Full Length Research Paper

Leadership Practices of Texas Female Superintendents

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For the purposes of this study, the Leadership Practices Inventory was administered to 82 superintendents in Texas and data including demographic information regarding the district size, gender, and age of the participants was collected. Superintendents in Texas were selected for two reasons: the study met the needs of universities in Texas, and the superintendent pool in Texas contains a wide variety of school sizes and demographics. The Leadership Practice Inventory (LPI) was selected because the validity and reliability has been assessed nationally and because it measures individual leadership practices rather than theoretical applications. The goal of this study is to look at practices and behaviors of women compared to men in the superintendency.

Keywords: superintendents, leadership, gender

Introduction

The leadership practices of educational administrators have significant effects on the environment, culture and climate of schools. School administrators can have a powerful impact on teacher efficacy and student outcomes through effectual leadership practices. School district superintendents are charged with shaping the overarching vision and implementing mission of the entire school district. Understanding the successful leadership practices of superintendents and whether these practices vary by gender, is vital to superintendent programs in preparing successful candidates. The researchers will examine data about dominant leadership practices from survey responses of both male and female superintendents. Statistical analysis will attempt to identify any leadership similarities or differences that may exist between genders. The basis of the study follows the research done by Kouzes and Posner (2012) related to the leadership practices measured by the Learning Practice Inventory (LPI).

Kouzes and Posner developed the LPI to examine the levels of leadership competencies in organizations. The LPI Self Leadership Practices Third Edition (2003) is a one-page self-assessment consisting of 30 questions. Each question asks the respondent to choose a response number between 1 and 10 and record it in the box to the right of each leadership behavior statement. Based on Kouzes and Posner's research (2012), five practices of exemplary leadership have been identified:

- Model the Way - the ability of the leader to "find [his] voice" and "set the example." Through these activities a leader is able to create a system of shared values.
- Inspire a Shared Vision - the ability of the leader to envision the future and enlist others to give life to the vision. By creating a goal-oriented system with a shared vision the leader is successful.
- Challenging the Process - good leaders look for opportunities for risk-taking, and celebrate both success and failure by learning from mistakes.
- Enabling Others to Act - others are encouraged to work together and become leaders themselves
- Encourage the Heart - recognize the gifts of others and celebrate their contributions.

The LPI analyzes strengths and weaknesses of leaders by measuring these perceived leadership traits.

Literature Review

The leadership practices of school superintendents can vary according to the contexts in which superintendents operate. Louis et al. (2010) stated that, "leadership success depends greatly on the skill with which leaders adapt their practices to the circumstances in which they find themselves, their understanding of the underlying causes of the problems they encounter, and how they respond to those problems" (p. 94). The types of problems faced

by school superintendents vary greatly based on district size and location. Different leadership strengths are necessary to meet these varied needs.

While leadership practices are considered as an individual measure of success, little research has been done to discuss leadership practices within specific contexts. Leithwood, Harris, and Hopkins (2008) suggested that a core set of leadership practices indicate success for leadership in "turnaround schools," although they did not look at specific contexts. Leithwood et al. (2010) also stated, "the ways in which leaders apply these leadership practices, not the practices themselves, demonstrate responsiveness to, rather than dictation by, the contexts in which they work" (p. 31). So the question remains, are there specific leadership practices found to be more evident in male and female superintendents, in spite of context?

Leadership Practices and Gender

Underrepresentation of women in the superintendency is well documented. Though the number of women in the superintendency has increased in recent years, it is still astonishingly low compared to the number of women who are in academics (Silverman, 2004). Since 1992, the number of women in this position has increased to 13% compared to the previous level of 6.6% (Silverman, 2004). While the statistics show a positive trend, it will be approximately 2035 before we reach parity in the superintendency (Derrington & Sharratt, 2008).

Women have been historically underrepresented in the superintendency and important questions about why this disparity exists remain unanswered (Derrington & Sharratt, 2008). Though in recent years there have been an increasing number of women aspiring to and becoming school superintendents, it is likely that there are still barriers in place that are preventing a parity of gender (Derrington & Sharratt, 2008). These researchers cited findings from a 1993 study indicating that women in administrative roles perceived that discriminatory hiring practices were deeply rooted in society, and that the discrimination seemed to be institutionalized.

