RESEARCH ARTICLE

Strategies and Barriers: Career Advancement for Women Administrators

Myrtle Campbell

Retired Superintendent Gary Community Schools

Gloria D. Campbell-Whatley

University of North Carolina at Charlotte

Only 24% of superintendents are women in K-12 districts in the United States, though women outnumber men in these settings. There are barriers that prevent career advancement and equal rewards for women. These barriers can be internal, such as low aspirations or duties in the home and/or external barriers such as systems and structures of society. The purpose of this study was to examine survey data on 88 women administrators (i.e., assistant principals, principals, central office administrators) regarding the internal and external barriers and for strategies and career advancement that would lead to a superintendency in a Midwestern state.

Keywords: external barriers, internal barriers, women administrators, strategies for advancement, women superintendents, career advancement

Despite a notable increase in the number of women preparing for careers in educational administration in the last 3 decades, the implementation of anti-discrimination legislation and affirmative action policies in earlier years, women continue to occupy lower level administrative positions in our nation's school districts. It appears that some of these challenges for women are slowly evolving because there has been some improvement. There was a time when females had difficulty obtaining principal positions, now these roles for women have considerably improved. The percentage of female principals increased in public schools between 1988 to 2012, from 25% to 52% (Hill, Ottem, & DeRoche, 2016). However for top level positions, such as a superintendency, this is not true.

For example, in the year 2000, only 13% of women were superintendents, and still almost two decades later, only 24% of women (Robinson, Shackshaft, Grogan, & Newcomb, 2017) now hold these positions. This is not a notable change. Usually females, comprise 76% of the teachers, 52% of principals, and 78% percent of central-office administrators, but for roles such as superintendents, their representation is diminutive (Brunner & Kim 2010; McGee, 2015; Superville, 2017). Although K-12 systems have more females than males, males still dominate the chief executive offices (i.e., superintendents, chief deputy) in approximately 14,000 districts. As social pioneers, women in this profession, as well as in other professions, are still plagued by bias

in the workplace and personnel decisions (Hegewisch, Williams, Hartman, & Aaronson, 2014; Robinson, et al., 2017). Although there are improvements, there is still a focused emphasis on women's equity issues because we have not approached parity with men in educational administration.

What accounted for the underrepresentation of women in educational in higher-level administration positions? Numerous explanations were set forth by researchers to explain both the relative absence of women as leaders in educational administration and the factors which contributed to their absence (Brunner & Kim 2010; McGee, 2015; Superville, 2017). It is noted that specific barriers deterred career advancement, precluding equal participation, equal access, and equal rewards for women. These barriers were usually categorized as internal and external. External barriers, such as discriminatory practices, systems and structures of society, were visible targets of remediation. However, internal barriers, such as women's lack of self-confidence and aspirations, their low self-esteem and role conflicts associated with expectations of family and career, were much more difficult to alleviate due to the effects of years of socialization patterns that channeled women into specific roles in society (Brown & Garn, 2008; Brunner & Kim 2010; Grogan & Brunner, 2005; Superville, 2017). These psychological, sociological, and organizational barriers imposed on American women had a great deal to do with the occupational role expectations they were able to assume. Such barriers continued to contribute to the phenomenon of the absent female in superintendent positions.

Why Not Women?

Historically women were virtually ignored as potential leaders in most professions (Connell, Cobia, & Hodge 2015; Kowalski, McCord, Peterson, Young & Ellerson, 2010; Robinson et al., 2017). They usually encountered problems at the entry level, where men predominated from the very first stages of preparation and practice. In the field of education, however, a unique phenomenon existed. Traditionally, there was a preponderance of women in the pool from which leaders emerged, and yet women were virtually absent at the top of the administrative hierarchy (Brown & Garn, 2008; Grogan & Brunner, 2005; Kowalski et al., 2010; Superville, 2017). Why was it that in the field of education where women were the majority, the minority group dominated the leadership ranks and continued to receive preference in appointment to top positions? Existing research on women in educational administration examined both the limited representation of women as leaders in the administrative hierarchy and the critical barriers that excluded them from leadership roles and inhibited their acquisition of strategic leadership positions in school administration. Past studies on female administrators documented the existence of barriers as well as strategies believed to be effective in overcoming these barriers (Robinson, et al., 2017). Few studies provided a systematic inquiry into what strategies are effective in the career advancement of women. This study tried to fill that void.

LITERATURE REVIEW

Superintendencies are rarely extended to females who were top-level public school administrators. Perhaps, if for no other reason, because these women were a distinct minority in the educational hierarchy in every state in the nation (Brown & Garn, 2008; Grogan & Brunner, 2005; Superville,

2017). Connell et al., (2015) performed a quantitative and qualitative study on active and retired female superintendents from one state in the south using a 29 item Likert scale survey and interview questions to determine barriers for 29 women participants. They examined, gender bias, mobility, family responsibilities, selection processes for jobs, mentor's and networks. They found that mentoring opportunities were credited for women's successful career path and the greatest obstacle was gender bias. Other internal factors such as family responsibility didn't appear the be a factor.

