to this phenomenon of teacher retention might assist school districts and building principals in retaining and developing quality classroom instructors.

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Gerard Babo, Ed.D., is Associate Professor, Department of Education Leadership, Management and Policy at Seton Hall University.

Douglas J. Petty, Ed.D., is Principal of Oliver Street School and Oliver II School at Newark, NJ Public Schools.