However, in the 2007 comparative survey, women perceived the barrier that impacted them the most to be self-imposed obstacles (Derrington & Sharratt, 2008). Literature indicates the most discussed and potentially harmful barriers keeping women from the superintendency were women who were "less willing to relocate in order to obtain a superintendent position because of family or spouse's job" and "difficulty balancing the demands of the superintendent position and family responsibilities" (Derrington & Sharratt, 2008, p. 9).

While there are still barriers to women obtaining the superintendency, they are having an easier time than those in a similar position in the past (Silverman, 2004). Changing demographics as well as an increase in accountability of teachers for the achievements of their students has caused the superintendency to grow more complex over time (Bryant, 2010). After the implementation of the No Child Left Behind Act, leadership styles have changed so that administrators can meet

the increasing demands for academic achievement (Burns & Martin, 2010); Black (2007) stated that many schools want to raise student achievement, but do not really understand how effective leadership impacts student achievement. Though women still have to face some discrimination within the education system, as schools are feeling more pressure to achieve higher and higher test scores, they are looking more often to women to lead the school (Silverman, 2004).

In 2004, Richardson published research aimed at determining if there are gender differences in leadership styles and behavior by male and female administrators (Richardson, 2004). Richardson (2004) suggested the existence of differences in leadership styles related to differences in gender. Richardson (2004) used face-to-face interviews as a means of assessing these differences. Though findings indicated that there are distinct differences in leadership styles, researchers did not indicate whether one gender is better equipped to lead over the other (Richardson, 2004).

Leadership Practices and the LPI

The purpose of this research study is to determine if there is a statistically significant difference between the mean responses on each construct of the LPI and the gender of the participants. Identifying the constructs in which there is a significant difference between gender responses could identify areas in which gender can impact leadership practices. Understanding these areas can assist in professional development focus within schools and in hiring practices of school districts searching for school leadership.

Methods

The population represented in the study is a purposeful sample of 918 superintendents in Texas. A listing of superintendents from the state was extracted from the Texas Education Agency database (TEA, 2010). Superintendents that lead charter schools, K-8 schools, or school districts that did not have all grades from Kindergarten through12 were removed from the list for comparative purposes. Approximately 213 entities did not meet these criteria. Only superintendents in traditional (non-charter) K-12 school districts were included in the sample population, of these 918 superintendents approximately 82% were male and 18% were female.

Inquiries were sent to the 918 identified Texas superintendents asking them to participate in a study focusing on the leadership of Texas school superintendents using the contact information from the Texas Education Agency. Only sixty-six of the target population elected to participate. A letter containing an explanation of the project and a copy of the LPI survey were sent to the volunteer sample of 66 with a request that the survey be completed and returned within two weeks. A demographic survey was included with the LPI which asked each respondent for age, gender, ethnicity, the current district size, the number years at current position, the number years at previous position, the first teaching job, the first campus administrative job, the

first district level administrative job, and the age when first becoming a superintendent

Numbered and stamped return envelopes were included to assist in the follow up process. Superintendents were numbered alphabetically to ensure that the researcher could identify which participants to contact regarding submission of the survey. Superintendents were notified in the explanation of the project how the numbering system was designed in order to ensure anonymity in the reporting of findings.

Because the goal response rate was above 70%, all superintendents in the participant group that did not respond within the first week received a reminder in the format of an email. Participants were allowed 3 days for initial delivery, 1-day for response, and a 3-day return delivery. Two weeks following the reminder, a follow-up invitation letter with another survey was sent to all participants who had not responded. The envelopes were numbered with the same numbers used for the first invitation. Respondents were asked to complete and return the survey within two weeks. Once the 2 weeks following the second invitation passed, surveys were collected and analyzed using the software purchased from the publisher, and each of the five leadership practices were correlated. The five practices were then analyzed based on the reported gender of the participants. All responses were collected and scored using the Statistical Package for the Social Sciences (SPSS).

Description of the Sample

For the purposes of this research paper the demographic data evaluated will be only the gender of the participants. As indicated in Table 1, nine of the respondents, or approximately 14%, were female, and 57, or approximately 86%, were male. While not an exact demographic match, the response rate approximates the gender breakdown of superintendents in Texas that fit study criteria.

