

## AN IN-DEPTH QUALITATIVE AND QUANTITATIVE ANALYSIS TO DETERMINE THE FACTORS THAT AFFECT THE EXISTENCE OF AFRICAN AMERICAN WOMEN SUPERINTENDENTS IN THE NORTH CAROLINA K-12 PUBLIC SCHOOL SYSTEM

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### ABSTRACT

*The purpose of this study is to study how race, gender, values, attitudes and power perceptions of leaders contribute to the recruitment, retention, and training of African American female superintendents. This study is focused on African American female superintendents and their experiences that led to the acquisition of the position. The overarching question in this study is: how do race, gender, values, attitudes and power perceptions influence the success of African American female superintendents?. The data collection tools for this qualitative study include observations, focus group with African American women from the same state who are in the Education field but not superintendents, and interviews with current and former African American female superintendents and those who report directly to them. Through the lenses of critical race and social power theories, the researcher seeks to identify commonalities amongst the experiences of the participants to extract key elements that affect their success. With these key elements to success identified, they can be incorporated into the journeys of future leaders and increase the number of African American females who can successfully attain this position of power in the Southern State in this study. The implications of this study show that there is a need for a change in the way and timing of the way African American women are trained to lead.*

*Keywords: Analysis, Color Struck, Education, Educational Leadership, Empowerment, Gender, Glass Ceiling, Good Ole Boy Network, Instrument, Jim Crow, Power, Power-Over, Power-With, Qualitative, Quantitative, Shifting, Superintendent, Tri-Squared.*

### INTRODUCTION

In the effort to achieve equality, African American women have learned to assimilate to the people who hold the positions they wish to hold. Since they come in an array of hues and personalities, there are some who are more accepted in majority circles than others. Yet, there is still a need for all of them to ensure that they can fit into the world of the majority, White America, where the power holders are. Power is traditionally held by White males who have been trained throughout life to lead, and are controlling, confident and aggressive (Bosak & Sczesny, 2008).

Those women also hold the burden of having to fit into a minority world of people, African Americans who may or may not achieve or chose to pursue the success they choose to hold. In the African American world, success, in

terms of positions of leadership and power in any arena aside from sports as of late, is not a large part of their recognized history, thus it is not recognizably as prevalent as it is in the White world. For this reason, many African American women have changed the way they look to conform to more accepted aesthetics in American society or changed the way they interact with others to exude the power they want to attain.

All of these elements have affected African American women who venture for success in the world of educational leadership. In P-12 education, the pinnacle is becoming a superintendent. Unfortunately, women of this demographic who hold these positions are few. In this Southern State, that translates to three African American female superintendents out of the 115 school systems that have

the positions.

## **Background, Context, and Theoretical Framework of the Study**

This study will be based on the idea that power can be attained by employing behaviors that exhibit what others view as powerful. Power is maintained through the empowerment of others. African American women face a double edged sword in power attainment. Being African American and female provides them with two obstacles in the American power structure. Historically, the power holders in the country have been White males and the majority of the leaders today still hold both of those attributes (Brunner & Caire, 2000). This study is based on the theoretical framework of Marx's critical theory and French's social power theory. Both of these theories deal with social and power structures. These structures shaped the questions and expected findings of this study.

African American females are in two groups that have been traditionally oppressed in this country and are fighting to rise to the top of the power structure. For those women, the culture of many African Americans in America works as an advantage and disadvantage. Because of the need to survive in this power structure, Jones and Shorter-Gooden (2003) describe the adaptation of African American women as the art of "shifting," conforming to the majority and staying true to who they are in a multitude of ways and configurations. On one hand, African Americans have been known as those who strive in spite of constant battering, mentally and physically, which has led to a culture of hard work and constant fighting against the oppressors. On the other hand, those who have decided not to fight the system and conform and take what is given are seen as weak and lazy. Women have also been seen as the weaker sex. Oftentimes, they have taken on the characteristics of males to be respected and viewed as powerful. Collard and Reynolds (2004) suggest power-over, the most recognized type of power because it is the type enacted on others, as masculine and held less by female leaders.

