

LEADERSHIP BEHAVIORS OF SCHOOL ADMINISTRATORS: DO MEN AND WOMEN DIFFER?*

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Abstract

In this study, the reasons why men and women behave differently in leadership roles in schools were investigated because of recent research on the indirect nature of the school principal's impact on learning and on gender differences in leadership behaviors. Practicing principals (109 males, 172 females) from two Southwestern states were surveyed regarding their relational leadership behaviors. Findings in this study were not congruent with the typical stereotypes that surround gender issues in leadership behavior. Implications of these findings and suggestions for future research are discussed.



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1 Introduction

The reasons why men and women behave differently in the leadership roles they fill in public schools continues to attract the attention of educational researchers (Eagly & Johannesen-Schmidt, 2001; Oplatka, 2006; Oplatka & Herts-Lazarovits, 2006). This area of research has taken on greater importance because the most

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current research in educational leadership has revealed that the school principal's impact on student achievement is not a direct one, but rather an indirect one mediated by the climate of the school (Bossert, Dwyer, Rowan, & Lee, 1982; Hallinger & Heck, 1998; Leithwood, Louis, Anderson, & Wahlstrom, 2004; Witziers, Bosker, & Kruger, 2003). Therefore, the manner in which school principals interact and behave in relation to the school climate has become more meaningful as the educational emphasis in the United States continues to be placed on student achievement.

Women have traditionally been underrepresented in administrative roles even though they fill the majority of high school and elementary teaching positions. In 2000, women filled only 30% of the principal positions in public schools and only 13% of the superintendent positions (Koch & Irby, 2002). Given the traditionally low number of women who fill administrative roles, it is not surprising to find that some researchers in the 1970's found that successful managers were overwhelmingly identified with traditionally male traits (Vinnicombe, 1999). Notwithstanding the considerable body of research in which gender issues have been investigated, in more current empirical research comparing male and female leadership styles, researchers have documented that women tend to behave in more participative and democratic ways than men (Eagly & Johannesen-Schmidt, 2001). In a related meta-analysis study of transformational, transactional, and laissez-faire styles of male and female leaders, Eagly and Johannesen-Schmidt (2001) reported that females exceeded males on the three transformational scales of idealized influence, inspirational motivation, and individual consideration. These findings were interpreted to mean that female leaders tended to behave in manners that motivated others to feel respect and pride, show optimism about the goals of the organization, and attend to the needs of the other members of the organization (Eagly & Johannesen-Schmidt, 2001).

In a recent study of three female elementary principals, Johnson and Busch (2006) found that much of the principals' impact on the school climate was affected by their underlying needs behaviors, of which principals are often unaware. In their study, teachers were often aware of the principals' behaviors, whether usual, needs, or stress, and could accurately describe them. These teacher interview responses matched the behavioral component scores of their principals that described their behaviors regarding Organizational Control (i.e., structure, authority) and Goal Achievement (i.e., advantage, challenge). Interestingly, principals did not seem to be as aware of their need or stress behaviors, as were their teachers, nor of the impact that these behaviors had on their faculties (Johnson & Busch, 2006).

Johnson, Busch, and Robles-Pina (2006) investigated the impact of principals' (18 females, 12 males) behavior on the organizational health of a school. In their investigation principals were administered the Leadership Profile (Johnson, 2003) to study leader's underlying behaviors while their faculties were given the Organizational Health Inventory (Fairman, 1979) to determine the health of the organizational climate. One of the results of that study was the lack of a specific profile of principal behavior that had more impact on organizational health than another profile. A most interesting finding was that the results of the profile did not differ statistically even when some of the principals in the study had more than 10 years of experience in maintaining the school climate.

The results of these two studies, coupled with Koch and Irby's (2002) suggestion that researchers further investigate gender, led these researchers to examine differences between male and female leadership behaviors. As the demand for effective administrators in public schools continues to increase, it is relevant to explore possible differences between the leadership behaviors of men and women. Do men and women administrators behave differently as they assume leadership roles in schools? If so, how are their leadership behaviors in school settings different? These questions are appropriate to ask, particularly in view of the research that suggests that the principal's most meaningful impact on student outcomes is through interacting with the climate of the school. These questions are also relevant because women continue to experience barriers in attaining leadership roles in schools that are traditionally male dominated (Koch & Irby, 2001; Shakeshaft, 1989).