A study by Robinson et al. (2017), reported the findings of the American Association of School Administrators 2015 Mid-Decade Survey to discuss trends in research over the superintendency in the past 15 years. A sample of 9,000 men and women and majority (i.e., Caucasian) and cultural and linguistically diverse (i.e., African-American, Latina/Latino, Asian-American) superintendents were sent out survey and 900 responded. Analysis included chi-square tests, correlation, t-test and ANOVA to study race and gender. The article discussed several recent trends. The study determined that men and women had a lot of the same problems such as, both groups were former teachers and both had high stress indicators. There were some findings that remained the same as past studies; women still were greatly underrepresented in the superintendency. The study also presented other significant findings. For example, women indicated that difficulty with mobility and family circumstances and career advancement were not significant. In addition, the article indicated that Caucasian women were usually hired in smaller districts more so than Caucasian men. Another interesting finding was that women of color or more likely to lead districts that have more; (a) students of color, (b) children with disabilities, and (c) children from lower socioeconomic neighborhoods.

McGee (2010) used a survey to examine barriers to administrative position for women in public school systems within the Florida public schools. Only assistant, deputy, and area superintendents (n=212), along with principals (n=2,730) and assistant principals (n=3,733) in a public elementary, middle/junior high, and high school settings were included as participants. The researcher found that exclusion from professional networks impeded women from achieving career advancements. The researcher also found that once women were in an administrative position, they felt isolated and needed mentors, both female and male alike, for continued support.

There were two significant qualitative studies. Garn and Brown (2008) performed a qualitative study using Inductive Reasoning methods, with 15 female superintendents from a southwestern state regarding their perception of gender bias. The researchers found 2 major obstacles for female superintendents: (a) finding appropriate mentors, and (b) lack of support from the community because of gender stereotyping.

Goffney and Edmonson (2012), in a qualitative study, examined the perceptions of three female superintendents, one African American, one Hispanic, and one Caucasian, as relating to race and gender and the impact on their career and possible strategies to cope with barriers. A narrative inquiry approach revealed that race did not correlate with performance and that collaborative leadership, spirituality, and positive relationships with other superintendents was the best strategies for females.

The implication of these studies suggest that women were more likely to experience external barriers. Women are less likely to: (a) be hired as superintendents than men, (2) have more difficulties networking, and (c) have more challenges obtaining suitable mentors than men. The studies also suggest that internal barriers, such role conflicts associated with expectations of family and career was not as prevalent as external barriers. These situations demonstrate inequitable practices within the administrative systems that impede the progress of women.

METHODOLOGY

The purpose of the present study is to present perceived barriers to career advancement and strategies to support progression for women administrators. The study occurs in one state in the Midwest for district superintendency, assistant/associate/ deputy superintendency positions. The theoretical framework for the study is based on Liberal feminism because this theory focuses on; (a) women's ability to maintain their equality through their own actions and choices, and (b) making the legal and political rights of women equal to men. The study also provides a systematic, inquiry into the administrator's perceptions of barriers to career advancement and the effects of these barriers. Also, the study involves choices that women make to overcome particular perceived barriers. Previous studies have shown that only a small percentage of women administrators are provided higher level positions as superintendents (Connell et al., 2015; Garn & Brown, 2015; McGee, 2010; Robinson et.al., 2017). Consequently, this study is significant because not only does it provide specific data on barriers, but recommending strategies for women administrators currently aspiring to career advancement are presented.

Hypothesis are used when a body of knowledge is already available about the subject that allows you to make a prediction about the results of your study before you begin. However, research questions are more exploratory and investigative in nature and will require that you collect data and analyze results before drawing any conclusions, therefore the collection and analysis of the data were guided by the objectives and questions that follow, rather than by testing related hypotheses (Michaelson, 2019): (1) What did women administrators in a state in the Midwest perceive as the major barriers to their career advancement? (2) Which category of barriers, internal or external, was perceived as significantly deterring their career advancement? (3) Did barriers differ according to ages, position, level of education and marital status? (4) If respondents encountered specific barriers in their career advancement, were there corresponding effects which could be linked to these barriers? (5) What did women experience as advancement strategies? An Analysis of Variance (ANOVA) was used to analyze the data on perceptions of barriers, effects of barriers, and strategies by marital status, ethnicity, age, position, and level of education. The Pearson product moment correlation was used to show the magnitude or strength of the relation between variables. Barriers, effects and strategies were rank ordered according to perceived significance of barriers for respondents.

Participants

Using a stratified sample, women were drawn from specified sub-groups such as the positions of district superintendent, assistant superintendent, secondary school principal, assistant principal in middle and high schools. There were 100 female administrators in several districts identified in a state in the Midwest that were chosen to participate in the study. The subjects were identified and verified from listings from a school directory and a computer printout of certified employees provided by the State Department of Public Instruction. Approval for the study was gathered through the IRB process at the university. No one handled the raw data except the researchers and professors at the university. All data was digitally password protected.

