

Examining the Role Gender Plays in the Public School Principalship

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Abstract

The Schools and Staffing Survey (SASS) is a nationally representative survey that collects data from districts, schools, principals and teachers in the United States every four years. It was first administered in the 1987-88 school year and the most recent administration took place in the 2011-12 school year. In addition to information on school characteristics (e.g., grades offered, policy, staff counts), SASS collects detailed information on teachers and principals in the sampled schools, such as gender, income, highest level of education, and years of experience. Between the 1987-88 and 2011-12 school years, the proportion of school principals who are female has climbed from 25 percent (Fiore and Curtin 1997) to 52 percent (Bitterman et.al. 2013). We use the three most recent SASS administrations (2003-04, 2007-08, and 2011-12) to examine changes in the makeup of the public school principal workforce as well as differences between male and female principals in regards personal characteristics, including prior experience, age, education, and income.

Key Words: Schools and Staffing Survey, Public School, Principal, Gender, Sex, Administrator

1. Introduction

In recent years, the gender gap in education administration has closed considerably (Snyder and Dillow 2013, Bitterman et.al. 2012) in public elementary and secondary schools. In 1987-88, about 25 percent of public school principals were female (Fiore and Curtin 1997). Over more than two decades, this has climbed steadily – 34 percent in 1993-94 (Fiore and Curtin 1997), 44 percent in 1999-2000, 50 percent in 2007-08 (2012 COE), and 52 percent in 2011-12 (Schools and Staffing Survey 2011-12).

McQuigg and Carlton (1980) found that men move into administrative positions earlier in their careers than do women and, indeed, Schools and Staffing Survey data seem to reflect this. Pounder (1988) posits that the apparent influx of women into administrative positions is oversimplified when examined at the national level and notes that women are more likely to occupy administrative positions at the primary or elementary school level, rather at the secondary or high school level, where salaries are higher. Pounder (1988) also suggests that this occupational segregation may indicate that, though they are increasingly becoming principals, women are more likely to be in lower-paid positions. McGee (2010) suggests that barriers, both institutional and self-imposed, still exist for women in education administration.

Recent publications using Schools and Staffing Survey data seem to indicate that female principals have more years of teaching experience than male principals and fewer years of experience as principals (Snyder and Dillow 2013, Bitterman et.al. 2012). These data also indicate that higher percentages of women earn advanced degrees than do men. This pattern is certainly interesting and led us to consider whether, despite representing the majority of public school principals, women were working harder, in terms of education and experience prior to becoming principals, to become principals.

To investigate these issues, Schools and Staffing Survey data are used to examine characteristics of public school principals, by gender, including: age at becoming a principal, educational attainment, years of teaching experience prior to becoming a principal, years of teaching experience after becoming a principal, school level (elementary, secondary, combined) of current assignment, and income. A trend analysis is also performed to determine persistent patterns in these characteristics and assess the presence and status of gender gaps in these characteristics, over time.

1.1 About the Schools and Staffing Survey

The Schools and Staffing Survey (SASS) is a nationally representative sample survey of public districts, schools, principals, teachers, and library media centers in the 50 states and the District of Columbia. The SASS also includes a nationally representative sample of private schools, principals/school heads, and teachers. SASS was developed by the National Center for Education Statistics (NCES) of the Institute of Education Sciences within the U.S. Department of Education and is conducted by the U.S. Census Bureau. The SASS was first administered in the 1987-88 school year and the most recent collection took place in the 2011-12 school year (Bitterman et.al. 2013).

The analyses presented in this paper include data from the 2003-04, 2007-08, and 2011-12 administrations. These three administrations were chosen due to consistency in the way principal experience questions were asked across all three administrations.

2. Population and Variables Examined

2.1 Population and Variables

For the purposes of the analyses discussed herein, the population examined includes principals in public¹ elementary or secondary schools. Principals at schools containing a combination of elementary and secondary grades, also known as “combined” schools were excluded from the analyses (combined)

These principals made up less than 10 percent of the weighted sample in all three survey administrations. After sub-setting the data to meet these conditions, sample sizes² were as follows: 7,200 principals in 2003-04; 6,500 principals in 2007-08; and 6,500 principals in 2011-12.

2.2 Variables

Male and female principals were compared using a variety of variables including:

¹ Includes public charter.

² Unweighted and rounded to the nearest 100.

- Age – this was obtained by subtracting the reported year of birth from the year of survey administration.
- Educational attainment – initially reported by the principal, this variable was collapsed into three-level (master's or less, education specialist or professional diploma³, and doctorate or first professional degree) two-level (master's or less, higher than a master's) versions.
- Years of principal experience, as reported by principal.
- Years of teaching experience prior to becoming a principal, as reported by principal.
- School level of assignment – elementary or secondary. This is derived from the grade levels offered at the principal's school, which are reported on the SASS School Questionnaire.
- Age at which the respondent first became a principal – this is calculated by subtracting years of principal experience from current age. This proxy variable cannot account for leaves of absence.
- Census region – Northeast, Midwest, South, West
- Community type – categories include: city, suburban, town, rural. This was only comparable for 2007-08 and 2011-12 due to a change in methodology after the 2003-04 SASS.

3. Findings and Conclusions

3.1 Findings

Findings are discussed below. These include our initial observations, based on simple t-tests, as well as results obtained using more complex modeling and controlling for various factors.

3.1.1 Initial observations

Women made up about half of public school principals in 2003-04, 2007-08, and 2011-12 (48.7%, 51.1%, and 52.9%, respectively). In all three years examined, an array of significant differences were found between male and female principals ($p < .01$). Higher percentages of women (85–87 percent) were principals in elementary-level schools, compared to men (62–65 percent).

