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Principal Gender as Related to Campus Size, Level, and Academic Rating

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Abstract

A comparative, quantitative research design was utilized with a Pearson χ^2 test statistic. Procedures for the study included gathering the gender of all public school principals in the state of Texas by utilizing a TEA data bank. The 2006 AEIS report generated information regarding campus size, campus level, and campus rating for every school in the state of Texas. Results indicated that a significant relationship exists between each of the variables tested. The prevalence of gender at particular school campuses has continued, as gender was found to be significantly related to campus size, campus rating, and campus level. Discussion presented is related to hiring practices and future research.

Key words: Principal, school, gender issues, hiring practices

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Introduction

The school principal is the highest-ranking administrator at the elementary, junior high, and high schools level. The role of the public school principal has become an increasingly complex, albeit multi-tasked, position that has required a plethora of responsibilities. Despite legislation that has promoted equal opportunity, affirmative action, and support of women's professional aspirations, women have continued to be the minority in public school administrative positions (Boyle, 2004; Gladstone, 2001). As Eagly (2007) stated, "there continued to be widespread recognition that women often come in second to men in competitions to attain leadership positions" (p. 1).

Traditionally, past research has focused on the White, male educational leader (Blackmore, 1989; Capper, 1993; Glazer, 1991). The characteristics and attributes of leadership styles among public school principals varied on many different levels across both genders. Historically, women have been the majority in the teaching profession. With the division of labor among administrators and teachers in the early 1900s, women were assigned the role of nurturing teacher, and men became scientific decision-makers, bureaucrats and disciplinarians (Shakeshaft, 1987). In 1928, female principals became the majority, with 55% holding the position of elementary principal. Interestingly, there was then a sharp decline in the number of women holding a principal's position. "In the years between 1928 and 1984, the number of women principals continually dropped from 55% to 18%" (Lynch & O'Riordan, 1990, p. 471).

Recent research revealed that female principals comprise less than half of the percentage of male principals at the secondary level (National Center for Educational Statistics, 2007). Generally, women principals, as profiled by their male counterparts, were seen as having sacrificed family for success. Women were considered to be power-hungry, aggressive, and stepping on others in order to gain prestige. Few examinations of female administrators existed, and, "they lacked the substance necessary for a thorough examination of the style and manner of effective women administrators" (Smith-Thibodeaux, 1991, p. 132). Even though the level of opportunities for women increased, there is still a great deal of "social scrutiny" faced, making "hard choices—such as when and whether to start a family or advance in the workplace—even harder" (Fels, 2004, p. 59). Regardless of administrator gender, the bottom line has been student achievement, which can be measured by the overall academic success or failure of a campus.

Past mandates and ratings by the No Child Left Behind Act (2001) have further spotlighted schools that were not receiving an academically acceptable passing score. The state of Texas has used the Texas Assessment of Knowledge and Skills as an assessment criterion that has rated both individual students and subgroup populations within the student body. Schools are then rated as having been academically successful or not. When a school receives an unacceptability rating, change often occurs in administrative leadership.

Today's principal has been the facilitator of staff and student learning—the leader of a learning community. The principal has been the instructional cheerleader that taught, coached, and promoted professional development. Providing availability to the staff would enhance motivation, self-esteem, security, and morale (Blase & Blase, 1998). Principals have had a positive impact on professional development when they offered a vision of learning, supported

collaborative change, and discussed professional research with their teachers. Teachers who worked in a stimulating and supportive environment could reach a higher stage of professional development (Phillips & Glickman, 1991).

A review of related literature indicated that perceptions of female principals vary due to both gender and myth. One of the most common reasons presented in the literature for the underrepresentation of women in school administration was negative perceptions of women's leadership (Tyree, 1995). Studies of female and male approaches to leadership have documented a distinct set of beliefs with regard to the stylistic way that women and men manage (Morgan, 2004). Management attributes traditionally associated with men, such as authoritative, decisive, controlling, and unemotional were often more respected by potential employers in education than a more decentralized approach to leadership which involved the principal as a facilitator of a shared vision and shared decision-making. Tyree (1995) stated that the underrepresentation of women in educational administration was fostered through a series of myths: "(a) women don't have what it takes, and (b) women lack support of teachers and the community" (p. 22).