Instrumentation

The data gathering tool for the study was a questionnaire developed by the researchers following the review of related research. The research instruments in similar studies (Connel et. al., 2015; Garn & Brown, 2008; Grogan & Brunner, 2005; McGee, 2010) were reviewed to determine technical construction, nature of items selected for use and potential applicability to the present study. To strengthen content validity, the preliminary questionnaire for the study was reviewed and critiqued by five professors in Educational Leadership. They examined the survey according to these questions: (a) Is the item clearly and precisely worded? (b) Is the item relevant to the objectives of the study? (c) Does the item economize the effort and time of the respondent? (d) Does the item allow for exceptions and diversity of responses? and (e) Is the construction of the instrument appealing to the respondent? Also, a pilot study was conducted with female administrators in two school districts in the same state in the Midwest to determine needed changes in the instrument before full-scale administration. Suggestions from the reviewers and the respondents' evaluations were used in preparation of the final questionnaire. It consisted of demographical data and 53 items requiring categorical responses on a Likert- type response with a comment section. Questions 1 through 26 included factors that are barriers with a 1-7 scale from a Not a Factor to Serious Factor and questions 27 through 40 included the effects of the barriers with a scale of 1-5 Not at All to Absolutely, and questions 41-53 included strategies to career advancement with a scale of 1-4 from Highly Successful to Never Used. The data derived from these sections were also analyzed to determine the relationship between these variables and the respondents perceptions of internal and external barriers to career advancement (Table 1). Cronbach's alpha reliability (1951) was computed using the total survey score of participants and the reliability coefficient was .88.

TABLE 1
Questionnaire Items

Factors that are Barriers- Scale– Not A Factor (1) to a Serious Factor (7)
1. Lack of professional network
2. Teachers, parents, community preferences for male rather than female administrators
3. Limited access to formal and informal training opportunities provided for male colleagues
4. Lack of experience and prior opportunities to qualify for higher level administrative positions
5. Reluctance to take risks involved in asking and competing for scarce higher level administrative positions
6. Guilt about pursuing non-traditional career roles
7. Limited professional preparation
8. Differential treatment on the basis of sex in the formal processes of application, screening, and selection
9. Existence of "cronyism" or the "Buddy System" where man refer male associates to jobs.
10. Differential evaluation of performance ratings on the basis of sex
11. Lack of career mobility (more place bound)
12. Conflicts created by the dual roles of wife/mother
13. Lack of role models
14. Problems in overcoming stereotypic attitudes about women's appropriate roles in society
15. Reorganization of school districts resulting in "reductions in force"
16. Lack of encouragement or support from family and peers

Factors That are Barriers- Scale– Not A Factor (1) to a Serious Factor (7)

17. Exclusion from the informal socialization process ("Good Old Boy Network")
18. Lack of ability to perform managerial roles
19. Lack of influential sponsors
20. Small proportion of women in administration which affects how you are perceived and responded to by colleagues (e.g., as "tokens")
21. Personal characteristics and abilities incongruent with job demands
22. Lack of motivation in advance candidacy for particular administrative positions because of past obstacles encountered
23. Higher level of training required in order to be competitive with male colleagues

Effects of the Barriers-Scale- Not at All (1) to Absolutely (5)

24. Career was delayed due to family responsibility
25. Denied access to power groups who make important decisions
26. Applications to more routine tasks, rather than challenging
27. Assignments to more routine tasks, rather than challenging ones
28. Interruption of career
29. Having to accept less attractive and less challenging jobs
30. Having to move from district to district to advance
31. Applied more frequently for available administrative positions because of obstacles encountered
32. Exclusion from informal networks
33. Confusion regarding life's goals
34. Additional pressure to prove worth and competence as an administrator
35. Promotion into dead-end positions which are not commensurate with abilities and experiences
36. Problems with finding a workable balance between feminine identity and professionalism
37. Limited opportunities to advance professionally due to positional segregation

Strategies to Career Advancement - Scale- Highly Successful (1) to Never Used (4)

38. Setting career goals and formulating a plan of action
39. Developing a more positive self-concept
40. Developing/utilizing "New Girl Network"
41. Enlisting influential sponsors
42. Seeking advance training
43. Being more assertive in pursuing career goals
44. Becoming professional visible
45. Improving professional image
46. Attending seminars, administrative workshops to improve professional and interpersonal skills
47. Learning to cope multiple roles-wife/mother/professional
48. Obtaining support from family and/or peers
49. Preparing an effective resume and updating it
50. Gaining outside experience in various leadership positions to upgrade administrative skills

---

Data Collection and Analysis

The questionnaire was sent through Survey Monkey, an online survey development cloud-based software used to send surveys to respondents. The surveys were sent directly to the 100 female administrators identified in the selected positions. These selected positions were chosen because these females were most eligible to assume a superintendent position. A total of 88 female administrators or 88% comprised the final sample. Data collected on perceived barriers, effects,

and strategies were rank-ordered according to perceived-significance for respondents. Pearson product-moment correlation coefficients were computed for barriers and effects to show the magnitude or strength of relations between these variables. An ANOVA was used to analyze the data on perceptions of barriers, effects of barriers, and strategies by marital status, ethnicity (cultural and linguistically diverse status-CLD), age, position, and level of education. Data was computed using SPSS software.

