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Perceptions of Leadership Behaviors by Female Principals in North Carolina

Cheryl McFadden, Cathy Maahs-Fladung, Susan Beck-Frazier
and Kermit Bruckner

This study was designed to investigate whether significant differences exist among the perceptions of leadership behaviors of female principals in North Carolina using Bolman and Deal's (1984) four frames (structural, human resource, political, and symbolic) for analysis. Participants consisted of 1,245 female principals from elementary, middle, and secondary public schools in North Carolina. The researchers collected 525 responses for a 53% response rate. Overall, female principals in North Carolina perceive that they use multiple frame perspectives in their leadership behaviors. Furthermore, results indicate that age, parental status, and years in current position made a difference in the number and type of frames female principals use.

Introduction

In the early 1900s, women were discouraged from pursuing administrative roles in the public schools because the belief in male dominance made it difficult to accept women as leaders. A review of the literature of women in administration clearly illustrates that since 1905, there has been a consistent male dominance in all administrative positions except for in the elementary school (Shakeshaft, 1989). By 1928, women held 55% of elementary school principalships, 8% secondary school principalships, 25% county superintendencies, and 1.6% of the district superintendencies. However, these positions were lower paying and held a lower status than the ones held by men in similar positions (Shakeshaft). Although women have broken through the "glass ceiling" of school administration, studies of women and their leadership in schools continues to be limited in comparison to studies of men (Restine, 1993). As the percentages of women entering principal preparation programs continues to increase (McFadden & Smith, 2004), more studies are needed on women in administration.

In 2006, the researchers conducted a study on the perceptions of leadership behaviors by female principals and their assistant principals in the

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third largest public school district in North Carolina. The Leadership Orientation Instrument (Self and Other) developed by Bolman and Deal (1990) to measure four organizational frames (structural, human resources, political, and symbolic) was used in the study. The results of the study indicated that the primary perceived leadership orientation for the female principals as a group was the human resource frame, followed by the structural, political and symbolic. The assistant principals also perceived their female principals with the same leadership orientations. Results of this study also show that collectively, female principals exhibit multiple frame perspectives in their leadership behaviors and assistant principals agreed with this assessment (McFadden & Beck-Frazier, 2007). As a result of this study, the researchers decided that it was important to conduct a much larger and wide scale study of female principals' perceptions of leadership behaviors and to see if certain demographic variables such as age, parental status, and years in current position made a difference in the number and type of frames female principals use.

Review of Related Literature

Introduction

This review of related literature is presented in three sections. The first section discusses the organizational theory suggested by Bolman and Deal (1984) that advocates the use of four frames of reference: (a) structural; (b) human resource; (c) political; and, (d) symbolic. The second section explores a historical perspective of the principal as school leader and the last section reviews the literature on women in school administration.

Organizational Theory of Bolman and Deal

Definitions and assumptions about leadership are numerous and varied. As early as 5,000 years ago, Egyptian hieroglyphics for the words leadership, leader, and follower were recorded (Bass, 1990). Greek philosophers, such as Plato and Aristotle, “looked at the requirements of the ideal leader of the ideal state” (Bass, p. 4). In the Old and New Testaments as well as in Greek and Latin classics, leaders were called prophets, priests, kings, chiefs, and heroes. Machiavelli’s *The Prince*, written during the Renaissance, explained that the keys to the state’s success are found in the qualities of the leader (Bass; Ramsden, 1998).

Although the advent of leadership can be traced to these early beginnings, leadership studies did not begin in earnest until after World War I. Since World War II there has been great interest and research in this area (Lathan, 1993). Leadership exists to the degree that people believe it does, and that belief depends on how individuals, through their interactions, create the realities of organizational life and delineate the roles of leaders within them (Bensimon, Neumann, & Birnbaum, 1989). Several schools of thought have emerged from the social sciences that contain distinctive concepts and assumptions that represent a unique view of how organizations work and the leadership that they need (Bolman & Deal, 2003).