According to Helgesen (1990), women must continue to deal with the negative views of female administrators held by peers, parents, and employees of both sexes. Gupton and Slick (1995) quoted a female elementary principal as having said that "even after women have obtained administrative positions, they are not afforded the status or the respect given their male colleagues" (p. 10). Educational leadership "has been subjected to and contributed to workplace gender power relations within and across hierarchical levels, in recruitment, selection, appraisal, promotion and so on" (Broadbridge & Hearn, 2008, p. 44). Within the school environment, the attitudes which teachers have had toward women administrators may also have had a direct effect on how well the administrator's job performance would be evaluated by her supervisor. Attitudes may also be a deterrent to women who have sought administrative positions.

The gender gap in school principal leadership has continued, despite past records of successful leadership by women principals (Mertz, 2006). To date, the gender of Texas school principals has not been correlated to state mandated testing for student success rates, and has received very little attention. While many studies have supported the evidence that differences in perception exist among men and women with regard to leadership qualities that equate success (Eagly, Karau, & Johnson 1992), relatively little has been examined comparing gender to the Texas Essential Knowledge and Skills (TAKS) as a success indicator. The current study examined the relationship between gender and TAKS success. Campuses receive report cards from the Academic Excellence Indicator System (AEIS) that determine the overall academic rating through a summative assessment. The report cards also present data on campus size and campus levels.

Past researchers (Morgan, 2004; Pompel, 2004; Tyree, 1995) have indicated a distinct stereotype of the differences in the way women and men manage leadership positions (Eagly, 2007). Differences in leadership style have also existed among the same gender. Placing leadership differences aside, the question has arisen regarding placement of women principals in specific campus levels and campus sizes. In the past, women were seen as being selflessly nurturing, domestic, and more motherly in manner (Pompel, 2004). This may impact the placement of female principals at particular campus levels or particular campus sizes. The

current study examined these issues as well. Research has uncovered very little regarding male principals, even less about female principals. There have been volumes of books published on various historical educational topics but the principal has been missing from most of the chapters. Rousmaniere (2006) stated that “it’s as if the principal did not exist at all” (p. 12).

The purpose of the study was to examine gender demographics and report on the relationships between principal gender and TAKS campus rating, campus level (e.g., elementary, junior high, and high school), and campus size (student population totals). The comparative study gathered Texas state data for the 2006-2007 school year. The following research questions were posed for the study:

1. What is the relationship between administrator gender and campus level (elementary, junior high, and high school)?
2. What is the relationship between administrator gender and campus academic success as measured by the Texas TAKS test?
3. What is the relationship between administrator gender and campus size?

Method

A comparative study using descriptive statistics was utilized to compare the nominal variable gender with the ordinal variables campus rating, campus level, and size. Descriptive statistics utilize variables whose values are measured on different types of scales (Norusis, 2004). For this study, the variables were measured for relationships that existed. Researchers who have used this design do not give any treatments; they have only described observations. Hence, the study was descriptive and comparative.

To test all of the hypotheses, the study utilized two-way contingency table analyses with the Pearson chi-square statistic to test the phenomenon that: (a) a specific gender exists in particular campus level principals (b) a specific gender exists in successful campus rating and (c) a specific gender exists in certain campus sizes. A crosstabulation table with a contingency coefficient was generated. The statistical significance (p value) of a result is the probability that the observed relationship or a difference in a sample occurred by chance, and that in the population from which the sample was drawn, no such relationship or difference exists (Gall, Gall, & Borg, 2003). The required level of significance for all analyses was $p < .05$. The magnitude of the relationships were also examined and reported using Cramer's V .

Population and Sample

Rarely in educational research can one study every member of a specified population (Gall, Gall, & Borg, 2003). Instead, data are collected from a sample of individuals, which are then used to make inferences about the specified population. A population is “all of the individuals who possess a certain characteristic (or set of characteristics)” (Fraenkel & Wallen, 1996, p. 104). The target population, or population of interest for the study, included all of the public schools in the state of Texas.