By looking at specific cases within this realm, it will be seen in detail how this struggle for power has affected each person. Each of these women attains power through her

elicitation of the cooperation of others (Schwalbe, 2008). Knowing the type of power that each individual exudes will show how that power type has helped or hindered their success. The study of these women sets the stage for an instrumental case study. Having details about the nuances of their lives can lead to potential connections to the lives of other women who have reached their level of achievement as well as those who aspire to reach that level.

In educational leadership, there have been methods and styles of leadership that have proven to be successful. The culture of African American females makes performing some of these methods more difficult than others. Furthermore, the values and attitudes these women have may also influence their drive and the perceptions other people have of them. Being able to assimilate culture and successful leadership styles and methods will serve as an important element of the success of this group reaching positions of administrative power. This assimilation must take part in the political structure of education that many try to mask or deny. Ramsey (2006) states, "whenever there is power to be had, resources to be divided, recognition to be earned, or influence to be brokered, there is politics". The position of superintendent is a position of power, thus, it is surrounded by politics. The current research about African American female educational leaders is predominated by studies on principals, further cementing the need for information about those who have achieved the Superintendency (Alston, 2000).

## **Rationale for the Research Investigation**

There is a gap in the literature regarding how African American women gain power in roles of Educational leadership. The number of African American female superintendents in the Southern State used in this study is extremely low. Out of 100 counties, with some counties having more than one school system, there are only three of these women in the role of Superintendent. Research is needed to determine how African American women are achieving success in the world of Educational leadership by achieving a Superintendent position at the P-12 level. Historically, the power holders in the country have been White males and the majority of the leaders today still hold

both of those attributes (Brunner & Caire, 2000).

## Purpose of the Investigation

The purpose of this study was to clarify the attainment of leadership roles from the three African American female superintendents in a Southern State. This information will help lay a foundation to increase the number of African American female Superintendent in the state and in the country. Acquiring knowledge about those African American females who have managed to obtain positions as Superintendents in a Southern State, where there are very few, can provide insight into how their power perceptions, attitudes, values, race, and gender have affected their success. Brunner and Claire (2000) declare that White males are the ones who hold positions of power, in the United States of America. Thus, for African American females in the country to ascend into this position of power there has to be research completed to find out why what they are doing currently is not garnishing them more power. The ultimate position of power in the world of public education is Superintendent of a School District. In the observed Southern State, the number of superintendents who vary from the traditional power holders in the country are drastically low. Out of 115 total Superintendents in the state, there are only three African American females having knowledge about the lives of those women who have successfully achieved the position of Superintendent can help show possible paths for others who also want to take the journey to this position of power.

## Qualitative Research Questions

The overarching question in this study was; how do race, gender, values, attitudes and power perceptions influence the success of African American female Superintendents? To delineate this information, the researchers broke down the question into the following seven [R1– R7] qualitative sub-questions:

- R1: How does race influence the success of African American female Superintendents?
- R2: How does gender influence the success of African American female Superintendents?
- R3: How do power perceptions (i.e. the type of power a woman can hold or holds) influence the success of

African American female Superintendents?

- R4: How do values and attitudes influence the success of African American female Superintendents?
- R5: Based on participant perception, what issues need to be addressed in the recruitment of future African American female Superintendents?
- R6: Based on participant perception, what issues need to be addressed in the retention of present and future African American female Superintendents?
- R7: Based on participant perception, what issues need to be addressed in the educational preparation of present and future African American female Superintendents?

The overarching research question and subsequent sub-questions were also further addressed in the development and deployment of the Webb–Osler Tri–Squared Research Inventive Investigative Instrument and used to ascertain more in–depth evidence that supported the research question. A Tri–Squared Test was conducted and provided the transformation of qualitative input into quantitative outcomes to determine the validity of the research hypothesis.