Table 1.

Frequencies and Percentages of Respondents Based on Gender

Gender

Gender	N	%
Female	9	13.63
Male	57	86.4

Research Question

One research question guides this study: Is there a statistically significant difference between the mean responses on each construct of the LPI and the gender of the participants.

H_1: There is a statistically significant difference between the mean responses on each construct of the LPI and the gender of the participants.

H_0: The is not a statistically significant difference between the mean responses on each construct of the LPI and the gender of the participants.

One delimitation of this study is that the sample contains only 14% females. Looking at a binomial analysis where there are a disparate proportion of participants can limit the generalizability of the findings. However, reporting the study findings is important to current assist in informing the leadership best-practices knowledge base. It may also provide a basis for future studies investigating possible similarities and differences in male and female leadership styles.

Instrumentation

The LPI was developed by designing a set of statements describing individual leadership behaviors. Each statement was originally designed to be measured using a five-point Likert scale, but was altered in 1999 into a more vigorous ten-point Likert-scale. Participants rate themselves; the higher the rating, the more frequently they believe they exhibit the particular leadership behavior being measured. The LPI contains 30 statements. There are six statements that measure each of the five key practices of extraordinary leaders (the constructs).

The Leadership Practices Inventory (LPI) was selected for this study due to its validity and reliability. Validation studies have been conducted for over fifteen years, and the authors of the instrument consistently find the LPI to be both reliable and valid. Kouzes and Pozner's (2012) studies indicate adequate internal reliability, with each construct obtaining a 0.75 Cronbach Alpha score or better., as indicated in Table 2.

Table 2

Reliability Coefficients Reported by Kouzes and Posner (2012)

Constructs	Cronbach Alpha Coefficients for the LPI
Model Way	0.77
Inspire and share vsision	0.87
Challenge the Process	0.80
Enable others	0.75
Encourage the heart	0.87

Additional reliability analyses were conducted for the purposes of this research. These results do not achieve the same reliability coefficients reported by Kouzes and Posner (2012), but do have some similarities. Ordinally, the constructs align themselves identically in both of the analyses. The most reliable construct is the final construct of the instrument. Both the researchers and Kouzes and Posner received solid Cronbach Alpha Coefficients for this construct. As seen in Table 3 the weakest construct would appear to be the fourth construct addressing the ability of the leader to enable others. The data on the reliability of this construct was only 0.521 when analyzed by the researchers, and

0.75 when analyzed by Kouzes and Posner. The final three constructs fall somewhere between the fourth and fifth constructs with regard to reliability coefficients.

Table 3.

Reliability Coefficients Calculated by the Researchers

Constructs	Cronbach Alpha Coefficients for the LPI
Model Way	0.618
Inspire and share vsision	0.767
Challenge the Process	0.611
Enable others	0.521
Encourage the heart	0.868

Findings

Research Question Analysis

The purpose of this research study is to determine if there is a statistically significant difference between the mean responses on each construct of the LPI and the gender of the participants. Each construct was analyzed to determine if there was a statistically significant difference in any of the Five Practices of Exemplary Leadership related to gender. As seen in Table 4, the means for each of the five constructs for female, male and the entire population were determined using SPSS.

Table 4

Gender and Mean Score of the Five Practices of Exemplary Leadership

	Female	Male	Total
Model way	8.65	8.37	8.41
Inspire and share vision	8.02	7.95	7.96
Challenge the process	7.83	7.85	7.84
Enable others	8.63	8.80	8.78
Encourage the heart	8.33	8.03	8.07

Table 5

Statistical Significance

Variable and Source	df	SS	MS	F	P
Model the Way					
Between Groups	1	0.596	0.5962	1.013	0.318
Within Groups	64	37.637	0.588		
Inspire a Shared Vision					
Between Groups	1	0.033	0.033	0.031	0.861
Within Groups	64	68.955	1.077		
Challenge the Process					
Between Groups	1	0.001	0.001	1.349	0.970
Within Groups	64	48.881	0.764		
Enable Others to Act					
Between Groups	1	0.237	0.237	0.757	0.387
Within Groups	64	19.994	0.312		
Encourage the Heart					
Between Groups	1	0.719	0.719	0.599	0.442
Within Groups	64	76.785	1.200		