Schools in the state of Texas are divided into 20 separate regional areas that encompassed a total of 8,105 public schools during 2006 (TEA, 2007). Of the public schools listed, approximately 112 schools were not listed in the TEA ASK TED (TEA, 2008) website. These schools were either closed, or they were omitted from the website. The total population of schools that was used in the study numbered 7,893. Schools that did not receive a rating by the state of Texas' TAKS test were not grouped by grade level, but were instead counted as missing in the system, and numbered 881. The final count of the number of schools included by campus size, campus level, and campus rating numbered at 7,012. This sample included all possible schools meeting the criteria for the study, and therefore is representative of the State of Texas. Using the largest sample possible is a general rule in quantitative research (Gall, Gall, & Borg, 2003).

Instrumentation

The instrument that was used to collect the data was the campus Academic Excellence Indicator System (AEIS) report rating of the Texas Assessment of Knowledge and Skills (TAKS). TAKS is one of a series of criterion-referenced tests published by the Texas Education Agency intended to measure student achievement in reading, math, and science. The TAKS objectives remained the same in all TAKS grade levels and were defined at each grade level by instructional targets (TEA, 2004). The TAKS campus ratings were collected for the one test administration period: Spring 2006. The AEIS report also contained the campus type, campus level, and the location of the campus.

The Texas Education Agency provides a public access, online webpage, as well as documents that contains a directory for all principals in the state of Texas (ASKTED, 2008), and constitutes the final instrument for the study. Principals were listed by name and campus type as well as contact information and location. Gender data for school principals were ascertained from the list and verified.

Procedures

Data regarding gender and campus rating were gathered from the Texas Education Agency data bank. Further, campus level and campus size data were also collected from AEIS reports. A database of campus information was developed with a list of Texas principals' gender for all public campuses, accountability ratings, campus level, and campus size, using the Statistical Package for the Social Sciences (SPSS 15.0).

Results

Data Preparation

In order to utilize the SPSS program for statistical data, and for ease of data analysis, the original data were converted into specific coded items prior to analysis. Each variable was coded numerically, for ease of data entry into SPSS, and for data analysis. There were four variables in the data file collected for all Texas public school campuses: gender of principal, level of school, size of school, and accountability rating. The gender of campus principal was coded with either 0

= male principal or 1 = female principal. Level of school was originally coded using several codes, including PK/K campuses. However, due to group sizes, and the fact that many schools did not receive the accountability variable (level), these schools were recoded as Missing. Campus levels were as follows: K-5 as elementary, 6-8 as junior high, and 9-12 as high school. Campus level was then recoded with a 0 = elementary school, 1 = junior high school, or 2 = high school level.

Initially, the number of students at each campus was coded by using five groups ranging from 500 students up to 3,000. Ultimately, the number of students was recoded to make three appropriate groupings for the comparative analysis. Therefore, the number of students was recoded as 0 = 0 to 500, 1 = 501-1,000, and 2 = 1,001+. Campus accountability rating was coded as follows: 0 = exemplary, 1 = recognized, 2 = acceptable and 3 = unacceptable.

Once all data were entered, recoded, and verified for accuracy, the comparative data analysis was conducted. The data were compared using the crosstabulation and Chi-square test, which is a nonparametric test of statistical significance used for categorical data where observed and expected frequencies of events are compared (Green & Salkind, 2005). The contingency coefficient Cramer's *V*, which assesses the strength of the relationship between row and column, was also used. According to Green & Salkind (2005), Cramer's *V* tells the magnitude of the difference in variables that have more than two levels by rescaling phi (another strength measure) to a scale between 0 and 1.

Descriptive Statistics

Four separate frequency tables were obtained for each of the study variables. A frequency table is constructed by arranging collected data values in ascending order of magnitude with their corresponding frequencies (Green & Salkind, 2003). As gender was relative to the study, a count of all of the principals in the state of Texas was necessary, and was thus included as the first table. The data for Table 1 were taken from the TEA (2008) website indicating the name of every school campus in Texas. Once the information was gathered, the TEA ASKTED (TEA,2008)website, was reviewed for every campus, with the name of the principal listed. Table 1 displays the frequency distribution of the prevalence of male and female principals for the public schools in the state of Texas.