## Research Hypotheses

The Research Hypotheses of the follow up Tri–Squared study were based on the trivariate (or “three variable”) grouping of the aforementioned research questions from the overarching research question to form the Tri–Squared Trichotomous Categorical Variables. The responses to the initial research qualitative Trichotomous Categorical Variables were then analyzed to determine qualitative Trichotomous Outcome Variables that could then be transformed quantitatively through the Tri–Squared Test to ascertain which research hypothesis had merit. The research hypotheses for the Tri–Squared study were:

- $H_0$ : There is no significant difference in the perceptions of the research participants regarding leadership as determined by the Tri–Squared Test in terms of (1) Leadership Experiences; (2) Leadership Values; and (3) Leadership Outcomes.
- $H_1$ : There is a significant difference in the perceptions of the research participants regarding leadership as

determined by the Tri-Squared Test in terms of (1) Leadership Experiences; (2) Leadership Values; and (3) Leadership Outcomes.

The aforementioned research hypotheses were converted into Mathematical Hypotheses for the purposes of analysis (in a two tailed format). The Mathematical Hypotheses for the Tri-Squared study were:

$$H_0: \text{Tri}^2 = 0$$

$$H_1: \text{Tri}^2 \neq 0$$

### Relevance of the Study

In the area of Educational leadership, this study could provide the insight needed to create pathways for increased numbers of African American women in positions of educational leadership. Knowing what has affected the journeys of current African American Superintendents can provide those who are recruiting, retaining and training future leaders with knowledge to increase their chances for success. The findings from this study will be used by organizations who train future leaders. The information gleaned from this study will also assist school systems to recruit African American female leaders to increase their organizations' diversity at the advanced leadership level.

### Significance of the Study

In P-12 education, it is imperative that there be a diverse group of people in leadership positions. In these settings, the teacher workforce is made up of women, while the school leaders are typically male (Dana & Bourisaw, 2006). With the schools moving to a more global model, there should be a variety of leaders who have a say in how schools are run and provide an example of success to the students and staff members under their leadership. In order to increase the number of leaders who are in the minority in education administration, there must be research conducted to find out why their numbers are low in representation, how those numbers can be increased and maintained.

There are currently limited published studies about African American female superintendents, thus this study would add to the pool of literature (Alston, 2000). The existing literature focuses on what happened in the lives of women

who have achieved the position of Superintendent. This study describes the journeys of three current or former Superintendents and extrapolates from their experiences and the perceptions of others' information that would help other African-American females achieve the same or a similar position. Looking specifically at a Southern State with 100 counties and more school systems than that which has only three African American female Superintendents will give insight on the regional issues in Educational Leadership as well as for the overall leadership community.

### Nature of the Study

Qualitative research methods are most effective when embarking upon a study where the questions are open ended and the researcher yearns to discover information that answers how and why (Creswell, 2009). Furthermore, in cases where the in-depth study of the minute aids in the understanding of the complex case studies can enhance the understanding of qualitative inquiries. For this study, case study and phenomenological designs were used. The study focused on the Superintendents, current and former, to discover what themes were consistent through their journeys to and through the position. The phenomenological study focuses on African American female educators and the influences on their careers and potential upward mobility in educational leadership.

Jones, Arminio, and Torres (2006) stated that qualitative research is the methodology used to highlight and understand the lives and world of human beings. This research methodology is complex, compelling, and ever changing because humans are in a state of constant evolution. As people change, so do the results of qualitative research. As a result, there will always be more research to conduct and new connections to be made. Since this research is done about humans and human nature, there are automatic connections of the researcher to the research. These connections have been criticized and called bias by critics, but proponents of qualitative research see it as the power behind the research (Jones et al., 2006). The data collection methods used to support these designs were focus groups, open ended interviews, interviews, and observations.

The study involved three African American female

Superintendents from a Southern State. By studying the individual cases of the Superintendents, the researcher was able to gather information about the overall picture of their journeys to positions in educational leadership. This information provides clarity of successes and failures and opens the door to further inquiry in this field. By looking through the lenses of the critical and power theories, the researcher was able to make inferences and connections between the lives of these women and their professional ascension.

## Data Collection

The following data collections method will be used to assist the researcher in this qualitative case study:

### 1. Open-ended conversational interviews

It is the process of having personal conversations with the individuals whose cases are to be studied. These conversations provided the researcher with answers to specific questions about their professional journeys and life experiences. The open ended questions allotted for a consistent focus for each interview. Conversational style interviews permitted for the interview to be open and adaptable to the individual's personality.