2 Purpose of the Study

In this study, the researchers sought to determine the extent to which male and female principals differed in their relational leadership behaviors. Specifically, the researchers were interested in identifying whether

male and female principals differed in their usual, needs, and stress leadership behaviors, as assessed by the Leadership Profile (Johnson, 2003).

3 Research Questions

1. What is the relationship of gender with usual leadership behaviors?
2. What is the relationship of gender with needs leadership behaviors?
3. What is the relationship of gender with stress leadership behaviors?
4. To what extent can male and female principals be differentiated on their basis of their self-reported leadership behaviors?

4 Method

Participants

From two different states, Texas and New Mexico, 281 principals were surveyed to obtain information to address the above-stated research questions. Of these 281 principals, 109 were male and 172 were female. Concerning the state from which participants were sampled, 171 (60.9%) were from Texas and 110 (39.1%) were from New Mexico. Regarding ethnic membership, 169 (60.1%) were White, 73 (26.0%) were Hispanic, and 39 (13.9%) were African American.

Selection Process

Participants selected for this study were derived from an archival database containing the records of 281 practicing principals who completed the Leadership Profile from 2003 through 2007. All records were included and did not contain identifying information regarding any of the included participants.

Instrumentation

To determine principal behavior, each principal was asked to complete the Leadership Profile® (LP) (Johnson, 2003), a questionnaire driven by the Birkman Method® (Birkman, 2001). This method is a “complex set of psychological instruments and interpretive reports that use score profiles to predict significant behavioral and motivational patterns by asking respondents about their perception of how ‘most people’ view the world and comparing those responses with ‘self’ perception responses” (Birkman, Elizondo, Lee, Wedlingtron, & Zamzow, 2008, p. 4). Because principals often are not aware that they react according to their expectations of others, the Birkman was chosen to emerge these underlying expectations.

Theoretically, the questionnaire aligns to the Five Factor Model (Norman, 1963) but, more importantly, it provides a methodology that measures both social and self-perceptions. The theoretical position of Birkman et al. (2008) is that:

a close relationship exists between the way individuals judge the motives, attitudes, and behavior of others on the one hand and their characteristic mode of thinking and performing on the other. Each person attributes to others their own thoughts, attitudes, and motives for action. Essentially, individuals are as they see others. (p. 44)

From Birkman et al.’s (2008) work, he determined that individuals attribute meaning not so much to the actual facts as much as the meaning that the individual attaches to those facts. The individual’s reaction to the meanings of events, rather than the events themselves, comprises the most significant data concerning his/her behavior. He went on to say that some “individual’s perceptions may be irrational, illusory and unreal; nevertheless, these perceptions are real...to the individual, and greatly influence their behavior. They are constantly reacting to an environment distinctly and uniquely their own in a manner which, at the instant of behavior, appears to them most logical, effective, and desirable” (p. 44).

Within the questionnaire, principals answered questions on 11 distinct components that provide considerable information toward building self-awareness through three relational levels: usual, needs, and stress. These relational scores measure how the individual is perceived by others (usual), how others are likely to affect the individual (needs), and how the individual reacts when needs are not met (stress). The usual behavior exemplifies the principal’s socialized behavior when they are comfortable and free from stress. The needs scale gives the principal an indication of his/her underlying motivations and expectations. Finally,

the stress behavior emerges when the principal's needs are not met. Principals are provided with scores for each component ranging from 1 to 99 that describes the direction of behavioral preference: (a) low, 1- 39; (b) balanced, 40 - 59; and, (c) high, 60 - 99. Scores are neither positive nor negative; they are simply reports of the principal's behavioral preferences. The specific descriptions of the components are as follows:

1. Esteem – this strand provides a glimpse of behavior that the principal uses when relating to individuals.
2. Acceptance – this strand gives the principal an indication of what behaviors might be used in relating to people in groups.
3. Structure – refers to the individuals use and need for system and procedures.
4. Authority – indicates the individual's preference for behaviors regarding directing and controlling.
5. Freedom – describes the use of personal independence.
6. Empathy – refers to how each individual involves feelings in decisions, directions, and interactions.
7. Change – refers to how an individual will deal with change and interruptions. How well the person tends to focus.
8. Thought – describes the individual's orientation to thought processes – active versus reflective orientation.
9. Activity – describes the person's preferred pace for action.
10. Advantage – this strand provides a notion of how idealistic or realistic this individual might be and how that might be portrayed to others.
11. Challenge – describes the manner in which the individual deals with self-imposed demands for achievement.