The cultural and linguistically diverse (CLD) composition of this group of administrators included (n=72) 81.8% Caucasian, (n=15) 17.0% African-American, and (n=1) 1.1% Asian-American. The CLD category represented only 18.1% of the respondents. Of the 16 CLD administrators, 7 were senior high administrators and 9 were junior high/ middle school administrators. There were no culturally and linguistically diverse (CLD) superintendents or assistant superintendents. Almost all of the administrators in the study held one or more advanced degrees. More than 19% reported the Ed.D./ Ph.D. to be their highest degree, 22.7% indicated the Ed.S. as the highest earned, 56.8% held the master's degree, and only one respondent held a bachelor's degree. A large majority of the administrators were assistant principals at the senior high school level (36.4%). Over one-fourth of the respondents were, employed as assistant principals at the junior high/middle school level. Only 8% of the women were represented at the apex of the organization--the superintendency, while 11.3% were in the position of assistant superintendent. Principalships at both the senior high and junior high/middle school levels were held by 14.8% of the respondents.

Perception of Barriers to Career Advancement.   Research question one "What did women administrators in a state in the Midwest perceive as the major barriers to their career advancement?" was addressed in this section. The respondents were asked about their perceptions of barriers, indicated on a seven-point scale, what had or had not deterred them in their pursuit of professional career goals as administrators. Data regarding respondents' perceptions of barriers were viewed initially by individual items as each appeared on the study questionnaire.

The results on Table 2 indicated the existence of the "Buddy System" (a cooperative arrangement whereby individuals assume the responsibility for one another's welfare) and exclusion from the "Good Old Boy Network" (i.e., a series of male contacts who can offer preferential treatment) was indicated. Many Good Old Boy Networks, which operate on a favor system, were reported and ranked higher than any other barrier. The Existence of a "Buddy System" ranked the 2nd highest of these barriers and was repeatedly mentioned in the literature on women in management and administration (Connell et al., 2015; Garn & Brown, 2015; McGee, 2010; Robinson et.al., 2017). A frequently mentioned barrier was "Overcoming Stereotypic Attitudes" (a fixed, over generalized belief about women's appropriate roles in society) ranked third. Respondents perceived a decline in the job market as a significant factor. In the comment section, respondents instances of their "token status" (i.e., the practice of making only a perfunctory appearance of equality within a workforce) while emphasizing the lack of emotional support in handling professional and personal conflicts on the job and their "feelings of isolation" as leaders. "Sex discrimination" (i.e., discrimination in employment and opportunity against a person, typically a woman, on grounds of sex) ranked moderately high along with the divided role of wife/ mother and career woman.

TABLE 2
Rank Ordering of Female Administrators' Perceptions of Barriers by Mean
Response Scores

Barriers	n	M	SD
Existence of the "Buddy System"	88	4.5	2.0
Exclusion from the "Good Old Boy Network "	88	4.4	2.1
Problems in overcoming stereotypes	87	4.0	2.0
Decline in the job market	88	4.0	2.1
"Tokenism"	88	3.9	1.9
External preference for males	88	3.9	1.9
Employer's negative attitudes	88	3.8	2.1
Lack of career mobility	87	3.7	2.4
Differential treatment on the basis of sex	88	3.5	2.2
Lack of professional network	88	3.5	2.2
RIF's	88	3.5	2.2
Lack of role models	88	3.3	2.1
Lack of influential sponsors	87	3.1	2.0
Lack of opportunity for experience	88	3.0	1.9
Limited training opportunities	88	2.9	1.9
Differential evaluation	88	2.9	1.9
Role conflicts wife/mother career woman	88	2.8	2.1
Higher level of training required	88	2.7	1.9
Lack of opportunities lowers aspirations	88	2.7	1.9
Reluctance to take risks*	88	2.2	1.8
Lack of motivation	88	2.0	1.5
Personal Characteristics inconsistent with job demands	88	1.9	1.2
Lack of confidence*	88	1.9	1.2
Lack of family or peer supports	88	1.7	1.4
Limited preparations	88	1.6	1.2
Guilt about pursuing non-traditional roles*	88	1.6	1.2

Note. *Indicates internal barriers. Based on scales of 1-7 for each item

Perceptions of the Effects of Barriers on Career Advancement.   Research question two "Which category of barriers, internal or external, was perceived as significantly deterring their career advancement?" was addressed in this section. The respondents were asked to identify their perceptions of how the barriers listed had affected them in pursuing their professional career goals. A five-point Likert scale, varying from "Not at all" to "Absolutely," was used to indicate respondents' perceptions of the degree to which their career development had been affected. Overall, as with barriers, the respondents did not perceive the effects of barriers as significantly hindering their career advancement. On a five-point scale, only three effects had a mean response score near the mid-point level (3 for the five-point scale). All other effects were rated below the mid-point. Table 3 indicated that, when ranking effects by the mean response score, "pressures to prove worth and competence as an administrator" was perceived as having the greatest effect on respondents' career advancement. More than one-half of the administrators rated this effect as an obstacle in their career development "To a little extent" or "To a great extent." The item seen indicated as having the next greatest effect was "Exclusion from the informal network," followed by "Denied access to power groups."

