

# School Leadership Review

---

Volume 4 | Issue 2

Article 4

---

2009

## Relationship Between Student Academic Achievement and Gender of Campus Administrator

Pam Winn  
*Tarleton State University*

Susan Erwin  
*Tarleton State University*

Jim Gentry  
*Tarleton State University*

Mary Cauble  
*Tarleton State University*

Follow this and additional works at: <https://scholarworks.sfasu.edu/slr>



Part of the [Educational Administration and Supervision Commons](#), [Educational Leadership Commons](#), and the [Gender Equity in Education Commons](#)

[Tell us](#) how this article helped you.

---

### Recommended Citation

Winn, Pam; Erwin, Susan; Gentry, Jim; and Cauble, Mary (2009) "Relationship Between Student Academic Achievement and Gender of Campus Administrator," *School Leadership Review*. Vol. 4 : Iss. 2 , Article 4. Available at: <https://scholarworks.sfasu.edu/slr/vol4/iss2/4>

This Article is brought to you for free and open access by the Journals at SFA ScholarWorks. It has been accepted for inclusion in School Leadership Review by an authorized editor of SFA ScholarWorks. For more information, please contact [cdsscholarworks@sfasu.edu](mailto:cdsscholarworks@sfasu.edu).

Relationship Between Student Academic Achievement and Gender of  
Campus Administrator

Pam Winn, Tarleton State University  
Susan Erwin, Tarleton State University  
Jim Gentry, Tarleton State University  
Mary Cauble, Tarleton State University

Studies of the effectiveness of women's leadership have been recommended by researchers for over three decades (e.g. Eckman, 2004; Edson, 1988; Schmuck, 1981; Shakeshaft, 1989). Burke & Nelson (2002) and Smulyan (2000) have suggested that a woman's leadership experience is fundamentally influenced by gender. As greater numbers of women fill educational administration positions previously held by men (Addi-Raccah, 2006; Rusch & Marshall, 2006), opportunities to study leadership differences and effectiveness of men and women in meeting unique demands of their campuses can be measured. Although issues related to women leaders in superintendent positions have been explored (Tallerico, 1999; Brunner, 1999; Blount, 1998; Grogan, 1996), few studies have investigated women's leadership at the campus level (Goldberg, 1991; Ortiz 1982; Shakeshaft, 1989; Schneider, 1986). Furthermore, identification of the complex leadership attributes of women might clarify the dynamics of their advancement into campus administration (Burke & Nelson, 2002).

However, determining whether the gender of a public school campus administrator significantly affects a school's academic performance is a precursor to more detailed studies of engendered leadership differences. The purpose of this study was to determine to what degree student academic achievement was affected by the gender of a school's principal. A Texas principal evaluation database provided demographic data regarding campus administrators and state accountability ratings based

on campus-wide student academic achievement. Should a significant relationship be found between the gender of the campus leader and campus-wide student academic achievement, future investigations would be needed to determine which specific leadership attributes vary most between men and women in positions of campus administration.

### Review of Literature

Throughout the past three decades, studies have been undertaken to determine to what degree men and women differ in terms of leadership. Related topics addressed in this review included an examination of: 1) the shifting leadership trends of professional women, particularly women educational leaders; 2) differences in the career pathways of men and women into educational leadership; and finally, 3) the role of school administrators in student academic achievement.

#### *Trends in Women's Leadership*

In 2008, women were considered for top elective offices by both American political parties; still, only 16% of the House of Representatives, 16% state governors, and 24% state legislators in the United States were women and internationally, the US ranked 85<sup>th</sup> in the world in number of women holding seats in a lower house, legislative bodies (Pew, 2008). This poll revealed Americans rated women leaders higher on seven of eight leadership qualities, yet men were perceived to be better leaders overall. Pew (2008) reported that only one third of all practicing lawyers and physicians, and fewer than 2% of CEOs of Fortune 500 companies are women, even though women currently comprise 57% of all college students and nearly half of all students in MBA, law, and

medical programs. Furthermore, women comprised 46% of the workforce, but only 38% held management positions.

Similar gender trends in leadership have been reflected in education. Women represent 79% of the educational workforce, but only between 14-18% of school superintendents are women (Brunner & Grogan, 2005; Couse & Russo, 2006; Glass, 2000). As Skrla (1999) found, women educators were 40 times less likely to serve as superintendents than their male counterparts.