Reliability and validity. Birkman International has tested the psychometric properties of the Birkman Method® for years, with the most recent testing having been completed in 2007. Classical Test Theory (CTT), used to examine the psychometric properties of the Birkman factor scales, showed moderately high interrelationships. The Item Response Theory (IRT) model (Three-Parameter Logistic Model) was used to examine the Birkman scales at the item and scale level. Overall, the IRT parameters demonstrated that all scales are sound-constructed scales for use in differentiating between examinees throughout the range of each of the latent traits from the other perspectives (Birkman et al., 2008). For reliability, test-retest reliabilities provide evidence that the scale scores measured are stable across time. Face validity, construct validity, and convergent construct validity were all explored to ensure that the instrument measures what it claims to measure. Face validity is provided from the thousands of organizations across most industries throughout five decades within the U.S. and abroad. Construct validity has been established with directly comparable instruments such as the NEO Personality Inventory-IPIP, MBTI® Step II, 16PF Questionnaire-IPIP, HPI-IPIP, the Job Descriptive index, Emotional Intelligence-IPIP, Personal Attribute Survey-PIIP, Positive and Negative Affect Schedule, 6PF-IPIP, Risk-Avoidance facet, HEXACO-IPIP, Abridged Big Five-dimensional Circumplex-IPIP, Ability scales, and Adjective Checklists. Convergent construct validity was constructed with other instruments that assess personality-related constructs. Due to the voluminous nature of the psychometric information available, readers are referred to The Birkman Method Manual (Birkman et al., 2008).

5 Results

Because each of the three relational dimensions (i.e., usual, needs, and stress) had 11 component scores, a separate multivariate analysis of variance (MANOVA) was conducted for each relational area. For the first research question, in which the relationship of gender with usual leadership behaviors was examined, the overall result was statistically significant, Roy's Largest Root (11, 269) = 2.981, $p = .001$, effect size = 10.9%. Follow-up univariate analysis of variance (ANOVA) procedures revealed that male and female principals differed significantly on the Acceptance Usual measure, $F(1, 279) = 5.194$, $p = .023$, effect size = 13.5%; on the Authority Usual measure, $F(1, 279) = 7.146$, $p = .008$, effect size = 16.0%; on the Activity Usual measure, $F(1, 279) = 3.822$, $p = .052$, effect size = 11.9%; and on the Advantage Usual measure, $F(1, 279) = 11.788$, $p = .001$, effect size = 20.7%. Statistically significant differences were not yielded on the Esteem Usual measure, $F(1, 279) = 0.657$, $p = .418$; on the Structure Usual measure, $F(1, 279) = 2.555$, $p =$

.111; on the Thought Usual measure, $F(1, 279) = 0.815$, $p = .368$; on the Empathy Usual measure, $F(1, 279) = 0.709$, $p = .401$; on the Challenge measure, $F(1, 279) = 2.734$, $p = .099$; on the Freedom Usual measure, $F(1, 279) = 2.259$, $p = .134$; and on the Change Usual measure, $F(1, 279) = 1.657$, $p = .199$. Readers are referred to Table 1 for the means for these items. Subscales on which male and female principals differed are noted with a superscript. When examining the means of the four statistically significant components, females and males differed in their usual behavior even though their usual dimension scores appeared in the same range of the continuum for each of the components.

For the Acceptance Usual component, females scored significantly higher than males; however, both male and female principals registered at the upper end of the continuum. Both males and females exhibit collaborative behavior and are inclusive as they bring people together for interaction, planning, and decision-making. Females, though, exhibit a higher level of collaborative behavior than males which suggests that females in this group of principals tend to be very collaborative and inclusive in most group interactions. In the use of Authority behaviors, both males and females scored on the low end of the continuum with females scoring significantly lower. Males in this group of principals are more authoritative in the manner in which they give and receive authority. Females tend to suggest ways to do things and encourage consideration of various tasks rather than issuing directives or telling individuals what to do. For Activity Usual, both males and females scored in the high range of the continuum noting that both genders seek to stay busy with varied activities while remaining on the move. Males scored at the norm ($M = 75.00$) whereas females scored higher ($M = 81.71$), indicating that females tend to create more activity and seek a broader involvement in events and meetings in deference to their male counterparts in this study.