### 2. Focus Groups

It is the process of gathering information from African American women who are in the field of education but are not at the executive level of Superintendent who provided insight into why they would or would not want to gain the position, why they are where they are professionally, and what could or should be done to increase the power levels of African American women in education. These focus group participants were separated from those whose cases are studied individually.

### 3. Observations

The individuals whose cases are studied were observed in their working environment. These observations provided additional insight into their success and power roles in the workplace.

This study leads the way to a qualitative study because, the goal of the researcher is to find themes that present themselves in the experiences of the women who are successful in the field of educational leadership. The

conducting of case studies aids in revealing the themes. By looking at three women from different places that are successful in their eyes and the eyes of others helps to shape the picture of what happens with this group as a whole. This methodology is further appropriate because the researcher is not attempting to reach a specific goal in this study, but to question a phenomenon (Creswell, 2009).

## Relevant Research Terms that Impacted the Study

There are a number of terms that were vital and critically important as they were primary catalysts that greatly affected the research participant's responses. They are:

- "Color Struck": The belief by African Americans that the darker the person the less worth and power they have. This perception encourages African Americans to look and behave in form with their lighter hued counterparts, fair skinned African Americans and Whites.
- "Empowerment": Empowerment is when the leader initiates constant change within people by encouraging them to grow.
- "Glass Ceiling": This is a metaphor for the levels of leadership that are unattainable though they can be seen by those who cannot achieve them due to societal forces. (Dana & Bourisaw, 2006);
- "Good Ole Boy Network": A barrier to career advancement for anyone who is not a White male. The network typically consists of White males with power and money. (Davidson, 2010).
- "Jim Crow": Racial segregation. The name originated from a character in an 1832 minstrel show where a White actor was dressed in African American face. The Plessy v. Ferguson case of 1896 which ruled separate but equal cemented these laws through Supreme Court ruling. Though the case spoke of railroad cars specifically, the South passed a lot of Jim Crow laws based on this ruling. (Lawson, n.d.).
- "Power-Over": Power-over is the masculine form of power that creates a structure of clearly defined power holders and subordinates. (Collard & Reynolds, 2004);
- "Power-With": Power-with is the feminine form of power that creates a structure of power holders who

empower those who follow them. (Collard & Reynolds, 2004);

- “Shifting”: Shifting is the act of African American women changing their personal language options, style and dress to fit the majority of the group of people they will be interacting with for a certain amount of time. (Jones & Shorter–Gooden, 2003).

## Investigation of Primary Characteristics

### Assumptions

The following assumptions were present in this study:

- The Superintendents hold power in their district;
- The Superintendents took a number of steps to achieve their position;
- The Superintendents are successful;
- The experiences of these leaders replicate those of other women of their same race and in their geographic region;
- Those interviewed may embellish their accounts to impress the researcher;
- Focus group participants may harbor negative feelings for a variety of reasons and it may affect their responsiveness to the selected questions for discussion.

### Limitations

The following limitations were present in this study:

- The participants will be from one state in the Southeast region of the United States;
- This study may not be relevant for work environments outside of education;
- Precautions must be taken to prevent researcher bias;
- Results of this study may be altered if the participants are not completely open and honest; and
- There may be factors outside of race, gender, power perceptions, attitudes and value that cannot be excluded from the results of the study.

### Delimitations

The following delimitations were present in this study:

- The study will not be a comparison of the experiences of African American females to other females in

leadership roles. This will allow the focus to remain on the experiences of these women and how their personal experiences aided in their position attainment;

- There will not be explanations of what defines their success outside of the achievement of the position of Superintendency. Test scores, teaching working conditions surveys and other quantitative measures of success will bring in outside factors that determine success;
- There will not be any Superintendents included outside of the specified Southern State. Keeping the study state-specific will provide a definite commonality that links the participants.