TABLE 3
Rank Ordering of Female Administrators Perceptions of Effects by Mean
Response Scores

Effects	n	M	SD
Additional pressures to prove worth and competence	88	2.8	1.2
Exclusion from informal network	87	2.7	1.4
Denied access to power groups	88	2.5	1.2
Limited opportunities to advance	86	2.1	1.1
Career delayed	88	2.0	1.3
Assignments to routine tasks	88	2.0	1.3
Having to move from district to district to advance	86	2.0	1.4
Motivation and aspirations thwarted	88	1.8	.933
Promotion into dead-end positions	87	1.8	1.3
Problems with finding a workable balance between femininity and professionalism	88	1.8	.964
Confusion regarding life's goals	88	1.7	.873
Having to accept less challenging jobs	86	1.7	1.0
Applied less frequently for jobs	87	1.7	1.1
Career interruption	87	1.3	.707

Relationship of Demographic Variables to Perceptions of Barriers.   Research question three, "Did barriers differ according to ages, position, level of education and marital status?" was addressed in this section. A one-way Analysis of Variance (ANOVA) was calculated to determine significant differences between mean response scores to barriers by respondent variables of ethnicity, age, level of education, marital status and position. For all items with a significant overall F-ratio ($p.< 05$), the differences between means were tested by the Scheffe test for post hoc comparisons in order to assess homogeneity of variance and to identify subgroups with means significantly divergent from those of other subgroups. There were four sub-groups that were significant: (a) ethnicity, (b) age, (c) level of education, and (d) marital status.

When grouping respondents by ethnicity, culturally and linguistically diverse (CLD) administrators perceived significantly more guilt about being non-traditional than did Caucasian administrators. Analysis revealed a statistically significant effect of ethnicity on the perceptions of barriers, $F(1, 85) = 8.83, p = .004$, with female administrators in cultural and linguistically diverse (CLD) (i.e., persons of color) groups ($M = 2.40, SD = 1.99$) having higher perceptions of barriers than Caucasian female administrators ($M = 1.40, SD = 0.94$). The resulting F-ratio was significant at the .05 level and post-hoc comparisons indicated that the two groups differed significantly.

When grouping respondents by age, their perceptions of the "Buddy System," "conflict between wife/mother and career woman, and "lack of confidence" were found to be statistically significant. The results of the Scheffe test indicated that regarding the "Buddy System," administrators between the ages of 35-39 and 45-49 perceived this barrier as a considerable factor in their career advancement-$F(5, 82) = 3.15, p = .012$; ages 30-34 ($M=4.44, SD=2.01$), 35-39 ($M=5.11, SD=1.77$), 40-44 ($M=3.21, SD=1.96$), 45-49 ($M=5.26, SD=1.79$), 50-54 ($M=4.92, SD=2.06$), 55 and over ($M=3.41, SD=1.58$). The mean response score for both groups was 5.11 and 5.26 respectively. Administrators between the ages of 40-44 felt the effects of this barrier the least (x - 3.2). The Scheffe test results also revealed that women in the age categories of 30-34,

50-54, and 55-59 formed a homogeneous subset, while women 40-44 differed in their perception, but not significantly.

The divided role of wife/mother and career woman was perceived as a considerable barrier for women under age 35 (x = 5.4). Results revealed that there were statistically significant differences among female administrators in different age groups in their perceptions of barriers (Role Conflict), $F (5, 82) = 4.24$, $p = .002$--ages 30-34 ($M=5.44$, $SD=1.81$), 35-39 ($M=2.73$, $SD=1.97$), 40-44 ($M=2.00$, $SD=1.82$), 45-49 ($M=2.80$. $SD= 2.04$), 50-54 ($M=2.92$, $SD=2.19$), 55 and over ($M=2.00$, $SD=1.53$). Post-hoc comparisons disclosed that the mean response score for women in this age group was significantly different from other age groups. Administrators in the 40-44 and 55 or older age categories experienced this barrier to a lesser degree than any of the other age groups. Other age groups formed a homogeneous subset whose mean response scores were quite similar.

Age also influenced the degree to which respondents perceived the barrier--"lack of confidence." The resulting F-ratio was significant at the .05 level (p = .0138). Results revealed that there were statistically significant differences among female administrators in different age groups in their perceptions of barriers (lack of confidence), $F (5, 82) = 3.07$, $p = .014$--ages 30-34 ($M=3.22$, $SD=1.20$), 35-39 ($M=1.65$, $SD=.75$), 40-44 ($M=1.57$, $SD=1.01$), 45-49 ($M=1.67$, $SD=1.35$), 55 and over ($M=2.00$, $SD= 1.41$. Post-hoc comparisons indicated that the mean response score for women under age 35 differed significantly from the other age categories. Although respondents in this age category perceived this barrier as only somewhat a factor in their career advancement, it was still rated higher than respondents' mean response scores in other age categories. The Scheffe test results also revealed that after age 50, the perception of this barrier increased slightly.