Table 1

Descriptive Statistics for the Usual Relational Subscales on the Leadership Profile by Gender

Usual Measures	Male PrincipalsM (SD)	Female PrincipalsM (SD)
Esteem	23.31 (27.53)	20.93 (21.48)
Acceptance	71.46 (29.40) ^a	78.74 (23.80) ^a
Structure	75.66 (24.28)	70.58 (27.00)
Authority	49.10 (30.02) ^a	39.53 (28.75) ^a
Thought	42.87 (24.61)	40.25 (23.14)
Activity	76.28 (26.65) ^a	81.71 (20.56) ^a
Empathy	37.43 (28.74)	34.73 (24.53)
Advantage	23.29 (18.55) ^a	17.22 (11.10) ^a
Challenge	48.04 (28.76)	54.16 (31.13)
Freedom	38.81 (24.79)	34.66 (21.01)
Change	61.50 (30.44)	56.74 (30.06)

Table 1

NOTE: "a" indicates that the two means are statistically significantly different from each other.

Next, a MANOVA was conducted on the 11 needs components of the Leadership Profile to address the second research question concerning the relationship of principal gender with the needs leadership behaviors. Similar to the findings for the usual leadership behaviors, the overall result was statistically significant, Roy's Largest Root (10, 270) = 1.886, $p = .047$, effect size = 26.4%. Follow-up ANOVAs revealed that male and female principals differed significantly on the Esteem Need measure, $F(1, 279) = 4.578$, $p = .033$, effect size = 12.8%; on the Authority Need measure, $F(1, 279) = 3.801$, $p = .052$, effect size = 11.5%; on the Thought

Need measure, $F(1, 279) = 6.694$, $p = .010$, effect size = 15.3%; on the Activity Need measure, $F(1, 279) = 14.282$, $p = .0001$, effect size = 22.7%; on the Empathy Need measure, $F(1, 279) = 7.131$, $p = .008$, effect size = 16.0%; on the Advantage Need measure, $F(1, 279) = 3.732$, $p = .054$, effect size = 11.5%; and on the Freedom Need measure, $F(1, 279) = 4.218$, $p = .041$, effect size = 12.3%.

Statistically significant differences were not yielded on the Acceptance Need measure, $F(1, 279) = 2.779$, $p = .097$; on the Structure Need measure, $F(1, 279) = 0.071$, $p = .790$; and on the Change Need measure, $F(1, 279) = 0.852$, $p = .357$. Readers are referred to Table 2 for the means for these items. Subscales on which male and female principals differed are noted with a superscript.

For Esteem Need, males scored much higher ($M = 57.26$) than females indicating a greater need for others to balance their criticism with genuine praise as well as demonstrate genuine appreciation for whom they are and what they do. Females scored in the middle of the continuum ($M = 49.56$) demonstrating a need for individuals to respect them personally but preferred interactions to be somewhat more direct and frank. Individuals scoring in the mid-range of the continuum tend to be balanced in their Esteem Needs and prefer a balance of frank and direct relationships with genuine appreciation and approval from others.

In handling Authority Need, males scored significantly higher ($M = 49.61$) than did females ($M = 42.93$) connoting that males need to have a balance of strong, directive supervision with some preference for a suggestive, defined authority style from their superiors. Females, on the other hand, prefer more agreeable relations that allow autonomy coupled with a more suggestive style of supervision.

In terms of Thought Need, males ($M = 66.35$) significantly differ from females ($M = 57.90$), yet both score in the high range of the continuum. Both male and female principals need ample time to think carefully and consider options before acting; however, females prefer less time and would tend to move on choices somewhat more rapidly than their male counterparts. In terms of Activity Need, females ($M = 60.91$) need significantly more outlets for energy coupled with varied and definite activities, whereas males ($M = 48.06$) are more balanced in their Activity needs. Males want varied activities but tend to want more freedom to set their own pace with less physical demands or mental stress.

Another significantly different need component is that of Empathy Need. In this study females ($M = 50.97$) scored in the balanced range of the continuum lower than their male ($M = 60.31$) counterparts who registered in the high continuum range. Female needs are balanced between a need for more detached and matter-of-fact interactions while getting tasks accomplished with the need to consider the feelings of others. However, male principals clearly need activities that challenge their imagination coupled with outlets for strong subjective feelings.