### *Trends in School Leadership*

Recently, administrative roles in public schools have shifted from a management model (male-orientation) to one focused on student learning and accountability (female-orientation) (Tallerico & Blount, 2004), and reform efforts related to the No Child Left Behind Act of 2001 reinforce this practice (Bjork, 2000). Based on this shifting trend in management emphasis, the future may feature greater numbers of women educators in historically male-dominated administrative positions.

Growing shortages of secondary principals (Eckman, 2004; Houston, 1998; Protheroe, 2001; Young & McLeod, 2001) and shortages in early childhood leadership (Couse & Rousso, 2006; Kagan & Bowman, 1997; National Association for the Education of Young Children [NAEYC], 2002) have opened doors for women leaders. Recent efforts to reinvent the principalship in an effort to recruit and retain school leaders (Boris-Sacter & Langer, 2002; Mathews & Crow, 2003) have included a shifting focus from management to instructional leadership, while improving mentoring, staff support, compensation, working conditions, professional development, and principal preparation (Adams & Hambright, 2004; Ferrandino & Tirozzi, 2001; Institute for Educational

Leadership, 2000). In addition, policy changes to promote the balance of family and work obligations have been suggested (Eckman, 2004). These efforts appear to have produced an administrative environment more conducive to women's leadership needs.

These changes may partially explain why the majority of students in educational administrative preparation programs are women (Rusch, & Marshall, 2006) and why greater numbers of women are entering education leadership positions (Addi-Raccah, 2006; Glass, Bjork, & Brunner, 2000). Women currently represent a majority of elementary school principals and women are beginning to gain positions in secondary school administration (Rusch, & Marshall, 2006). This may indicate the traditional role expectations that women teach in high school and men lead (Marshall 1997) may be weakening. Collard (2003) found that small, collaborative school cultures typically found in elementary schools may affect the satisfaction of women in these leadership positions. On the other hand, as school size increases, as is typical of secondary schools, this collaborative atmosphere crumbles (Collard, 2001).

### *Leadership Stereotypes*

Administrative selection criteria based on male-oriented management models have typically discounted instructional leadership skills which often require no formal certification (Addi-Raccah, 2006; Newton, 2006), and evidence suggests women view their administrative skills in terms of instructional leadership (Acker, 1995; Eagly, Makhijani, & Klonsky, 1992; Fauth, 1984; Glass et al., 2000; Pitner, 1981; Shakeshaft 1989, 1999). Women's leadership style consistently has been described as collaborative and empowering (power to, rather than power over), with a focus on student instruction (Andrews & Basom, 1990; Ah Nee-Benham and Cooper, 1998; Bjork, 2000; Brunner,

2000; Grogan, 1996, 1999; Noddings 1990, 1991; Regan and Brooks 1995).

Nevertheless, as Mathews (2001) points out, the prevailing perception that women are better instructional leaders places them in subordinate, administrative positions to men in educational leadership. It is not altogether clear that instructional leadership skills are related to gender (Hall, 1997; Johnson, 1996; Reay, 1997; Reay & Ball, 2000). However, when expertise in instructional leadership is needed, women are hired more often than men (Addi-Raccah, 2006; Glass et al., 2000). In addition, there is evidence that when administrative recruitment emphasizes instructional leadership, more women apply for positions (Newton, Giesen, Freeman, Bishop, & Zeitoun, 2003).

#### *Women's Career Path to Educational Leadership*

Teachers exhibit leadership skills in the classroom, where they collaborate with adults in a variety of roles and direct student learning (Whitebook, 1997). The knowledge and skill of classroom teachers enhances their leadership ability (NAEYC, 2002). As reported in the section above, women comprise nearly four of every five classroom teaching positions (Brunner & Grogan, 2005; Couse & Russo, 2006; Glass, 2000). However, women's leadership aspirations beyond middle management are negatively affected by limited opportunities to experience administrative duties, while lack of mentors and negative perceptions of women's abilities compound the problem (Glass et al., 2000). Therefore, women educators typically enter leadership with little administrative experience but with longer careers in teaching than their male counterparts, where they develop relational expertise with young people and adults (Lárusdóttir, 2007). Many women administrators begin their careers as preschool or elementary level teachers and enter campus administration at this level (Taba, Castle,

Vermeer, Hanchett, & Flores, 1999; Whitebook, 1997). Among first-time principals, women are likely to be older and have more classroom experience than men (Glass *et al.*, 2000; National Center for Education Statistics [NCES], 2000; Ortiz 1982, Paddock, 1981, Schneider, 1986; Shakeshaft, 1989).