Level of education strongly influenced respondents' perceptions of lack of opportunities for experience (F =3.70, p< .05). Women with doctorates perceived this barrier as a much greater obstacle to their career advancement than women with either master's or specialist degrees. There were statistically significant differences between female administrators with different educational background in their perceptions of barriers (lack of opportunities for experience level of education), $F (2, 84) = 3.70$, $p = .029$. Female administrators with Ed.D/Ph.D degree ($M = 4.19$, $SD = 2.10$) have higher perceptions of barriers than those with either M.S/M.A ($M = 2.71$, $SD = 1.98$) or Ed.S. degree ($M = 2.76$, $SD = 1.82$).The Scheffe test results showed that the women with master's and specialist degrees formed a homogeneous subset, while women with doctorates differed significantly from these two groups.

Level of education also influenced respondents' perceptions of whether their personal characteristics and abilities were congruent with their job demands. There were statistically significant differences between female administrators with different educational background in their perceptions of barriers (personal congruency with job level of education), $F (2, 84) = 4.02$, $p = .021$. Female administrators with M.S./M. A. degree ($M = 2.26$, $SD = 1.51$) have higher perceptions of barriers than those with either Ed.S. ($M = 1.48$, $SD = 0.68$) or Ed.D./Ph.D. degree ($M = 1.50$, $SD = 0.89$). Women with a master's degree perceived significantly higher incongruency with job demands than those with a specialist or doctorate degree. However, the difference was not significant. Finally, the barrier most related to family life and stemming from an effort to combine career and family roles-- role conflict between wife/mother and career woman was perceived more strongly by married women than single women. One-way Analysis of Variance, followed by the Scheffe test indicated that the two groups differed significantly (F = 14.0, p = .0003). A one-way between subject ANOVA was conducted to compare the effect of marital status

on the perceptions of barriers. There was a significant effect of marital status on the perceptions of barriers, $F(1, 86) = 14.01$, $p < .001$. Married female administrators had higher perceptions of barriers ($M = 3.37$, $SD = 2.19$) than single female administrators ($M = 1.68$, $SD = 1.39$).

Relationship of Barriers to Effects.   Research question four was, "If respondents encountered specific barriers in their career advancement, were there corresponding effects which could be linked to these barriers?". Correlation matrices were calculated for responses to barriers and effects to ascertain if any relationship existed between these variables. The technique used to determine relationships was the Pearson product moment correlation coefficient (Pearson r). The probability level for each correlation coefficient was set at the .05 level. Testing for statistical significance indicated whether the probability of the obtained coefficient was really different from zero and reflected a true relationship, rather than just a chance relationship. The results suggest that 28 out of 77 correlations were statistically significant (Table 4). Significant correlations ranged from moderate ($r = .50$, $n = 88$, $p < .05$) to high ($r = .82$, $n = 88$, $p < .05$). These findings undoubtedly reflected that if respondents encounter the barriers of the "Buddy System," "Good Old Boy Network," and "problems in overcoming stereotypic attitudes," then they most likely would experience the most frequently cited effects on career advancement (see Table 3).

Successful Strategies to Career Advancement.   Research question five was addressed in this section, "What did women experience as advancement strategies?" In the final section of the survey questionnaire, respondents reported their perceptions of the success rate of strategies in accomplishing their career goals. Respondents indicated on a four-point Likert scale whether the list of strategies had been "Highly unsuccessful," "Somewhat successful," "Highly successful," or "Never used" in advancing their specific career goals. Table 5 gave the percentage distribution of ratings. The vast majority of the administrators, over 70%, most often reported "seeking advanced training," "developing a positive self-concept," and "becoming professionally visible" as highly successful strategies (Table 5). More than 60% of all respondents found that "improving professional image," "obtaining support from family and peers," "setting career goals," and "being more assertive" had positive results in their career development. "Enlisting influential sponsors," a strategy which has been noted as an important tactic for women in administration, was reported as highly successful by only 36.2% of respondents. The most interesting finding was the use of the "New Girl Network" (An informal system of mutual social networking among women) (Dempsey & Williams, 2013) by respondents. Of the ones who had used it, only 27.3% found it to be somewhat or highly successful. Nearly 70% reported never using this strategy.

TABLE 4

Coefficients and Variances Indicating the Magnitude of the Relationship Between Barriers and Effects

Barriers	Pearson product moment effects													
	Additional pressures to prove self		Exclusion from informal network		Denied access to power		Limited opportunity to advance		Having to move		Applied less frequently		Promotion into dead–end jobs	
	r	r^2	r	r^2	r	r^2	r	r^2	r	r^2	r	r^2	r	r^2
Buddy System					.67	45%								
Exclusion from formal socialization process	.58	34%	.82	67%	.52	27%	.57	27%	.57	32%				
Problems in overcoming stereotypical attitudes			.56	31%										
Tokenism	.54	29%	.63	40%	.51	26%	.54	29%						
Employer's negative attitude			.55	30%	.55	30%	.54	29%					.57	32%
Differential Treatment on the basis of sex			.59	35%			.54	29%	.52	27%				
Lack of network	.53	28%	.57	32%										
Lack of influential sponsors	.54	29%	.55	30%										
Limited access to training opportunities			.56	32%										
Differential evaluations	.51	26%	.57	32%	.55	30%	.50	25%						
Lacking motivation											.52	21%		

Note. * p<.05

TABLE 5
Percentage Distribution of Female Administrators' Responses to Strategies