In regard to the component of Advantage Need, males are again higher on the continuum than females. Females ($M = 50.37$) are balanced in regard to their need for competition and incentives, whereas males ($M = 57.22$), even though still considered balanced in their Advantage needs, score toward the high end of the continuum. They would reflect more immediate and distant benefits, clearly defined rules and boundaries with defined competitive advantages. But it is important to note that both genders are motivated by incentives.

Freedom Needs for male and female principals are significantly different, but they score closer together on the continuum. Females ($M = 56.57$) are considered balanced in their Freedom Needs; however, they are definitely in the high end of the balanced range. Males ($M = 63.41$) follow closely in the beginning range of the high end of the continuum. Both males and females tend to need freedom in action and thought while expressing concern for independence in goals, schedules, and work demands.

Table 2

Descriptive Statistics for the Needs Relational Subscales on the Leadership Profile by Gender

Needs Measures	Male PrincipalsM (SD)	Female PrincipalsM (SD)
Esteem	57.26 (28.56)a	49.56 (29.87) a
Acceptance	55.08 (28.28)	60.94 (28.98)
Structure	53.21 (30.31)	54.19 (29.71)
Authority	49.61 (29.98) a	42.93 (27.43) a
Thought	66.35 (25.07) a	57.90 (27.63) a
Activity	48.06 (27.13) a	60.91 (28.20) a
Empathy	60.31 (28.66) a	50.97 (28.54) a
Advantage	57.22 (28.25) a	50.37 (29.39) a
Freedom	63.41 (26.56) a	56.57 (27.62) a
Change	64.11 (28.15)	60.92 (28.20)

Table 2

NOTE: "a" indicates that the two means are statistically significantly different from each other.

Next, a MANOVA was conducted on the 11 stress components of the Leadership Profile to address the third research question concerning the relationship of principal gender with the stress leadership behaviors. Similar to the findings for the usual and needs leadership behaviors, the overall result was statistically significant, Roy's Largest Root (10, 269) = 3.800, $p = .0001$, effect size = 37.6%. Follow-up ANOVAs revealed that male and female principals differed significantly on the Esteem Stress measure, $F(1, 278) = 4.091$, $p = .044$, effect size = 12.3%; on the Acceptance Stress measure, $F(1, 278) = 3.836$, $p = .051$, effect size = 11.9%; on the Authority Stress measure, $F(1, 278) = 9.430$, $p = .002$, effect size = 18.5%; on the Activity Stress measure, $F(1, 278) = 23.206$, $p = .0001$, effect size = 28.9%; and on the Empathy Stress measure, $F(1, 278) = 4.146$, $p = .043$, effect size = 12.3%.

Statistically significant differences were not yielded on the Structure Stress measure, $F(1, 278) = 0.001$, $p = .797$; on the Thought Stress measure, $F(1, 278) = 0.352$, $p = .553$; on the Advantage Stress measure, $F(1, 278) = 2.370$, $p = .125$; on the Freedom Stress measure, $F(1, 278) = 2.911$, $p = .089$; and on the Change Stress measure, $F(1, 278) = 0.592$, $p = .442$.

Different yet from usual and needs behaviors for the principals participating in this study are the scores from the stress relational dimension for each of the 11 components. For the stress dimension, 37% of the variance in leadership behavior is determined by gender. Specifically, five components generated statistically significant differences: (a) Esteem, (b) Acceptance, (c) Authority, (d) Activity, and (e) Empathy.

Males and females significantly differed in their Esteem Stress regarding one-on-one interactions with others. Males ($M = 59.83$), when stressed, become easily embarrassed, direct, overly sensitive to criticism and could lose self-confidence. Females ($M = 53.56$) scored a somewhat lower mean that reflects a more balanced behavior between losing sensitivity to others when stressed and downplaying their feelings to becoming easily embarrassed and having their feelings hurt. However, both males and females tend to become sensitive and embarrassed when stressed.

In relating to people in groups when stressed, Acceptance Stress, both males ($M = 46.83$) and females generated balanced scores ($M = 54.03$). When stressed, both would find it difficult to balance their interactions with other individuals in group encounters and could appear quiet and withdrawn or even unconcerned about other individuals and even say what others want to hear.