Table 1. Frequency Distribution of Principal Gender, 2006 (N = 7,893)

Score	<i>N</i>	%
Male	3,503	44.4
Female	4,390	55.6
Total	7,893	100.0

The sample size represents all public school principals in the state of Texas during the year 2006 (TEA, 2008). The data revealed that women occupied 55.6 % of the principal

positions in the state of Texas, while the percentage of men that occupied the principal position was noted at 44.4%. Although women occupied over half of the principal positions, further analyses were necessary in order to validate whether or not the findings were significant.

Table 2 narrows down the school campus level into three separate categories (elementary, junior high, and high school). The campus names and levels were obtained from the TEA (2008) website, and were listed alphabetically by District. Each school campus was listed, along with the level of the campus. Table 2 represents the frequency table for the campus level-recode.

Table 2. Frequency Distribution of Campus Level-Recode (N = 7,893)

Score	N	%
Elementary	4,058	51.4
Junior High	1,505	19.1
High School	1,449	18.4
Total	7,012	88.8
Missing	881	11.2
Total	7,893	100.0

Elementary campuses were the most numerous in the state of Texas with 4,058 or 51.4%. Junior high campuses ranked second in number with 1,505 or 19.1%. High school campuses were the fewest with 1,449 or 18.4%. There were 881 campuses that were excluded from the study due to their ineligibility of taking the TAKS test. Generally, these campuses were listed as PK/K campuses.

Results for the campus rating recode are presented in Table 3, with a row in the frequency table representing each of the categories rating the school campuses for the state of Texas. Six hundred eighty schools were excluded, as they received no rating or were excluded by TEA (TEA, 2008).

Table 3. Frequency Table for Campus Rating-Recode (N=7,893)

Campus Rating	N	%
Unacceptable	268	3.7
Academically Acceptable	3,572	45.3
Recognized	2,802	35.5
Exemplary	571	7.2
Total	7,213	91.4
Missing	680	8.6
Total	7,893	100.0

The total number of schools that received a rating by the TEA (2006) was 7,213. Of the schools receiving a rating, 268 campuses received an unacceptable rating by the state of Texas. This was equivalent to 3.7% of the total population. The majority of schools tested as academically acceptable (3,572) with 45.3%. Schools that were rated as recognized accounted for 35.5% with 2,802 campuses statewide. Only 7.2% of schools received an exemplary rating with 571 schools total. Schools that were missing from the campus rating accounted for 8.6% of the total number of schools.

Table 4 reports the frequency distribution table for the total number of students at each campus. Campus size was relevant to determine if the prevalence of gender was significantly related to the size of a campus. Table 4 reveals the frequency distribution for the variable of campus size.

Table 4. Frequency Distribution of New Number of Students (N = 7,893)

Number of Students	N	%
0 – 500	3,919	49.7
501 – 1000	3,150	39.9
1001 +	823	10.4
Total	7,892	100.0
Missing	1	0.00
Total	7,893	100.0

Research Question 1

The first research question was: What gender of campus administrator is most prevalent at the elementary, junior high, and high school levels?

The 2006 data indicated that there are more elementary campuses in the state of Texas, while junior high and high school campuses are nearly equivalent percentagewise. Historically, research has indicated that the majority of elementary campus positions in the United States were held by women, with 69% in 2000 by the U.S. Department of Education. Results indicated that at the elementary level, women were the most prevalent with 73.5% of all elementary principals being women.

At the junior high level, men outnumbered women with 58.7% male principals. High school results indicated that men also outnumbered women, with 70.2% male.

Gender and campus level were found to be significantly related, Pearson $\chi^2(2, N = 7,012) = 1,038.81, p = .000$, Cramer's $V = .38$, a moderate to large effect size. The prevalence of men at the elementary, junior high, and high school level were .27, .59, and .70, respectfully. The prevalence of women at the elementary, junior high, and high school level were .74, .41, and .30, deferentially.