## The Legacy of African American Women in the United States

The background for this study starts with the history of African American women in the United States. These women were a part of the slave trade and have been treated like property as slaves and as women. They constantly had to struggle to attain equal rights from the Women's Suffrage Movement to the Civil Rights Movement of the 60's (Loder, 2005). In the midst of these struggles, women have been left behind in the power race. Being left behind has caused these women to fight for equality. They have had to learn from the past and still hold on to hope for the future. The implication for women presently is a gap in the successful achievement of power. The world of education has been affected by this power gap. African Americans have also had similar challenges and are in the game of catching up to the power levels of the majority race in the country. Being members of both of these groups, African and American women are in a quandary (Andrews & Simpson, 1995; Jones & Shorter–Gooden, 2003). Like all creatures in nature, these women have the option of fight or flight in their pursuit of power in all areas of life.

There are a limited number of African American female Superintendents in the Public School system, in comparison to the growth in number of African American female teachers, Principals and other district level leadership positions (Alston, 2000; Lane–Washington & Wilson–Jones, 2010). Because of the limited numbers, there is a need to

delve further into why the number of Superintendents is still so low and what can be done to assist more of these females to attain the position. This study shed light on the issue with emphasis on a Southern State. In this chapter, the focus will be on the findings of other researchers about this problem.

The previous recorded research has been based on the comparison of female administrators to male administrators and on the barriers to female advancement (Grogan, 1999). This study extends the research by focusing on the addition of racial challenges, power struggles, and the implications for recruitment, retention, and educational preparation of this group of women. This study also gives a regional view by focusing on a Southern State. While African American women are attaining Superintendent positions in the State, there are only three African American female Superintendents in the State while there are 115 school districts in the State.

The theoretical framework and literary themes are discussed based on Marx's Critical Theory and French's Social Power theory. Both of these theories deal with social and power structures. These structures seem to have helped to construct the glass ceiling that these African American women have a hard time breaking and moving beyond. The literary themes that will be discussed are included:

1. Race
2. Gender
3. Power and
4. Perceptions, Values Attitudes.

Each of these themes reveals a different portion of potential areas that are overcome by the African American women who attain Superintendent positions in the Southeastern United States.

### **Theoretical Framework of the Research Investigation**

The subject of this study leaves room for many questions to be answered and for many different perspectives to be considered. For the purpose of a narrowed view for more specific study, the critical theory and social power theory lenses were used as a framework for this research investigation.

### ***Critical Theory***

Critical theory maintains that, ideology is the principal obstacle to human liberation (Guess, 1981). Critical Theory is rooted in the belief that humans need to be freed from what holds them captive (Bowman, 2005). This theoretical basis has led to many other critical theories; one of which is the critical race theory. The captor in this case is then race. It is race that enslaves and it is from race that people need to be freed. Race is an idea that is created by society, it is not natural (Schwelbe, 2008). Race goes beyond color though it is defined by it. Race defines power lines and perceptions. Race fosters thoughts of what certain people can and cannot do, learn, create, attain, and maintain (Bonilla-Silva, 2006). Race is defined by appearance, interrelations, values and attitudes.

Gender, like race, has also been affected by society though it is a natural occurrence. Though men and women have obvious physical differences, they may have to change the way they do tasks, but they are still capable of doing the same task other than those that are biologically impossible for them to perform (i.e. child birth). But, because of societal histories of power holders, females are often relegated to being followers rather than leaders. Gender is portrayed through appearance, interrelations, influences, values, and attitudes.

### ***Social Power Theory***

Power in society is affected by both race and gender. Both of these entities define where humans lie in the social structure. As it relates to critical theory, those who enslave and the ideas that enslave hold the power. Both theories also connect because they are based on social structure. French's formal theory of social power specifically speaks to the effects of the thoughts and opinions of people by those who influence them through direct communication (Friedkin, 1986). The theory speaks directly to the power of networking and influence. It determines that power structures are based on opinions and thoughts, thus the structures are based in networks and influence (Friedkin, 1986). Those with power therefore influence the thoughts and opinions of others, so to attain power you must attain influence.