### *Effect of Campus Leadership on Student Academic Performance*

Three decades of educational research has confirmed the importance of effective school leadership on student success (Edmonds, 1979; Lesotte, 1991, 1992; Marzano, Waters, & McNulty, 2005; Reynolds, 1990). School leadership has been cited as second only to classroom instruction in influencing student academic achievement (Leithwood, Louis, Anderson, & Wahlstrom, 2004). Furthermore, countries worldwide have recognized that as school administrator responsibilities continue to increase, there is a growing need to develop effective school leadership (Olson, 2008). For these reasons, gender-oriented leadership skills may impact student learning as never before.

### *Conclusions and Recommendations*

The literature reviewed indicates differences between educational leaders in terms of gender. Current trends find more women entering school leadership positions (Addi-Raccah, 2006; Glass, Bjork, & Brunner, 2000; Rusch, & Marshall, 2006), while it is clear women come to leadership positions from different career pathways than do men (Glass *et al.*, 2000; Lárusdóttir, 2007; NCES, 2000; Ortiz 1982 Taba, et al., 1999; Paddock, 1981, Schneider, 1986; Shakeshaft, 1989; Whitebook, 1997). Regardless of gender, however, evidence clearly demonstrates the importance of school administrators in the academic achievement of students (Edmonds, 1979; Leithwood, et al., 2004; Lesotte, 1991, 1992; Marzano, et al., 2005; Olson, 2008; Reynolds, 1990). In summary, the

number of women in school leadership is increasing, and the leadership experiences of those women differ from those of their male counterparts. Considering the influence of campus administrators on student achievement, it is important to determine the degree to which the gender of campus leaders impacts student achievement. In addition, many researchers have called for studies to test current scholarship, maintaining that the principalship is a gendered role (Addi-Raccah, 2006; Eckman, 2004; Regan & Brooks, 1995; Oplatka & Atias, 2007; Shakeshaft, 1995). Consequently, the purpose of this study was to determine whether student achievement varied according to the gender of the campus leader in Texas K-12 public schools.

## Method

### *Sample*

Data accessed in August 2008 represent records of 701, K-12 public school administrator assessments from schools located throughout the state of Texas. Due to missing data or incomplete data from respondents, 672 (95.9%) respondents' data were deemed useable for analysis. Demographics reported included: Female administrators 52% (351) outnumbered male administrators 48% (321) slightly by 4.3% (29). Elementary/Middle school, Junior High/High School, and Alternative schools represented 47% (313), 47.4% (319), and 6% (40), respectively.

### *Data Source*

Every five years in Texas, principals are required to participate in a state-approved, professional development assessment of their performance. Records from one such assessment, Principal Assessment of Student Success (PASS), provided data for this study (see Appendix A). One component of PASS requires school administrators to



identify their gender and the Texas state accountability rating for their school (see Appendix B). Because Texas accountability ratings are based on student achievement on state academic proficiency tests, the state ratings were used to measure student academic achievement.

### *Data Analysis*

Descriptive statistics were used to report Texas school accountability ratings by gender. Percentages and frequency counts were reported. A chi-squared, cross tabulation (2 x 4) table was utilized to determine dependent/independent relationship between gender and Texas accountability ratings. Pearson's chi-squared statistic ( $X^2$ ) and Cramer's V ( $\phi_c$ ) effect size measures were reported.