When handling Authority when stressed, males ($M = 62.28$) scored in the high range of the continuum whereas females ($M = 52.05$) generated more balanced scores. Males would tend to become aggressive, domineering and possibly lose direction whereas females would vacillate between avoiding open disagreement and agreeing aggressively. Neither group would shy away from a conflict. The differences for the Activity

Stress category were significantly different. Males scored in the low range ($M = 42.00$) of the continuum whereas females scored in the high range ($M = 58.57$). Under stress, males will procrastinate, become discouraged and substitute thought for action. Females, however, would act without thinking, waste energy, become impatient and have difficulty delegating.

Males and females also generated significantly different scores for the component Empathy Stress. Under pressure, males ($M = 62.11$) would base their decision largely on feelings and allow emotions to affect judgment whereas females ($M = 55.06$), being more balanced, would move between minimizing problems and losing sensitivity for feelings to basing decisions on feelings and allowing emotions to cloud judgment.

Table 3

Descriptive Statistics for the Stress Relational Subscales on the Leadership Profile by Gender

Stress Measures	Male PrincipalsM (SD)	Female PrincipalsM (SD)
Esteem	59.83 (28.18)a	53.56 (29.98) a
Acceptance	46.82 (28.94) a	54.03 (30.59) a
Structure	46.93 (30.37)	47.02 (30.09)
Authority	62.28 (25.76) a	52.05 (27.96) a
Thought	69.72 (21.86)	68.08 (22.87)
Activity	42.00 (26.28) a	58.57 (29.05) a
Empathy	62.11 (27.81) a	55.06 (28.42) a
Advantage	56.95 (28.25)	51.48 (29.37)
Freedom	67.91 (23.630)	62.71 (25.53)
Change	71.71 (22.50)	69.56 (23.00)

Table 3

NOTE: "a" indicates that the two means are statistically significantly different from each other.

Finally, to address research question four concerning the extent to which male and female principals could be differentiated by their responses to the subscales on the usual, needs, and stress relational dimensions, a series of canonical All Possible Subsets (APS) discriminant analysis procedures were conducted. Each of the usual, needs, and stress subscales were used as dependent variables in separate analyses with principal gender serving as the independent variable. All possible models involving some or all of the Leadership Profile subscales were examined. Using APS discriminant analyses involves computing separate discriminant functions for all subscales one by one, then using all possible pairs of subscales, all possible trios of subscales, and so on until the best possible subset of Leadership Profile subscales were identified using prespecified criteria. In this investigation of leadership behaviors, we used: Wilk's lambda; the probability level; the canonical correlation; the standardized canonical discriminant function coefficients; and the structure coefficients. Readers should be aware that the APS discriminant analysis differs substantially from traditional stepwise discriminant analysis where variables are entered based solely on their probability level. The stepwise discriminant analysis procedure was specifically avoided in this study because of recommendations by statisticians (e.g., Onwuegbuzie & Daniel, 2003).

Concerning principal gender, the resulting discriminant function was statistically significant, $\chi^2(1) = 22.87$, $p = .0001$, and accounted for 100.0% of the between-groups variance (canonical $R = .281$; Wilks's $\Lambda = .921$). The group centroids were .232 for female principals and -.366 for male principals. This discriminant function contained two Leadership Profile subscales: Activity Stress (Standardized Coefficient = 1.00) and Empathy Stress (Standardized Coefficient = -0.489). An examination of the standardized coefficients

indicated that, using a cutoff criteria of 0.3 (Lambert & Durand, 1975), both Leadership Profile subscales contributed made an important contribution to the canonical function. The positive standardized coefficient indicates that female principals had a higher mean score on the Activity Stress subscale than did male principals whereas the negative standardized coefficient indicates that male principals had a higher mean score on the Empathy Stress subscale than did female principals.

6 Discussion

Findings in this study were not congruent with the typical stereotypes that surround gender issues in leadership behavior. Using the Leadership Profile enabled the exploration of those underlying motivations that affect leaders' behavior as they interact with people in their environment.