Strategies	Highly Unsuccessful	Somewhat Successful	Highly Successful	Never Used
Seeking advanced training	4.5	20.5	73.9	1.1
Developing a positive self-concept	2.3	20.5	72.6	4.6
Becoming professionally visible	5.4	22.2	70.l	2.3
Improving professional image	2.3	22.0	69.4	7.9
Obtaining support from family/peers	2.3	22.6	68.3	6.8
Setting career goals	3.4	25.6	65.3	5.7
Being more assertive	5.6	22.8	61.4	10.2
Attending seminars/workshops/ participation in internship programs	5.7	34.1	56.8	3.4
Gaining external experience	1.1	30.7	46.6	21.6
Coping with multiple roles	2.3	28.4	45.5	23.9
Enlisting influential sponsors	2.3	37.5	36.2	26.1
Updating resume	4.5	40.9	31.8	22.8
Developing/utilizing "New Girl Network"	3.4	21.6	5.7	69.3

DISCUSSION

The primary objectives of the study for female administrators in a state in the Midwest public schools were to: (a) identify perceived internal and external barriers to career advancement; (b) identify the effects these barriers had on their career advancement, (c) determine which strategies have been successful for them in overcoming barriers and achieving professional career goals; and (d) identifying differences in the perception of barriers according to age, ethnicity, level of education, position, and marital status. Internal barriers seemed less significant, thus, it was concluded that some of the obligations and conflicts attached to a woman's role as mother was alleviated. Sixty-nine point three percent did not view these multiple roles as significantly affecting them in their pursuit of professional goals (Brunner & Kim, 2010; Robinson et al., 2017). The external barriers most frequently cited by respondents as moderate to serious factors in their career advancement were: (a) the existence of the "Buddy System," (b) exclusion from the "Good Old Boy Network," (c) problems in overcoming stereotypic attitudes, and (d) a decline in the job market. This barrier has been linked to the sex-role stereotype perspective which perpetuates discriminatory practices against women in promotional policies and defines what is thought to be

their appropriate role in the organizational setting (Grogan & Brunner, 2005; Hegewisch et al., 2014; Robinson et al., 2017).

As with barriers, respondents did not feel that the effects of barriers significantly hindered their career advancement. The three effects most frequently cited were: (a) pressures to prove worth and competence in administration, (b) exclusion from the informal network, and (c) denied access to power groups. The findings suggested that the major barriers to career advancement correlated significantly with the respondents' perceptions of how these barriers had affected pursuit of career goals. The results indicated that respondents who encountered the major barriers to career advancement were more likely to experience one or more of the major effects. An ANOVA indicated differences in age, ethnicity, level of education and marital status. Those that were married differed from those that were single and those with a higher education level significantly differed from those who had a lower level. It appears that younger administrators, ages 30-39, who likely had younger children and were married were more affected by internal barriers. Those who were older and had higher educational levels had more expectations for higher career aspirations. There was strong evidence in the study that respondents used various strategies to overcome barriers. However, there was no single strategy viewed as being the most successful in achieving career goals. Instead, employing numerous strategies increased one's chances for success. . Analysis revealed a statistically significant effect of ethnicity on the perceptions of barriers, with female administrators in cultural and linguistic diverse (CLD) groups as having significantly higher perceptions of barriers than Caucasian female administrators.

Limitations

The study was limited to include all women administrators in one state: superintendencies, assistant/ associate/ deputy superintendencies, and secondary principalships. The study did not include female administrators in non-public, private, vocational or special service schools because of their methods of recruitment and hiring of administrators, the differences in the administrative hierarchy and organizational structure: differences in certification requirements for administrators, and differences in their accreditation guidelines and financial support. Since the district superintendents were responsible for public school personnel, no county superintendents were included in the study. Reporting bias is defined as "selective revealing or suppression of information" by subjects. It is possible that under-reporting unexpected or undesirable experimental results for the participants may be a reporting bias. There may be self-report bias as surveys rely on honesty and introspective ability.

CONCLUSIONS AND IMPLICATIONS

The results of the study added to the accumulating data on female administrators and the factors which create barriers to their full participation in educational administration. Research activities of the network should include documenting all administrative vacancies and changes in schools. Information should be gathered on; (a) how many administrative changes or vacancies occur, (b) who applies for those positions, and (c) who gets the job. State departments of education or professional educational organizations (e.g., American Association for School Administrators-AASA) should provide periodic preservice and in-service awareness workshops for

administrators, school boards, and teachers. Discussions of future change strategies for eliminating sexism in hiring and promotional practices should be a major part of these workshops. Policy changes most effectively come from within. Consequently, it is recommended that individual school boards and districts investigate the extent to which women are represented in their administrative staff and closely examine their hiring/promotion practices and procedures.

Policy changes most effectively come from within. External attempts at institutional change are sometimes resisted and resented. Consequently, it is recommended that individual school boards and districts investigate the extent to which women are represented in their administrative staff and closely examine their hiring/promotion practices and procedures. They should also stimulate broad and in-depth research endeavors to identify present policies, practices, and programs that facilitate or hinder women's equal participation in leadership roles. The systematic ·collection of employment data that will provide the base for reviewing and analyzing differential treatment should be encouraged. Other efforts should consist of developing and implementing procedures for identification, active recruitment and promotion of women into administrative posts. Utmost attention must be given to actively encouraging women to consider administrative jobs, personally recommending candidates for positions, and reevaluating requirements based on the premise that women need prior administrative experience in order to possess the skills necessary for administrative positions.