### Findings

Of the school campuses represented by principals in the sample, Texas accountability ratings varied: academically acceptable 57% (381), recognized 34% (230), exemplary 7% (49), and academically unacceptable 2% (12). When accountability ratings were compared by the gender of the principal, the following emerged (by male and female, respectively): academically acceptable 31% (203)/26% (178), recognized 13% (91)/21% (139), exemplary 3% (19)/4% (30), and academically unacceptable 1.2% (8)/0.6% (4). Gender differences of principals by accountability ratings were statistically significant  $X^2(3, N = 672) = 14.149, p = 0.003, \phi_c = 0.145$ . The small effect size of 0.145 (Rea & Parker, p. 203) suggested 14.5% of the variance in Texas accountability ratings were accounted for by the gender of the principal. Male principals outnumbered female principals in schools with academically acceptable ratings. However, female principals

were more numerous in schools with exemplary and recognized state ratings. Males were more numerous in schools with academically unacceptable state ratings.

### Conclusion

The findings in this study suggest female principals are as effective, or more effective as their male counterparts with regard to student academic achievement; thus gender should not exclude women from administrative positions. Influencing factors that might account for these findings include: 1) accountability requirements increase as grade level increases; 2) women are more likely to head elementary level schools, whereas men are more likely to head secondary schools; 3) career pathways to the principalship are different for men and women.

First, the accountability requirements for student achievement increase with grade level. At the time the data were collected, not all subjects were tested at all grades levels. Elementary campuses in Texas were academically rated based on student test scores in grade: 3 (reading and math), 4 (writing), and 5 (reading and math). Middle school campuses were rated based on student test scores in grades 6, 7, and 8 (reading, math, and writing). While high school campuses were rated based on student test scores in grade: 9 (math and ELA), 10 (math, ELA, and science), and 11 (math, ELA, science, and social studies). The academic accountability requirements increase by number of subjects and grades tested as the campus grade level increases. Thus, it becomes more difficult for a campus to earn a higher accountability rating as the grade level increases.

Secondly, more women enter the principalship at the pre-school/elementary level (Whitebook, 1977; Taba et al., 1999) rather than at the secondary level, where accountability standards are more complex. Although study findings showed campuses

with the highest ratings (Exemplary and Recognized) were more likely to have female principals, it did not take into account the campus level (i.e., elementary or secondary). Consequently, though women leaders appeared to outperform their male counterparts at the highest levels of campus ratings, campus level accountability standards may account for some of this difference.

A third possible explanation for the findings, as noted in the literature (Glass *et al.*, 2000; Lárusdóttir, 2007; NCES, 2000; Ortiz 1982 Taba, et al., 1999; Paddock, 1981, Schneider, 1986; Shakeshaft, 1989; Whitebook, 1997), is that the career pathway to the principalship varies for males and females. In general, women spend more time in the classroom before entering administration; this additional experience provides greater opportunity to develop instructional expertise and relational skills with students. In addition, accountability ratings based on academic achievement may shift emphasis from school management (male-orientation) to student learning (female-orientation) (see Tallerico & Blount, 2004) favoring women's leadership strengths. Because this study only examined the gender of campus leadership in terms of student achievement measured by school accountability ratings, the role of instructional leadership was emphasized. This may have been an advantage to the women leaders sampled.

Furthermore, while women may enter the principalship with more years of classroom experience, they also bring fewer skills in management due to lack of administrative experience (Glass, et al., 2000). It should be noted that in addition to instructional management, a variety of skills are required for the principalship including, but not limited to, judgment, problem analysis, measurement and evaluation, delegation, motivation of others, and organizational oversight. Krüger, van Eck, & Vermeulen (2005)

found that effective educational leadership depends on the integration of instructional and management models. The National Policy Board of Educational Administration (NPBEA) identified 21 skills for the principalship that were categorized into three domains: functional, programming, and interpersonal (Thompson, 1993).

Because both men and women proved successful in academic leadership, other contributors to their overall performance should be identified. Further research is needed to identify the impact of engendered leadership on student achievement in terms of school size and school grade level. Finally, the interrelationship of gender with other attributes of successful leaders (e.g., NPBEA knowledge and skill domains) is recommended. Specifically, these interrelationships should be studied among leaders of schools with the highest academic ratings to identify the key leadership factors responsible for increased student achievement.

#### References

- Adams, K., & Hambright, W. (2004, May). Encouraged or discouraged? Women teacher leaders becoming principals. *Clearing House*, 77(5), 209-211.
- Accountability Manual (2007, May). Texas Education Agency. Austin TX: Department of Assessment, Accountability, and Data Quality Division of Performance Reporting. (Retrieved May 17, 2008 from <http://www.tea.state.tx.us/perfreport/account/2007/manual/index.html>)
- Acker, S. (1995). The headteacher as career broker: Stories from an English primary school. In D. Dunlap & P. Schmuck (Eds.), *Women leading in education*, (pp. 49–67). Albany, NY: State University of New York Press.