Research Question 2

The second research question was: What is the relationship between gender and campus success as measured by the Texas TAKS test?

Accountability ratings are categorized by the state of Texas and the ratings were kept the same for this study: exemplary, recognized, acceptable, and unacceptable. The prevalence of gender, as it relates to campus accountability rating, is important as Federal funding can be withheld from campuses receiving an unacceptable rating, and may influence hiring practices in the future.

A two-way contingency table analysis was utilized to evaluate whether administrator gender was related to campus rating. The two variables consisted of administrator gender, crosstabulated with four levels of campus rating (exemplary, recognized, acceptable, and unacceptable). Gender and campus rating were found to be significantly related, Pearson $\chi^2(3, N = 7893) = 202.95, p = .000$, Cramer's $V = .16$, a small to moderate effect size. The prevalence of men at the exemplary, recognized, acceptable, and unacceptable rating were .27, .37, .49, and .64, correspondingly. Women in the same order of academic rating were realized at .73, .63, .51, and .36. Therefore, it seems that the prevalence of women at the exemplary, recognized, and academically acceptable campus rating were higher than that of their male counterparts; while the most prevalent campus rating for male principals was that of unacceptable.

Research Question 3

The final research question was: What is the relationship between gender and campus size?

In order to report the campus size, the TEA website ASK TED (2008) was utilized for each school campus in the state of Texas. The website reported results for the year 2005/2006 by indicating the number of students on each campus. The numbers were recoded in order to procure a manageable list with which to categorize school campus numbers. Results were then crosstabulated for observed and expected frequencies. Campuses were divided into three numerical groups: 0 – 500 students, 501 – 1,000 students, and 1,001 + students.

Data indicated that men hold the majority of positions at campuses that have from 0 – 500 students, while women hold the majority of positions at campuses that have from 501 – 1,000 students. Men also hold the majority of positions at campuses with populations of 1,001 + students. The largest group of male principals was 2,052 at small campuses. The largest group of female principals was 2,175 at middle-sized campuses.

A two-way contingency table analysis was utilized to evaluate whether administrator gender was related to campus size. The two variables consisted of administrator gender crosstabulated with three levels of campus size (0 - 500, 501 – 1,000, and 1,001 + students). Gender and campus size were found to be significantly related, *Pearson* $\chi^2(2, N = 7892) = 390.50, p = .000$, Cramer's $V = .22$, a moderate effect size. The prevalence of men at the 0 – 500 students, 501 – 1,000 students, and 1,001 + students size of campus were .52, .31, and .58, respectively. The prevalence of women at the same size campuses was .48, .69, and .42, coordinately.

Discussion

Hiring practices should focus on experience, professional development, collegiality, and training of school principals, rather than giving credence to gender. The identification of gender bias that women principals face as school administrators has been an important component in the process of increasing opportunities for women who sought advancement. Eagly (2007) pointed out that “the good performance of business organizations that have more women among their executives provides an argument for nondiscrimination that complements the more fundamental

arguments that discrimination flouts laws and violates the American value of equal opportunity” (p. 6). The observations and studies presented in my study may contribute to insights that would help central office administrators and school boards when making decisions on principal candidates in the state of Texas. Hiring the most qualified person should remain the focus, not gender. Using action skills to address contemporary problems faced by female school administrators should enable current candidates to achieve success (Smith & Hale, 2002).

The results of the study indicated that the prevalence of female principals is greater in the state of Texas than the prevalence of male principals. Past research for the United States had indicated that men were more prevalent in principal positions. As reported by Mertz (2006), the hegemony of men during the 1970s in principalship positions had maintained a foothold for over 30 years. Women principals have been the prevalent gender in the state of Texas since 1998, according to the TEA (2002). Although women have been the prevalent gender for the state of Texas, the placement of women at specific campus levels is noteworthy.