## African American Women and Their Ongoing Role in Educational Leadership

African American women have a well-defined journey into positions of educational leadership. In the U.S., there is a history that complicates the journey of the African American female. Coming from a portion of time where they were not considered as whole humans, to being lower class citizens, and having to fight for rights of equality, these women are in the midst of an uphill battle (Loder, 2005). The research shows that there are elements that show the importance of having these women in the field of educational leadership. These elements include:

1. Serving as cultural icons for the students, staff and future leaders.
2. Serving as tools for recruitment, retention and training of other African American female leaders
3. Serving as breakers of barriers while continually serving the communities of which they have traditionally been a part.

The literature describes the role of the African American female as an educational leader. It tells that there are more than educational implications, but also cultural implications in the role of the African American female leader. These leaders have to concern themselves with uplifting the members of their race and serve as an example of high standards and expectations to all students and especially those of the African American community. Hillard says that, "African American educators must be committed to helping African American students and should partner with communities and parents to help them succeed in supporting these students' academic and social development, even when schools failed to do so". This shows that the role of the African American educational leader goes beyond the schools and must constantly connect with the greater community.

The research suggests that mentors are helpful factors in the retention and recruitment of African American female educational leaders. Though simply having a mentor is important, due to the lack of African American women in these leadership roles, White males often take the position of these mentors. The need for mentors who are physical examples of African American female leaders needs to be

increased. Researchers and authors suggest that, there is a need for increased African American male educators to help to improve the education of African American male students, the need for African American female leaders to serve as an example for reciprocal leaders is also needed. This also shows the need for the increase in the number of African American female leaders to aid in the continual increase and retention of African American female leaders in the educational field. The automatic relationships these mentors can have with their students or mentees cross cultural and racial barriers, others have to often work harder to achieve.

In the past, there was a vast difference in the number of African American leaders versus White leaders in the U.S. public schools and that the African American leaders that were represented were housed mostly in inner city, urban, low income, and minority districts. This shows that, those leaders have been boxed in, even when they have been able to make it into the positions of leader. If African Americans are limited in where they can lead, then they have not truly reached a level of equality and growth in the area of educational leadership. There has to be a plan to help potential African American leaders to find a way to break out of this barrier and find ways to grow into a more prominent place of leadership with more universal opportunities for placement and growth.

Those women have to continue to struggle to fight against the images society has placed on them. They have been seen as caretakers of all people (i.e. mammy, single mothers), objects of sexual satisfaction (i.e. slave mistresses, video dancers), and unruly defenders (i.e. ghetto girls, loud with bad attitudes). None of these characteristics lift them up as intelligent leaders who set a positive standard for others in society. The stereotypes make them reliant on others to keep moving through life or so independent that they would not serve as leaders for others. Yet, there are many African American women who have proven to be successful leaders in various organizations, but further research has to be done to bring these situations to the forefront and highlight these successes.

Plans for further literature research will need to focus on



more specific measures to determine to what extent there are common factors that lead to the success of African American female educational leaders. The factors that are found need to be used to recruit, retain, and train future African American female leaders, showing them ways to work within various communities rather than the traditional low income, inner city, urban, minority schools and districts. There needs to be further development of the research showing how these women can move from building level administration to district level administration and achieve success. Research also needs to be done to fill in the gaps from previous studies and bring the information up-to-date and relevant to modern times.

### **African American Female Superintendents**

Race is a structure that was created by humans to establish a social structure. (Schwelbe, 2008). Because it is humanly constructed, it can be changed and manipulated to work with the favor of those who created it. Race has primarily been used to establish power, those who will have it and those who will not by setting social norms based on the ideology of the dominant race (Bonilla-Silva, 2006). This also creates a cycle of oppression against those who do not hold the power. The cycle of oppression has been prevalent in the lives of African Americans. Moving from slavery to Jim Crow to the continued unnamed racial division, African Americans continue to fight for equality in all areas of life. It must be recognized that, racism still exists or the risk is run that it will no longer be seen as a factor that affects the lives of minorities and their chances for success (Bonilla-Silva, 2006). This factor needs to be acknowledged so that proper steps can be taken to increase chances for success.