While there are no right or wrong ways to view organizations, one of the most practical theories, suggested by Bolman and Deal (1984), advocates looking at organizations from four different perspectives or frames. These frames are often described as windows, maps, tools, lenses, orientations and perspectives because these images suggest multiple functions (Bolman & Deal, 2003). The four frames are: (a) structural (emphasizes specialized roles and formal relationships); (b) human resource (considers the needs of the individual); (c) political (focuses on bargaining, negotiating, coercion, and compromise); and (d) symbolic (views organizations as cultures with rituals and ceremonies). Each of the frames is powerful and coherent, and collectively, they make it possible to reframe, or view, the same situation from multiple perspectives (Bolman & Deal, 2003). A leader can improve the odds of being successful “with an artful appreciation of the four lenses and how to use them [in order] to understand and influence what’s really going on” (Bolman & Deal, 2003, p. 40).

Structural Frame

The structural frame reflects the idea that thinking rationally and having the right organizational chart will minimize problems and increase performance (Bolman & Deal, 2003). Structural leaders emphasize their role in making decisions, analyzing problems, determining different solutions, choosing the most appropriate strategy and executing it (Bensimon et al., 1989). From this perspective, the structural principal is seen as the center of power within the school.

Leaders who utilize the structural frame appreciate data analysis, stay focused on the bottom line, set clear directions, hold people responsible for

results, and try to resolve organizational problems with new policies and rules (Bolman & Deal, 1992). The structural perspective on leadership is found in works that concentrate on administrative and managerial techniques and provide realistic advice on the art and science of administration (Bensimon et al., 1989). The leader is identified with being decisive, planning comprehensively, solving problems rationally, and managing by objectives (Benezet, Katz, & Magnussin, 1981). In a school, the principal has the authority to decide, direct, or control.

Human Resource Frame

The human resource perspective focuses on human need and assumes that organizations meeting those basic needs will be more successful than those that do not (Bolman & Deal, 1992). This approach is based on studies by McGregor in 1960 which is centered on the idea that human beings have inherent needs for self-actualization and self-control. Human resource leaders honor relationships and feelings and attempt to lead through facilitation and empowerment (Bolman & Deal, 1992). Employee-centered leaders relate to the needs of their constituents and view the workplace as an investment in people.

Political Frame

The political frame emphasizes individual and group interests that often replace organizational goals (Bolman & Deal, 1992). Borrowing from political science, this perspective is the practical process of making decisions and allocating resources within the parameters of divergent interests and scarcity (Bolman & Deal, 2003). According to Bolman and Deal (2003), five statements summarized this approach: (1) Organizations are coalitions; (2) There are enduring differences among coalition members; (3) Important decisions involve allocating scarce resources; (4) Scarce resources and enduring differences make conflict central and power the most important asset; and (5) Goals and decisions emerge from bargaining, negotiation, and jockeying for position among competing stakeholders (p. 186).

Symbolic Frame

The symbolic frame combines concepts and ideas from several disciplines but most notably from anthropology (Bolman & Deal, 1992). Symbols express an organization's culture: "the interwoven pattern of beliefs, values, practices, and artifacts that defines for members who they are and how they do things" (Bolman & Deal, 2003, p. 243). Symbolic leaders pay attention to these elements of myth, ritual, ceremony and stories as well as to other symbolic forms (Bolman & Deal, 1992). They are able to make improvements through the manipulation of symbols and are seen primarily as catalysts or facilitators of an on-going process who channel activities in subtle ways (Bensimon et al., 1989).

Bolman and Deal's (2003) four frames identified effective leaders as an-

alysts and architects (structural frame), catalysts and servants (human resource frame), advocates and negotiators (political frame), and prophets and poets (symbolic frame). A combination of analysis, intuition, and artistry is involved when leaders choose a frame or understand others' perspectives, and this process builds on a lifetime of skill, knowledge, intuition, and wisdom. Research suggests that leaders who integrate elements of the four frames are likely to have more flexible responses to different administrative tasks because they perceive the multiple realities of an organization and are able to interpret circumstances in a variety of ways (Bensimon et al., 1989). Bolman and Deal advocated reframing or looking at events from each of the four frames in order to have a better picture of what is happening in the organization and to make the best decisions possible.

Leaders, such as principals, who can think and act using more than one frame may be able to fulfill the multiple, and often conflicting, expectations of their leadership positions more skillfully than leaders who cannot differentiate among situational requirements (Bensimon et al., 1989). Much of the current research suggests that the effectiveness of leadership can be connected to cognitive complexity as well as to the theory that complex leaders may have the flexibility to comprehend situations through the manipulation of different and competing scenarios (Bensimon et al.). Since greater cognitive complexity is demanded in a turbulent organizational world, leaders need to identify with multiple frames and know how to use them in day-to-day activities (Bolman & Deal, 1991). Leaders, such as principals, who can simultaneously attend to the structural, human, political, and symbolic needs of the organization, are seen as effective while those who focus their attention on a single aspect of an organization's functioning are seen as ineffective (Bensimon et al.).