A statistical Analysis of Variance (ANOVA) was performed in order to determine whether a statistically significant difference exists between construct scores. As seen in Table 5, no construct analysis yielded significance at the .05 level. The largest numerical difference occurred in the fifth construct (Encourage the heart). The difference between the scores of males and females reported here was 0.30. It is interesting to note that this is also the construct with the highest degree of reported reliability. The least amount of difference occurred in construct three (Challenge the process). Male and female averages on this construct were almost identical, with a reported difference of only 0.02. Construct 1 (Model way) had the second highest numeric difference with a reported 0.28. This is very close to the difference in the fifth construct. Overall, while there were no statistically significant differences, there were differences noted.

Discussion

The researchers note that the small sample size of the female superintendents severely limits the generalizability of the findings. With this in mind and based on the findings, the null hypothesis is not rejected. The researchers do note with extreme interest the ratio of group responses between male and female superintendents. These findings do seem to bear out some indications that female superintendents did rate themselves stronger on the leadership construct areas that have shown to have the greatest positive impact on institutions.

There is a lack of statistical significance between the means of each gender on the constructs identified within the LPI, although there were some non-significant differences noted. The lack of statistical significance between the means of each response might indicate that the leadership practices of superintendents do not vary significantly between male and female superintendents. It is important to note that the gender breakdown of respondents was similar (at 14% female) to the overall population (at 18% female). As previous discussed, the discrepancy between the number of female participants and male participants makes the findings of this study somewhat limited, however, the alignment between the sample and population percentages of females lends credence to the information gathered even though the groups were not statistically equivalent.

Leadership style development is influenced by a numerous factors. Most superintendents in the State of Texas are male. It is easy to conjecture that female administrators most likely had male mentors and role models as they aspired to and assumed the superintendents position. Since most superintendent preparation programs draw prospective faculty members from the current superintendent ranks males also dominate curriculum development and internships of superintendent candidates. Based on the limited information available from this research, it may result that as female superintendents increase in number, and affect school district cultures, and superintendent preparation programs, the large-effect leadership constructs that they engender most forcefully will be transmitted to new superintendents regardless of gender Further study will be required.

The limited survey responses from an extremely limited pool of female superintendents necessarily delimit researcher results and conclusions. Even had the entire population responded, there would have been a disparate number of male and female respondents due to the differences in the actual population. The researchers evaluated the need to alter the sampling protocol in order to get more numbers and decided to follow the procedures and not influence the metrics by making personal phone calls. Further research would have to be done with a larger population or with a more diverse representative sample. To address this issue, data gathering at a professional conference or individual superintendent district visits would be required.

Future Research

Future research should make greater attempts to increase response rates from the target population of female superintendents. The researchers also recommend including an analysis of the additional demographic data set and what relationship, if any, exists between these data, leadership practices and gender. This information from recommended future research can prove valuable to superintendent preparation programs, practicing administrators and school boards.

A lack of significant difference in the leadership practices between men and women or various ethnic groups could reduce the discriminatory practices in hiring and could be used to rationalize a more diverse pool of applicants. Finally, this information could be use when hiring future superintendents as part of the screening process.

Conclusion

The field of education has made steady gains in the move toward expanding the role of the superintendent to be more than that of a district level principal. Analysis of the efficacious leadership practices of school superintendents are important as to determine what patterns, if any, exists among successful school leaders. In this study, we found that there was not a significant difference between the practices of leadership based on gender according to responses on Leadership Practices Inventory. The results showing that female superintendents do seem to have stronger self-concepts in two of the leadership areas that have the highest effect on positive institutional leadership outcomes. Female superintendents in this research indicated they felt more able to "encourage the heart" and "inspire and share vision". While the study needs replication with a larger, better balanced sample, this study provides early insight into what differences, if any, exists on daily practices between male and female superintendents. Further studies will need to be done to determine if other demographic information impacts leadership practices or if it is simply individual eclectic leadership styles that work well based on the personality of the school board and the chosen leader.

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