- Addi-Racah, A. (2006, August). Accessing internal leadership positions at school: Testing the similarity-attraction approach regarding gender in three educational systems in Israel. *Educational Administration Quarterly*, 42(3), 291-323.
- Ah Nee-Benham, M. & Cooper, J. (1998). *Narratives of diverse women in school leadership*. Thousand Oaks, CA: Corwin Press.
- Andrews, M., & Ridenour, C. (2006, September). Gender in schools: A qualitative study of students in educational administration. *Journal of Educational Research*, 100(1), 35-43.
- Bjork, L. (2000, February). Women in the superintendency: Advances in research and theory. *Educational Administration Quarterly*, 36(1), 5–17.
- Blount, J. (1998). *Destined to rule the schools: Women and the superintendency, 1973-1995*. Albany, NY: State University of New York Press.
- Boris-Schacter, S., & Langer, S. (2002). Caught between nostalgia and utopia. *Education Week*, 11(21), 34-37.
- Brunner, C. (Ed.). (1999). *Sacred dreams: Women and the superintendency*. Albany, NY: State University of New York Press.
- Brunner, C. (2000, February) Unsettled moments in settled discourse: Women superintendents' experiences of inequality. *Educational Administration Quarterly*, 36(1), 76–116.
- Brunner, C. and Grogan, M. (2005, November). Motivation theory and attitudes of aspiration: Why do[not] women central office administrators seek the superintendency? Paper presented to the Fall Conference of the University Council for Educational

- Burke, R., & Nelson, D. (2002). Advancing women in management: Progress and prospects. In Burke, R., & Nelson, D. (Eds.), *Advancing women's careers: Research and practice* (pp. 3–15). Malden, MA: Blackwell Publishers.
- Collard, J. (2001, July). Leadership and gender: An Australian perspective. *Educational Management & Administration, 29*(3), 343-355.
- Collard, J. (2003, March). Principal well-being in complex times. *International Studies in Educational Administration, 31*(1), 2-14.
- Couse, L., & Russo, H. (2006, February). Service-learning: Mentoring leadership skills in the experienced teacher. *Mentoring & Tutoring: Partnership in Learning, 14*(1), 33-48.
- Eagly A., Johannesen-Schmidt, M., & van Engen, M. (2003). Transformational, transactional, and laissez-faire leadership styles: A meta-analysis comparing women and men. *Psychological Bulletin 129*, 569–591.
- Eagly, A., Makhijani, M., & Klonsky, B. (1992). Gender and the evaluation of leaders: A meta-analysis. *Psychological Bulletin, 111*, 3–22.
- Eckman, E. (2004, August). Similarities and differences in role conflict, role commitment, and job satisfaction for female and male high school principals. *Educational Administration Quarterly, 40*(3), 366-387.
- Edmonds, R. (1979). Effective schools for urban poor. *Educational Leadership, 37*, 15-24.
- Edson, S. (1988). *Pushing the limits: The female administrative aspirant*. Albany, NY: State University of New York Press.

- Fauth, G. (1984). Women in educational administration: A research profile. *Educational Forum*, 49, 65-79.
- Ferrandino, V., & Tirozzi, G. (2001). How do you reinvent a principal? *Education Week*, 20(20), 8-9.
- Glass, T. (2000) Where are all the women superintendents? *School Administrator*, 6(57), 28–32.
- Glass, T., Bjork, L., & Brunner, C. (2000) *The study of the American school superintendency. A look at the superintendent of education in the new millennium*. Arlington, VA: American Association of School Administrators.
- Goldberg, C. (1991). *A study of the career paths of administrators in central office positions in New York state public schools*. (ERIC Document Reproduction Service No. ED 341 145)
- Grogan, M. (1996) *Voices of women aspiring to the superintendency*. Albany, NY: State University of New York Press.
- Grogan, M. (1999). Equity/quality issues of gender, race, and class. *Educational Administration Quarterly*, 35(4), 518–536.
- Grogan, M. (2000). Laying the groundwork for a reconception of the superintendency from feminist postmodern perspectives. *Educational Administration Quarterly*, 36, 117-142.
- Houston, P. (1998). The ABC's of administrative shortages. *Education Week*, 17(38), 32-44.
- Institute for Educational Leadership. (2000, October). *Leadership for student learning: Reinventing the principalship*. A report of the Task Force on the Principalship,