Historical Perspective

During most of the nineteenth century, schools were led by "loosely structured, decentralized ward boards" (Glanz, 2004, p. 2), but later in the nineteenth century, educational reformers began to change this concept into "a tightly organized and efficiently operated centralized system" (p. 3). As a result, superintendents were given the daily control of schools. They continued to provide supervision during the early decades of the twentieth century, a time of dramatic growth in school enrollment and teacher numbers.

As urbanization intensified and the school system grew more complex, the superintendent lost contact with the day-to-day operations of the schools, and thus this supervision became the responsibility of the principal (Glanz, 2004). Initially, the principal was considered the lead teacher and was given only limited responsibilities, but as schooling expanded, the principalship gradually assumed a more important, managerial position.

The term, principal, denotes the multiple roles of leader, manager,

counselor, cheerleader, administrator, and keeper of the keys (Dunklee, 2000). Duties include “administering all policies and programs; making recommendations regarding improvements to the school; planning, implementing and evaluating the curricular and instructional programs; hiring, coordinating, and developing staff; organizing programs of study and scheduling classes; maintaining a safe school environment; providing stewardship for all school resources; and providing for cocurricular and athletic activities” (Cunningham & Cordeiro, 2000, p. 137). Principals are found in every school; elementary (K–5), middle (6–8) and high (9–12) and are expected to understand “how superiors, employees, patrons, and students define the distinct culture of the principalship” (Dunklee, p. 7).

Women in Administration

Discriminations based on gender and sex-role stereotypes in education as a whole were common and in agreement with bureaucratic school governance (Glanz, 2004). In the early 1900s, women were kept out of administrative roles because the belief in male dominance made it easy to accept that men were leaders and women were natural followers. A look at the number of women in school administration since 1905 illustrates consistent male dominance in all positions except for in the elementary school (Shakeshaft, 1989). According to Shakeshaft, “by 1928, women held 55% of the elementary principalships, 25% of the county superintendencies, nearly 8% of the secondary school principalships, and 1.6% of the district superintendencies” (p. 34). Although at first glance, these statistics seem significant, the jobs were lower paying, lower status and lower power positions than the ones held by men.

While studies of women and their leadership in schools continue to be limited in comparison to studies of men, information does exist about women who have broken through the “glass ceiling” of school administration, and these facts and figures reveal modest representation of women in leadership roles (Restine, 1993). Sustained increases seem promising due to progressively increasing percentages of women making up the ranks of future administrators seeking graduate degrees in leadership preparation programs (Hill & Ragland, 1995). According to Gupton and Slick (1996), “women received 11% of the doctoral degrees in educational administration in 1972, 20% in 1980, 39% in 1982, and 51% in 1990” (p. 136). As a result, the numbers and percentages of women in administrative positions have increased, beginning slowly in the 1970s and accelerating in the 1980s (McFadden & Smith, 2004).

Myths about women’s leadership abilities continue to be significant aspects in the selection of school administrators (Restine, 1993). Women often are encumbered by distorted images and stereotypes such as “icy virgins, fiery temptresses, and silent martyrs” (Hill & Ragland, 1995, p. 7). In addition, negative connotations are associated with the prefix *woman*. Witmer (2006) describes “woman’s work” as housekeeping and “women’s

intuition” as guessing rather than knowing. The need for competent educational leaders demands that these stereotypical images be discarded and leaders sought from all segments of society (Hill & Ragland).

Another important barrier to women in administration is gender-role or cultural stereotyping (Harris, Ballenger, Hicks-Townes, Carr, & Alford, 2004; Hill & Ragland, 1995; Regan & Brooks, 1995; Restine, 1993; Shakeshaft, 1989). It tends to place women in nonleadership roles that limit their goal orientation and inhibit their ability to recognize their ability to lead. Another explanation is that women aspire to achieve in the career they choose initially—teaching, and do not want to become a principal (Shakeshaft). They do not seek administrative positions because they do not view themselves in positions of leadership (Gupton & Slick, 1996). According to Gupton and Slick, “administration in public education is male dominated and generally accepted as such by both males and females” (p. 147).