Historically, research had indicated that there has been a distinctive pattern of male dominance in public administration, particularly at the secondary school level (Mertz, 2006), and the results of this study make the same implication. Gotwalt and Towns (1986) reported that women occupied 55% of elementary schools, 12% of junior high schools, and 6% of high schools during the 1930s. Results from my study indicated that women held 73.5% of elementary positions, 41.3% of junior high positions, and 29.8% of high school positions. The greatest increase for women occurred in the junior high school positions as women have gained 29.3% since the 1930s. The second increase in position occurred at the high school level as women have gained an increase of 23.8%. It would appear that the results of this study support historical data in reporting that women are more prevalent in elementary principal positions.

To date, there were no studies available with regard to gender and campus rating for the position of the principal in the state of Texas for the TAKS test. The No Child Left Behind Act of 2001 made school campuses accountable for the academic success of each student. Student scores were compiled, averaged, and grouped in order to give the campus an AEIS rating indicating academic success or failure (TEA, 2002). The study revealed that the gender most frequently associated with an unacceptable rating was that of male.

The final conclusion was found with regard to campus size. Once again, no data were found in the literature with regard to principal gender and campus size. I believed that a variable related to size of campus might reveal a prevalence of gender. Results indicated that the prevalence of gender at the campus size of 0-500 and 1,001 + students was male. Results for campus size of 501-1,000 students were most prevalent with the gender of female. The relationship is significant and the strength of the relationship was moderately strong.

The implications of the study are relative to the hiring practices of school administrators as they continue to realize the mandates that are required for Texas state accountability in order to receive federal funding. The findings show that schools that employ a female principal have an overall better campus accountability rating than that of their male counterparts. Although women have made a tremendous leap in the number of positions attained, they have still been relegated into the role of the nurturer, by being placed historically and prevalently into

elementary campuses. Interestingly, women have attained more positions at the junior high school level than ever before. Administrators in charge of hiring decisions at school districts may want to consider research data that might reveal trends, implications, and significant findings with regard to gender and campus rating.

Implications may further necessitate further examination of differences in gender when schools are involved in making hiring decisions with regard to state accountability. Although current results indicate a higher accountability rating for campuses lead by women, historical trends of hiring men continue to flourish in a world where education and research is supposed to be esteemed over all things. The research has set out to discover the overall significant principal gender of school campuses that have been rated as acceptable or above in the state of Texas. Further, implications of the study may creating a discrimination towards men in hiring practices if districts consider only the data concerned with unacceptable campus ratings that was reported.

Research is designed to further explore and understand the many variables that are associated with investigatory enlightenment. Research is necessary to understand historical trends, associations, and influences that shape outcomes in our world. This study attempted to discover the changes that have occurred in an ever-developing society which has struggled for equality in the workplace, competition to succeed, and accountability for actions. Further research on this topic is still needed.