- School Leadership for the 21st Century Initiative. Washington, DC: Institute for Educational Leadership.
- Kagan, S., & Bowman, B. (1997). *Leadership in early care and education*. Washington, DC: National Association for Education of Young Children.
- Krüger, M., van Eck, E., & Vermeulen, A. (2005, August). Why principals leave: Risk factors for premature departure in the Netherlands compared for women and men. *School Leadership & Management, 25*(3), 241-261.
- Lárusdóttir, S. (2007, April). 'The fact that I'm a woman may have been the defining factor.'. *Educational Management Administration & Leadership, 35*(2), 261-276.
- Leithwood, K., Louis, K., Anderson, S., & Wahlstrom, K. (2004). *How leadership influences student learning. A commissioned report*. New York: Wallace Foundation.
- Lesotte, L. (1991). *Correlates of effective schools: The first and second generation*. Okemos, MI: Effective Schools Products.
- Lesotte, L. (1992). "Principal" insights from effective schools. *Education Digest, 58*(3), 14-17.
- Marshall, C. (Ed). (1997). *Feminist critical policy analysis: A perspective from primary and secondary schooling*. New York: Routledge.
- Marzano, R., Waters, T, & McNulty, B. (2005) *School leadership that works: From research to results*. Alexandria VA and Aurora, CO: Association for Supervision and Curriculum Development and Mid-continent Research for Education and Learning.
- Matthews, J. (2001). Chief academic officers. *The School Administrator, 58*(6), 12-17.



- Matthews, L., & Crow, G. (2003). *Being and becoming a principal: Role conceptions for contemporary principals and assistant principals*. Boston, MA: Allyn and Bacon.
- National Association for the Education of Young Children [NAEYC]. (2002). Standards for early childhood professional preparation: Advanced programs. Retrieved July 28, 2008 from [http://www.naeyc.org/faculty/pdf/advanced\\_standards.pdf#xml=http://naeychq.naeyc.org/tehis/search/pdfhi.txt?query=standards+for+early+childhood&pr=naeyc&prox=sentence&rorder=750&rprox=500&rdfreq=1000&rwfreq=1000&rlead=1000&sufs=2&order=r&cq=&id=452256037e](http://www.naeyc.org/faculty/pdf/advanced_standards.pdf#xml=http://naeychq.naeyc.org/tehis/search/pdfhi.txt?query=standards+for+early+childhood&pr=naeyc&prox=sentence&rorder=750&rprox=500&rdfreq=1000&rwfreq=1000&rlead=1000&sufs=2&order=r&cq=&id=452256037e)
- National Center for Education Statistics [NCES]. (2002). Profile of undergraduates in U.S. postsecondary institutions: 1999–2000. Retrieved August 28, 2008 from <http://nces.ed.gov/pubs2002/2002168.PDF>
- Newton, R. (2006, October). Does recruitment message content normalize the superintendency as male? *Educational Administration Quarterly*, 42(4), 551-577.
- Newton, R., Giesen, J., Freeman, J., Bishop, H., & Zeitoun, P. (2003). Assessing the reactions of men and women to attributes of the principalship. *Educational Administration Quarterly*, 39, 505-531.
- Noddings, N. (1990). Feminist critiques in the professions. In C. B. Cazden (Ed.), *Review of research in education*, (pp. 393-424). Washington, DC: American Educational Research Association.
- Noddings, N. (1991). The gender issue. *Educational Leadership*, 49(49), 65–70.
- Olson, L. (2008, April). Lack of school leadership seen as a global problem. *Education Week*, 27(33), 8.