A study by Thompson (2000) directly contrasted the stereotypical assertions in earlier research by revealing no differences in the perceived effectiveness of leaders regarding gender. His accumulated findings demonstrate that “the broad differences in leadership styles in relation to gender and leadership effectiveness have clear implications for our understanding of how effective managers behave” (Thompson, p. 985). A new appreciation, new understanding, and greater empathy for this group will be gained by reexamining the experiences of women and acknowledging the importance of their leadership abilities (Schwartz, 1997).

The Problem

Leadership has been recognized for centuries. Leadership in education relies on the definition of organizational life and the roles of leaders in those institutions. The roles of leaders may be defined as the behaviors exhibited during day-to-day activities (Glanz, 2004). In a public school, the focus of leadership in the day-to-day activities lies with the principal. Research suggests that leaders who integrate elements of Bolman and Deal’s (1990) four frames are likely to have more flexible responses to different administrative tasks because they perceive the multiple realities of an organization and are able to interpret circumstances in a variety of ways (Bensimon et al., 1989). The ability to use more than one frame increases “an individual’s ability to make clear judgments and to act effectively” (Bolman & Deal, 1991, p. 519).

This theory suggests that the meaning of leadership can be interpreted differently and can lead to different expectations of leadership. A study of the perceptions of female leadership behaviors was warranted because of the growing number of women who have broken through the “glass ceiling” of school administration (Restine, 1993) and the number of women seeking graduate degrees in leadership preparation programs (Hill & Ragland, 1995). Studies of women and their leadership in schools continue to be limited in comparison to studies of men (Restine).

Research Questions

The study was designed to answer the following questions:

1. What do female principals perceive as their prominent leadership behavior?
2. What demographic characteristics influence the leadership orientation of female principals?

Methodology

Participants

During the 2006–2007 school year, North Carolina had 1,246 female principals of elementary, middle and secondary public schools. The researchers conducted a web survey of this population and 1,075 female principals received the survey. Two hundred and fifty eight were undeliverable or the person was no longer in the position. The researchers collected 525 responses for a 53% response rate.

Instrumentation

The Leadership Orientation instrument (LOI) developed by Bolman and Deal (1990) was used to measure the four organization frames (structural, human resource, political and symbolic). LOI has two forms (Self and Other) and only the Self-Survey was used in this study. The Self-Survey has three sections, however, only the first section was used because it yields data directly related to perceptions of leadership behavior and the four frames. Section one contains 32 items with five-point response scales. The use of a five-point Likert allows respondents to indicate the degree to which each leadership state is true (1—never, 2—occasionally, 3—sometimes, 4—often, and 5—always). The instrument was designed to measure eight separate dimensions of leadership, two for each frame: human resource dimensions (supportive and participative), structural dimensions (analytic and organized), political dimensions (powerful and adroit), and symbolic dimensions (inspirational and charismatic). Each frame is sequenced in a pattern of four as follows: the structural frame (items 1, 5, 9, 13, 17, 21, 25, and 29), the human resource frame (items 2, 6, 10, 14, 18, 22, 26, and 30), the political frame (items 3, 7, 11, 15, 19, 23, 27, and 31), and the symbolic frame (items 4, 8, 12, 16, 20, 24, 28, and 32). The scores for the eight items were added and divided by eight to yield a mean score that indicates a primary leadership behavior. The primary leadership behavior is determined by identifying the highest mean.

Data Collection Procedures

Perseus Survey Solutions was used to administer the invitation to the participants and to develop an electronic version of the LOI. Each participant received an electronic invitation with the URL link and two subsequent reminders during a two-week period.

Data Analysis

Descriptive statistics were used to organize and summarize results. The Statistical Package for the Social Sciences (SPSS) was employed to analyze the data. The data were reported in frequency distributions with means and standard deviations. To determine how many frames each principal used, a count of all means that were above 4.0 were calculated. This mean represents use of the frame as “often” to “always”. Use of a particular frame is considered consistent with a mean score of 4.0 or greater. This scoring scale has been used in dissertations that utilized Bolman and Deal’s (1990) Leadership Orientation Instrument (Beck-Frazier, 2005; Harrell, 2006; McGlone, 2005; Sasnett, 2006).