Many of the programs have focused on women as the problem and efforts have been made to change deficient individuals without addressing organizational change or how to improve the opportunity structure for women. Future reform efforts through training or internship programs must focus on changing the individual as well as introducing change strategies which will intervene in the informal processes or organizations, perpetuating discrimination. In addition, increased mentorship experiences within programs should be implemented which will provide women with informal protégée sponsorship relations. This type of relation is important in helping prospective candidates and women administrators to learn and to apply skills and gain professional visibility. It can also assist them in overcoming the psychological, sociological, and structural barriers they face in administration.

Culturally and linguistically diverse groups indicated further disparities. Although Caucasian and women of color themselves must take the initiative in counteracting stereotypic attitudes regarding their roles in society, they cannot accomplish this goal alone. Strategies to achieve equity in administration must include men. Women administrators and aspirants must solicit the help of male allies who are genuinely concerned with equity issues and about the damaging effects of sex stereotypes for women. Active, joint coalitions of male and female administrators should be established in districts in an effort to abolish sex-typing and to tackle the problem of institutional sexism in educational administration. Strategies could be planned to counteract the barriers women face in the workplace.

University departments of educational administration should be the leaders in effecting change with regard to equity issues. They should actively encourage and support women and CLD groups in their career aspirations by maintaining a sincere commitment to recruiting women in certification programs and master's, specialist and doctoral programs in school administration.

Counseling assistance involving information about job opportunities, promotion policies, networking, and informal and formal training opportunities must be an integral part of the student's program, in preparation for assuming leadership roles. Further, university professors could be instrumental in increasing professional job opportunities for women by serving as mentors in the

career socialization process and by providing leadership in introducing aspirants to practicing administrators at professional meetings and on campus.

REFERENCES

Brunner, C. C., & Kim, Y. (2010). Are women prepared to be school superintendents? An essay on the myths and misunderstandings. *Journal of Research on Leadership Education, 5*(8), 276-309. doi:10.1177/194277511000500801

Connell, P.H., Cobia, F.J. & Hodge, P.H. (2015). Women's journey into school superintendency. *Alabama Journal of Educational Leadership, 2*(1)*,* 37-63.

Garn, G., & Brown, C. (2008). Women and the superintendency: Perceptions of gender bias. *Journal of Women in Educational Leadership, 62*, 49-71. Retrieved from http://digitalcommons.unl.edu/jwel/62.

Goffney, L. (2011). Perceptions of race and gender in the superintendency: A feminist poststructural narrative inquiry of an African American, Hispanic, and White novice female superintendent (ProQuest Dissertations Publishing). Retrieved from http://search.proquest.com/docview/908980559/

Grogan, M., & Brunner, C.C. (2005). Women leading systems. *The School Superintendents Association.* Retrieved from http://www.aasa.org/SchoolAdministratorArticle.aspx?id=8792

Hegewisch, A., Williams, C., Hartman, H., & Aaronson, S. (2014). *Fact sheet: The gender wage gap: 2013; Differences by race and ethnicity, no growth in real wages for women* (Report No. C413) Retrieved from the Institute for Women's Policy Research website: https://iwpr.org/publications/the-gender-wage-gap-2013-differences-by-race-and-ethnicity-no-growth-in-real-wages-for-women/

Hill, J., Ottem, R., & DeRoche, J. (2016). *Stats in brief: Trends in public and private school principal demographics and qualifications: 1987–88 to 2011–12* (Report No. 2016-189). Retrieved from National Center for Educational Statistics, Institute of Education Sciences website: https://nces.ed.gov/pubs2016/2016189.pdf

Kowalski, T. J., McCord, R. S., Peterson, G. J., Young, P. I., & Ellerson, N. M. (2011). *The American school superintendent: 2010 decennial study*. Lanham, MD: Rowman & Littlefield Education.

Michaelson, A. (2019). The difference between research questions & hypothesis. *Sciencing*. Retrieved from https://sciencing.com/the-difference-between-research-questions-hypothesis-12749682.html

McGee, J. M. (2010). To climb or not to climb: The probing of self-imposed barriers that delay or deny career aspirations to be an administrator in a public school system. *Forum on Public Policy Online*, *2010*(2). Retrieved from https://files.eric.ed.gov/fulltext/EJ903578.pdf

Robinson, K. Shackshaft, C., Grogan, M., & Newcomb, W. (2017). Necessary but not sufficient: The continuing inequality between men and women in educational leadership, findings from the American Association of School Administrators mid-decade survey. *Frontiers in Education*, *2*(12). doi:10.3389/feduc.2017.00012

Superville, D.R. (2017). Few women run the nation's school districts. *Education Week, 36*(13). Retrieved from https://www.edweek.org/ew/articles/2016/11/16/few-women-run-the-nations-school-districts.html

Williams, J., & Dempsey, R. (2013). *What works for women at work: Four patterns working women need to know*. New York University Press, NY.