- Oplatka, I., & Atias, M. (2007, January). Gendered views of managing discipline in school and classroom. *Gender & Education, 19*(1), 41-59.
- Ortiz, F. (1982). *Career patterns in education: Women, men, and minorities in school administration*. New York: Praeger.
- Paddock, S. (1981). Male and female career paths in school administration. In P. Schmuck, W. Charters, & R. Carlson (Eds.), *Educational Policy and Management: Sex Differentials* (pp. 187–198). New York: Academic Press.
- Pew Research Center. (2008, August). *A paradox in public opinion: Men or women: who's the better leader?* Retrieved September 3, 2008 from <http://pewresearch.org/pubs/932/men-or-women-whos-the-better-leader>
- Pitner, N. (1981). Hormones and harems: Are the activities of superintending different for a woman? In P. Schmuck, W. Charters, Jr., & R. Carlson (Eds.), *Educational Policy and Management* (pp. 273-295). New York: Academic Press.
- Protheroe, N. (2001). *Attracting and retaining high quality people for the principalship: Problems and possibilities*. Paper presented at the annual meeting of the American Education Research Association, Seattle, WA.
- Rea, L. M., & Parker, R. A. (1992). *Designing and conducting survey research*. San Francisco: Jossey-Bass.
- Reay, D. and Ball, S. (2000). Essentials of female management. *Educational Management and Administration, 28*(2), 145–159.
- Regan, H. and Brooks, G. (1995). *Out of women's experience: Creating relational leadership*. Newbury Park, CA: Corwin.

- Reynolds, D. (1990). An introduction to managing school effectiveness. *School Organisation*. 10(2-3), 163-165.
- Rusch, E., & Marshall, C. (2006, July). Gender filters and leadership: Plotting a course to equity. *International Journal of Leadership in Education*, 9(3), 229-250.
- Schneider, G. (1986). *Career path and mobility differences of women and men in educational administration*. Paper presented at the annual meeting of the American Educational Research Association, San Diego, CA.
- Shakeshaft, C. (1989). *Women in educational administration*. Newbury Park, CA: Corwin.
- Shakeshaft, C. (1995). A cup half full: A gender critique of the knowledge base in educational administration, in: R. Donmoyer, M. Imber, & J. Scheurich (Eds.), *The knowledge base in educational administration: Multiple perspectives* (pp. 139–157). Albany, NY: State University of New York Press.
- Shakeshaft, C. (1999). The struggle to create a more gender-inclusive profession. In J. Murphy and K. Louis (Eds), *Handbook of research on educational administration*, (2nd ed., pp. 99–116). San Francisco: Jossey Bass.
- Skrla, L. (1999, April). *Femininity/masculinity: Hegemonic normalizations in the public school superintendency*. Paper presented at the annual meeting of the American Educational Research Association, Montreal, Quebec, Canada.
- Smulyan, L. (2000) Feminist cases of nonfeminist subjects: Case studies of women principals. *International Journal of Qualitative Studies in Education*, 13, 589–610.

- Taba, S., Castle, A., Vermeer, M., Hanchett, K. & Flores, D. (1999). Lighting the path: Developing leadership in early education, *Early Childhood Education Journal*, 26(3), 173–177.
- Tallerico, M. (1999). Women and the superintendency: What do we really know? In C. Brunner (Ed.), *Sacred dreams: Women and the superintendency* (pp. 29–48). Albany, NY: State University of New York Press.
- Tallerico, M., & Blount, J. (2004, December). Women and the superintendency: Insights from theory and history. *Educational Administration Quarterly*, 40(5), 633-662.
- Tallerico, M., & Burstyn, J. (1996). Retaining women in the superintendency: The location matters. *Educational Administration Quarterly*, 32, 642-664.  
<http://www.tea.state.tx.us/perfreport/account/2007/manual/index.html>
- Thacker, R. (1995). Gender, influence tactics, and job characteristics preferences: New insights into salary determination. *Sex Roles*, 32, 617–638.
- Thomson, S. (Ed.). (1993). *Principals for our changing schools: The knowledge and skills base*. Fairfax, VA: National Policy Board for Education Administration.
- Whitebook, M. (1997). Who's missing at the table? Leadership opportunities and barriers for teachers and providers. In S. Kagan & B. Bowman (Eds.), *Leadership in early care and education*. Washington, DC: National Association for Education of Young Children.
- Young, M., & McLeod, S. (2001, October). Flukes, opportunities, and planned interventions: Factors affecting women's decisions to become school administrators. *Educational Administration Quarterly*, 37(4), 462.