Results

Demographics

Of the female principals who answered the questionnaire, 65.8% were 46 years of age or older, 74.2% were Caucasian and 23.9% were African American. Seventy-one point five percent held a masters degree and 28.2% had an additional year of education or a doctorate. Female principals who were married comprised 84.6% of the sample as opposed to 24.3% who were not married. Female principals who were parents comprised 80.8% of the sample and 19.4% were non-parents (see Table 1).

Female principals had a lengthy teaching record but a short tenure in their current position; 62% of the sample had more than 15 years of public school teaching experience and an overwhelming majority had 10 years or less experience in their current position that being a principal. Sixty-one point nine percent were elementary school principals, 3.5% were K through 8 principals, 20.3% were middle school, 11.8% were high school and 2.6% were alternative school principals (see Table 2).

Reliability

The survey was analyzed for reliability using Cronbach’s Alpha. Jaeger (1993) refers to Cronbach’s Alpha as “a formula for estimating the internal consistency reliability of a measurement instrument. Cronbach’s Alpha uses data collected during a single administration of a measurement instrument, and can be used with instruments that have items with scores that fall into more than two categories (e.g., five-point scale)” (Jaeger, p. 369). The coefficient for developed scales using Cronbach’s Alpha needs to be 0.8 or higher. The survey instrument used in this study utilized a five-point Likert scale as the measurement tool. Table 3 provides information on the reliability and standardized alpha of each set of questions. Results shown in this table support the reliability standard being met by these questions.

Table 4 illustrates the means for all respondents as well as for the following respondents: (1) age 45 or less and those greater than 45, (2) married and unmarried respondents, (3) parents and non-parents, (4) years in current position (those with less than 16 years of experience versus those with

TABLE 1
Demographic Characteristics of Principals.

Demographic Variables		Number of Respondents	Valid Percent
Age	< 25	3	0.7
	26-35	22	4.8
	36-45	132	28.8
	46-55	218	47.5
	56-65	83	18.1
	Over 65	1	0.2
	Not Answered	9	
	Missing	57	
Racial Classification	African American	109	23.9
	Caucasian	339	74.2
	American Indian	5	1.1
	Hispanic	4	0.9
	Not Answered	11	
	Missing	57	
Highest Degree Earned	Bachelor's	1	0.2
	Masters	329	71.5
	Sixth Year	87	18.9
	Doctorate	43	9.3
	Not Answered	8	
	Missing	57	
Marital Status	Unmarried	41	8.9
	Married	348	84.6
	Divorced	58	12.6
	Widowed	13	2.8
	Not Answered	8	
	Missing	57	
Parental Status	Parent	370	80.8
	Non-parent	89	19.4
	Not Answered	9	
	Missing	57	

16 or greater years of experience), (5) years of public school teaching experience (15 or less versus greater than 15) and two compound categories: (a) married with less than 16 years of experience, (b) married with 16 or greater years of experience, (c) unmarried with less than 16 years of experience and (d) unmarried with 16 or greater years of experience. Mean variables were computed for each of the four frames which allowed the authors to compute a mean for each of the four frames for each respondent. These variables were used to conduct *t*-tests.

TABLE 2
Employment Information—Principals.

Demographic Variables		Number of Respondents	Valid Percent
Number of Years of Public School Teaching Experience	0-5	28	6.1
	6-10	64	13.9
	11-15	83	18.0
	16-20	85	18.5
	21-25	70	15.2
	25 Plus	130	28.3
	Not Answered	8	
	Missing	57	
Number of Years in Current Position	0-5	320	69.7
	6-10	106	23.1
	11-15	16	3.5
	16-20	11	52.4
	21-25	5	1.1
	25 Plus	1	0.2
School Level	Elementary	284	61.9
	K-8	16	3.5
	Middle	93	20.3
	High School	54	11.8
	Alternative	12	2.6
	N.A.	9	
	Missing	57	

It is interesting to note that in almost all cases mean scores for each of the groups were 4 or greater indicating that female principles used all four frames. Only the human resources frame for Age 45 or Less (3.9819), Non-Parents (3.9442), and for Unmarried with 16 or less years of public

TABLE 3
Reliability of the 2007 North Carolina Female Principals Survey.