³ At least 1 year beyond the master's level.



Figure 1: School level of principals, by gender and year.

Additionally, higher percentages of women (39–43 percent) had degrees beyond the Master’s level, when compared to men (34– 36 percent).

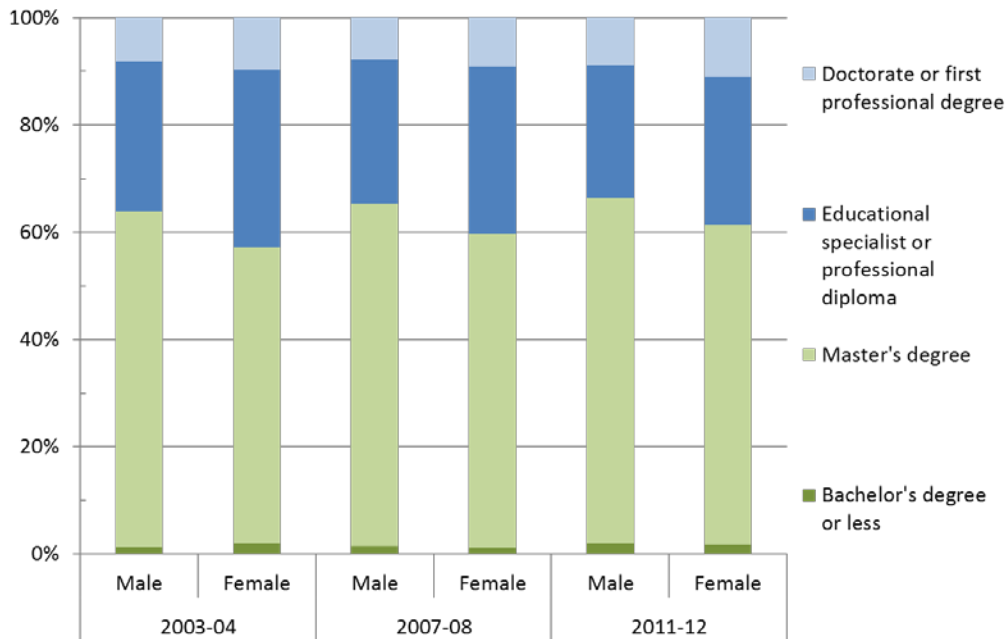


Figure 2: Educational attainment, by gender and year.

When compared to male principals, women had more years of teaching experience prior to becoming a principal, fewer years of experience as a principal, first became principals later in life than their male counterparts. Based on naïve comparisons, annual base salary was significantly lower for female principals in the 2011-12 school year ($p < .01$).

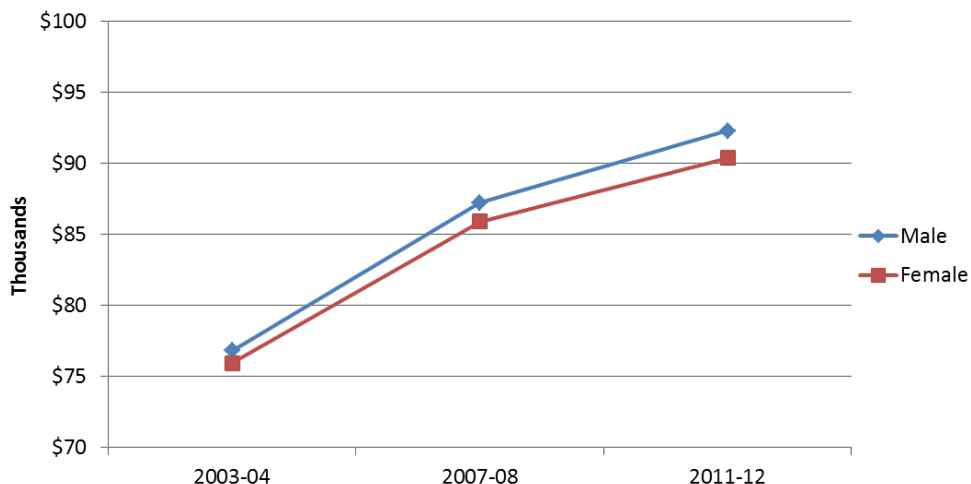


Figure 3: Average annual base salary, by gender and year.

3.1.2 Findings

After examining a linear model and controlling for experience, educational attainment, and a selection of school characteristics (school level, Census region, school community type, poverty level, school size). No significant differences in annual base salary were found between male and female principals. However, significant relationships did exist between gender and school level, school level and annual base salary, and gender and educational attainment.

At all three data points, female principals were significantly more likely than males to be working at the elementary level. The average annual base salary for elementary level principals was significantly lower than the average annual base salary for secondary level principals and also lower than the national average for all principals. Female principals also had higher attainment than their male counterparts in 2003-04 and 2011-12⁴. In 2007-08, female principals at the secondary level had higher educational attainment than their male counterparts as well⁵.

3.2 Conclusions

Our analyses reveal an apparent interaction between gender and school level that may bear an indirect impact on annual base salary and other measures of employment equity for public school principals. Overall, female principals are more likely to work at the elementary level and school level (elementary, secondary) is strongly linked to annual base salary with secondary level principals earning significantly more than elementary level principals.

While it seems clear that gender is linked to the school level at which a principal is employed, it is unclear whether the factors that go into level selection are institutional, internal, or some combination of the two. Future investigation should consider the role that gender plays in tracking principal candidates to the elementary or secondary level as well as what barriers exist, institutional or self-imposed, to achieving employment equity in the public school principalship.

⁴ Using the three-level breakdown (master's or less, education specialist or professional diploma, and doctorate or first professional degree).

⁵ Using the two-level breakdown (master's or less, higher than a master's).

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