References

- Blackmore, J. (1989). Educational leadership: A feminist critique and reconstruction. In J. Smyth (Ed.), *Critical perspectives on educational leadership*, 93-129. Falmer Press: Barcombe.
- Blasé, J., & Blasé, J. (1998). Inquiry and collaboration: Supporting the lifelong study of learning and teaching. *ASCD International Journal for Leadership in Education*, 2(7), 1-10.
- Boyle, P. (2004). School boards and public values. *American School Board Journal*, 3(1), 22-27.
- Broadbridge, A., & Hearn, J. (2008). Gender and management: New directions in research and continuing patterns in practice. *British Journal of Management*, 19(1), 38-49.
- Capper, C. A. (Ed.). (1993). *Educational administration in a pluralistic society*. New York: State University of New York.
- Eagly, A. H. (2007). Female leadership advantage and disadvantage: resolving the contradictions. *Psychology of Women Quarterly*, 31(1), 1-12.
- Eagly, A. H., Karau, S. J., & Johnson, B. T. (1992). Gender and leadership style among school principals: A meta-analysis. *Educational Administration Quarterly*, 28, 76-102.
- Fels, A. (2004). Do women lack ambition? *Harvard Business Review*, 82(4), 58-60.
- Fraenkel, J. R., & Wallen, N. E. (1996). *How to design and evaluate research in education* (4th ed.). New York: McGraw-Hill.
- Gall, M. D., Gall, J. P., & Borg, W. R. (2003). *Educational research: An introduction* (7th ed.). Boston: Allyn & Bacon.
- Gladstone, L. W. (2001). The long road to equality: What women won from the ERA ratification effort. *Library of Congress*. Retrieved March 6, 2008 from: <http://memory.loc.gov/ammem/awhhtml/aw03e/aw03e.html>.
- Glazer, N. Y. (1991). Between a rock and a hard place: Women's professional organizations in nursing and class, racial, and ethnic inequalities. *Gender & Society*, 5, 351-372.
- Gotwalt, L., & Towns, W. (1986). Rare as they are, women at the top can teach us all. *Executive Educator*, 8(12), 13-14.
- Green, S. B., & Salkind, N. J. (2003). *Using SPSS for Windows: Analyzing and understanding data* (3rd ed.). Upper Saddle River, NJ: Prentice-Hall.
- Green, S., & Salkind, N. (2005). *Using SPSS for Windows and Macintosh* (4th ed.). Upper Saddle River, NJ: Pearson Prentice Hall.
- Gupton, S. L., & Slick, G. A. (1995) *Highly successful women administrators: The inside stories of how they got there*. California: Corwin Press, Inc.
- Helgesen, S. (1990). *The female advantage*. New York: Doubleday.
- Lynch, K., & O'Riordan, C. (1990). Inequality in higher education: A study of class. *British Journal of Sociology of Education*, 19(4), 445-478.
- Mertz, N. T. (2006). The Promise of Title IX: Longitudinal study of gender in urban school administration, 1972 to 2002. *Urban Education*, 41(1), 544-559.
- Morgan, M. J. (2004). Women in a man's world: Gender differences in leadership style at the military academy. *Journal of Applied Social Psychology*, 34(12), 2482-2502.
- National Center for Education Statistics, (2007). *Digest of Education Statistics*. Retrieved from http://nces.edu.gov/programs/digest/d07/tables/dt07_082.asp
- No Child Left Behind Act (2001). Retrieved from www.ed.gov/nclb/landing.html
- Norusis, M. (2004). *SPSS 12.0 guide to data analysis*. Upper Saddle River, NJ: Prentice

- Hall.
- Phillips, M. D., & Glickman, C. D. (1991). Peer coaching: Developmental approach to enhance teacher thinking. *Journal of Staff Development*, 12(2), 20-25.
- Popiel, J. J. (2004). Making mothers: The advice genre and the domestic ideal, 1760-1830. *Journal of Family History*, 29(4), 339-350.
- Rousmaniere, K. (2006). *The "business" of reforming American schools*. Albany: State University of New York Press.
- Shakeshaft, C. (1987). *Women in educational administration*. Newbury Park, CA: Sage.
- Smith-Thibodaux, N. (1991). *Women superintendent's perception of managerial/leadership competencies: A national survey*. Unpublished doctoral dissertation, Texas A&M University, College Station.
- Smith, P., & Hale, R. P. (2002). *Making it work: Women's ways of leading*. New York: Guilford Press.
- Texas Education Agency (2004). *AEIS 2003-2004*. Available from ritter.tea.state.tx.us/perfreport/aeis
- Texas Education Agency (2006). *AEIS 2005-2006*. Available from ritter.tea.state.tx.us/perfreport/aeis
- Texas Education Agency, (2007). *AEIS 2006-2007*. Available from ritter.tea.state.tx.us/perfreport/aeis
- Texas Education Agency, (2008). *AEIS 2007-2008*. Available from ritter.tea.state.tx.us/perfreport/aeis
- Texas Education Agency (2008). ASK TED (2008). Texas Education Agency. Available from askted.tea.state.tx.us
- Tyree, C. L. (1995). Women in education: Are we perpetuating societal attitudes by moving toward an androgynous leadership style? In B. Irby & G. Brown (Eds.), *Women Executives: Voices and Visions*. Austin, Texas: The Texas Council of Women School Executives.
- U.S. Department of Education, (2000). Retrieved November 20, 2007 from www.ed.gov

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