Frame	Mean	SD	Chronbach Alpha Standardized Items
Structural (8 items)	4.32	0.12	0.86
Human Resource (8 items)	4.42	0.10	0.86
Political (8 items)	4.06	0.20	0.83
Symbolic (8 items)	4.13	0.23	0.86

TABLE 4
Means for Symbolic, Structural, Human Resource, and Political Frames.

Frame	Symbolic	Structural	HR	Political
All	4.3158	4.4200	4.0571	4.0639
Age 45 or Less	4.2627	4.3371	3.9819	4.0753
Age GT 45	4.3466	4.4661	4.0984	4.1679
Married	4.3121	4.4301	4.0660	4.1339
Unmarried	4.3273	4.3884	4.0293	4.1368
Parent	4.3301	4.4389	4.0823	4.1543
Non-Parent	4.2490	4.3361	3.9442	4.0486
Yrs. Current Position				
Less than 16	4.3198	4.4170	4.0515	4.1274
16 or greater	4.2101	4.4706	4.1838	4.2857
Years of Public School Experience				
Less than 16	4.3203	4.4372	4.0477	4.1312
16 or greater	4.2965	4.3449	4.0980	4.1495
Married with less than 16 years public school experience	4.3260	4.4576	4.0652	4.1355
Married with 16 or greater years public school teaching experience	4.2519	4.3104	4.0692	4.1269
Unmarried with less than 16 years public school teaching experience	4.3026	4.3738	3.9929	4.1177
Unmarried with 16 or greater public school teaching experience	4.4345	4.4515	4.1871	4.2194

school teaching experience (3.9929) exhibited means of less than 4. Otherwise, all other means were 4 or over (see Table 4 for a full description of the frames for these groups).

T-tests for Difference in Means

Independent Samples *t*-tests were conducted to evaluate the hypothesis that the means were significantly different based on the groupings in the means table for the four frames. Levene's Tests for Equality of Variances were also performed to determine whether the authors could assume equal variances between the two groups. The means for the human resource frame and means for the political frame were significantly different for parents and non-parents. For age 45 or less and age greater than 45, the means for the human resource and means for the political frame were again significantly different. For married with 16 or greater years of public school teaching experience and married with less than 16 years of public school teaching experience, the means for the human resource frame was significantly different (see the *t*-tests in Tables 5, 6, and 7). For parents and non-parents, the means for the human resource frame and means for the political frame were significantly different.

TABLE 5
Independent Sample *t*-Test—Age 45 or Less Versus Age 45 or Greater.

<i>M</i>	Levene's Test for Equality of Variances				t-test for Equality of Means				
	Equal Variances	<i>F</i>	Sig.	<i>t</i>	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
All Structural	assumed	0.006	0.939	-1.812	0.071	-0.08382	0.04626	-0.17474	0.00710
	not assumed			-1.853	0.650	-0.08382	0.04525	-1.7282	0.00518
All Human Resource	assumed	0.380	0.538	-3.052	0.002	-0.12897	0.04226	-0.21202	-0.04592
	not assumed			-3.080	0.002	-0.12897	0.04187	-0.21135	-0.04660
All Political	assumed	0.054	0.816	-2.547	0.011	-0.11648	0.04573	-0.20634	-0.02661
	not assumed			-2.527	0.012	-0.11648	0.04609	-0.20716	-0.02580
All Symbolic	assumed	0.267	0.606	-1.910	0.057	-0.09263	0.04850	-1.8794	0.00267
	not assumed			-1.893	0.059	-0.09263	0.04892	-1.8890	0.00363

Note: Mean human resource is significant at 0.01 level with equal variances assumed. Mean political is significant at .01 level with equal variances assumed.

TABLE 6
Independent Sample *t*-Test—Married with Less than 16 Years Public School Teaching Experience versus
Married with Greater Than 16 Years Public School Teaching Experience.