Usual Behavior

Because the usual relational dimension reflects socialized behavior that is influenced by significant persons in an individual's environment, it is the behavior that most teachers observe through their daily interactions with the principal in the building. This behavior occurs when the principals are at their best. Usual behavior becomes the behavior to which teachers are most accustomed. Until principals become stressed as a result of their needs not being met, teachers would not see a behavior change emerge. Differences in the usual behavior of any of the participants were not anticipated. Even so, four statistically significant differences were present between male and female principals.

Male and female principals differed in Acceptance, Authority, Activity, and Advantage. Female principals were found to be more collaborative than males, a finding that is commensurate with research studies in business (Eagly & Johannesen-Schmidt, 2001). Not surprisingly in our study was the difference in how males and females receive and give authority. Males are more directive and authoritative whereas females prefer leadership through suggestion accompanied by a strong democratic style in an agreeable and deferential manner. Both male and female principals prefer to act on a high energy level while working to capacity in an industrious and physically active manner – females prefer an even higher level of activity. Both males and females also seem to consider the well-being of others, emphasizing values and the importance of the team while exhibiting cooperative and well-intentioned behavior.

Need Behavior

A fully unexpected pattern in this analysis was the overall statistically significant differences between male and female principals that produced 26.4% of the variance in need behavior. Within these results, six need components were statistically significant. In terms of need, those things that are needed from other people to maintain our usual behavior clearly emerged in this study. Male principals in this study need more respect and sensitivity than was reported to be needed by the female principals. Males tend to be more authoritative than females whereas both of them prefer time to think about issues, even though males require more time than do women. Male principals prefer much less activity than do females and would prefer to express themselves and be more independent than do their female counterparts. Additionally, males in this study are more aware of their feelings and the non-material benefits and rewards from the job. Female tended toward more matter-of-fact supervision and tangible benefits and advantages. Males also demonstrated a higher need for competitive advantage and defined rules and boundaries. Females tended to vary between being competitive and being more service oriented.

In reviewing the analysis, distinct differences were present in the component that describes the one-on-one relationship needs required by the principals (Esteem Need). Important to note is that under usual circumstances, male and female principals are fairly straightforward and direct in the communication pattern in one-on-one relationships. However, the participants differ in their Esteem need behaviors. Male principals showed a need for others to be respectful, show genuine appreciation and balance criticism with praise much more so than was reported by female principals. Female principals, even though balanced, need respect and appreciation but they also appreciate more direct relationships and candor.

Stress Behavior

Even more interesting than the need behaviors were the results of the statistical analysis of stress behavior for the 11 components. These data accounted for 37.6% of the variance in stress behavior. Five of the 11

components were statistically significant and revealed several interesting differences. When stressed in regard to one-on-one relationships (Esteem), males became easily embarrassed, had their feelings hurt, and were possibly evasive with others. Males were also less apt to participate in collaborations when stressed. They also would become more directive and procrastinate while delaying necessary actions.

Females in this study recorded balanced scores in all five components which indicates that they have the tendency to vacillate between the descriptive behaviors for low scores and the descriptive behaviors for the high scores in each of those components.

7 Implications

As a result of this study, a number of issues emerged regarding gender differences that stimulated thought and discussion for future research. Given these current research findings, we believe that more study is necessary to determine the underlying factors that underlay the areas of usual behavior, need behavior, and stress behavior. Related to educational leader preparation, the rationale behind the findings of this study for the Advantage, Authority, and Freedom areas needs to be more clearly delineated. Further study is encouraged to determine the extent to which our findings in the areas of Empathy, Activity, and Esteem are generalizable. In this study, male principals reported leadership behaviors that are typically attributed to traditional female stereotypes. Investigating and understanding gender differences may contribute to assisting superintendents and principals in hiring with gender leadership behaviors in mind. Matching candidates to schools is a critical function in personnel placement and having access to additional information regarding gender issues would be invaluable. Finally, because school climate is such an important aspect of shaping and influencing student achievement, understanding the relationships among male and female leadership behaviors, school climate and its correlates (e.g., student achievement) is certainly warranted.

Several limitations should be pointed out in this study lest the reader make unwarranted generalizations. First, our sample of principals came from two Southwestern states and, given the diversity of principals in these two states alone, these findings may not be generalizable to principals in other states, much less these two states. Second, the extent to which self-reported behaviors regarding leadership translate to the actual leadership behaviors in question is unknown. Thus, readers are encouraged to be cautious in the extent to which they generalize these findings. Research is clearly needed to replicate these findings.

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