<i>M</i>	Levene's Test for Equality of Variances				<i>t</i> -test for Equality of Means				
	Equal Variances	<i>F</i>	Sig.	<i>t</i>	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
All Structural	assumed	2.097	0.149	1.150	0.251	0.07405	0.06437	-0.05255	0.20065
	not assumed			0.920	0.360	0.07405	0.08044	-0.08608	0.23418
All Human Resource	assumed	2.751	0.098	2.432	0.016	0.14720	0.06053	0.02815	0.26625
	not assumed			1.907	0.060	0.14720	0.07717	-0.00644	0.30084
All Political	assumed	1.277	0.259	-0.061	0.951	-0.00399	0.06521	-0.13224	0.12427
	not assumed			-0.053	0.958	-0.00399	0.07570	-0.15456	0.14658
All Symbolic	assumed	3.931	0.048	0.125	0.901	0.00855	0.06862	-0.12641	0.14351
	not assumed			0.103	0.918	0.00855	0.08285	-0.15631	0.17341

Note: Mean human resource is significant at 0.05 level with equal variances assumed.

TABLE 7
Independent Sample *t*-Test—Parents and Non-Parents.

<i>M</i>	Levene's Test for Equality of Variances				<i>t</i> -test for Equality of Means				
	Equal Variances	<i>F</i>	Sig.	<i>t</i>	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
All Structural	assumed	4.559	0.033	1.456	0.146	0.08107	0.05570	-0.02839	0.19053
	not assumed			1.648				0.101	0.08107
All Human Resource	assumed	1.701	0.193	2.009	0.045	0.10286	0.05119	0.00226	0.20345
	not assumed			2.190				0.030	0.10286
All Political	assumed	5.297	0.022	2.517	0.012	0.13811	0.05488	0.03027	0.24596
	not assumed			2.884				0.004	0.13811
All Symbolic	assumed	3.143	0.077	1.813	0.071	0.10574	0.05833	-0.00889	0.22037
	not assumed			1.968				0.051	0.10574

Note: Mean human resource is significant at 0.05 level with equal variances assumed. Mean political is significant at 0.01 level with equal variances not assumed.

Conclusion

The demographic profile of the respondents in our study may not be surprising to the reader. Of the 525 female principals in North Carolina that responded to our survey (53% response rate), most were 46 years of age or older (65.8%), Caucasian (74.2%), married (84.6%), and were parents (80.8%). Most of the respondents held a masters degree (71.5%), had 15 years or more of public school experience (62%) and an overwhelming majority had less than or equal to 10 years in their current administrative position. The majority (61.9%) of the female principals surveyed were elementary school principals.

What may be surprising is that overall the female principals in the study perceived that they used multiple frame perspectives in their leadership behavior. Research suggests that leaders who integrate the four frames are likely to have more flexible responses to different administrative tasks because they perceive the multiple realities of an organization and are able to interpret circumstances in a variety of ways (Bensimon et al., 1989). Furthermore, since research suggests that the effectiveness of leadership can be connected to cognitive complexity as well as to the theory that complex leaders may have the flexibility to comprehend situations through the manipulation of different and competing scenarios, it stands to reason that principals who use multiple frame perspectives are seen as effective (Bensimon et al.).

A result that may or may not surprise the reader was that female principals who were 45 years or less scored lower on the human resource frame and the political frame than those who were 45 years or older. Similarly, female principals with less than 16 years of public school teaching experience, scored lower in the human resource frame than their counterparts who had 16 years or greater public school teaching experience. It would seem the number of years of public school experience is related to the use of the human resource frame.

Finally, when comparing the scores from the Independent Samples Tests (see Tables 5, 6, and 7), parents scored higher than non-parents on the human resource frame and the political frame. The human resource perspective focuses on human need and assumes that organizations meeting those basic needs will be more successful than those that do not (Bolman & Deal, 1992). Human resource leaders honor relationships and feelings and attempt to lead through facilitation and empowerment (Bolman & Deal). Perhaps one could draw the conclusion that successful parenting is meeting the basic needs of children, and if one is engaging in this type of behavior in the home environment, then one is more than likely to exhibit these behaviors in the workplace.

This same logic might be applied when analyzing the higher scores of parents on the political frame. The political frame emphasizes individual and group interests that often replace organizational goals (Bolman & Deal, 1992). School leaders often report that parents are concerned about

the individual welfare of their child more so than the welfare of the school (Kerr, 2009). Again if female principals are concerned about their own children's welfare, then they are likely to understand and use the political frame more in the workplace.

Although this study has attempted to contribute to the field of literature in terms of how female principals perceive their leadership behaviors and the relationship of certain demographic variables such as age, parental status, and years in current position to the number and type of frames female principals use, it is just a beginning. More studies are needed on women in school administration in order to understand the dynamics of female leadership.

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