At the root of the race issue are words (Golden, 2004). These words have broken groups of people into shades of color. These colors have been used to determine who is acceptable and who has influence. "White Habitus" is a socialization process that conditions and creates the taste, perceptions, feelings and emotion of Whites (Bonilla-Silva, 2006). Whites in America have the power, thus their views and opinions are what influence and establish the norms in the country (Bonilla-Silva, 2006). Thus, those who are accepted by the or into the White racial group are the ones

who hold the power and influence. Bonilla-Silva (2006) suggests that the current racial structure is set up in a hierarchy which is called as Triracial Order. Bonilla-Silva states, "The Whites group includes Whites, new Whites (Russians, Albanians, etc.), assimilated White Latinos, some multiracials, assimilated (urban) Native Americans, and a few Asian-origin people. Honorary Whites include Light-skinned Latinos, Japanese Americans, Korean Americans, Asian Indians, Chinese Americans, Middle Eastern Americans, and most Multiracials. The Collective African American group includes Vietnamese Americans, Filipino Americans, Hmong Americans, Laotian Americans, Dark-skinned Latinos, African Americans, New West Indian immigrants, African immigrants, and reservation-bound Native Americans (Bonilla-Silva, 2006)."

This order not only shows the hierarchy of races, but inadvertently the hierarchy of power. This racial structure being seen as a power structure shows the potential factor for the continued low number of African Americans in power roles in the different sectors of American education institutions. Due to the increased numbers of other minorities in the country, African Americans can no longer assume that they are the most important of the groups (Bonilla-Silva, 2006). This affects the efforts towards the growth of this group in the power and racial structures that increases the importance of this type of study to help with the recruitment, retention and training of African American female Superintendents, so this group will not be cast aside and forgotten.

### **The Role of Gender and Leadership**

Women who are leaders typically have negative stigmas attached to them. They are assumed to be aggressive, which in women is often viewed as a negative trait (Dana & Bourisaw, 2006). Women are seen as nurturers, also negative because they are thought to be the ones who will leave work to care for sick children or arrive late because they are handling household emergencies and things of that nature (Dana & Bourisaw, 2006). Because of this nurturing role, women are also relegated to positions where they can take care of others, such as Secretary or Assistant which requires them to utilize their organizational and social duties as in home (Dana & Bourisaw, 2006). These are a few

of the reasons women have been held back from positions of leadership. Because of these positive stereotypes that come with negative connotations, women are thought of as those who care but not particularly as those who can control. These roles do not give others the perception that women can properly handle the power that it takes to lead organizations.

## Defining Perceptions of Power

Power is defined in this research study as the ability to do or accomplish things. There is a universal desire for some sense of "personal power" in each individual. Power is not just running companies or other big entities. Power can be the ability to purchase your own meals, decide where you live, what you will wear, and how much you will have to struggle. This is all equal to a specific type of freedom. In particular this relates to, "the freedom of choice". This type of freedom is one that is supposed to be right in the United States. But, when you lack the knowledge of what your choices are or you lack the power to attain various options in life, your freedom of choice is limited because your options are limited. When individuals have limited options, they are encapsulated and as a result of that, they are then forced to work with what they have.

Those who are fortunate enough to get beyond the aforementioned may have the opportunity to enter into the higher levels of the power infrastructure. They must then decide if they want to continue to climb higher within those channels or depart from the environment altogether. Those who decided to stay must then adapt to the "culture of power". They must then adapt to the rules for participating within the "culture of power". The culture of power (Delpit, 1988) doesn't leave much room for those who don't assimilate. The groups of people who hold power are those who decide who has the influence to get attention. This group also can condition others to doing what they want to get done. Until the group with the privilege, changes to those who are different from the ones currently with power, we must either learn to assimilate or annihilate the system (Johnson, 2006; Schwelbe, 2008).

It is during this process that people are pre-sorted and tracked. If students of certain groups are made to know that they are only successful if they master certain types of tasks

(i.e. learning information by rote, regurgitating information given to them by others) while other groups are successful if they master other tasks (i.e. learning how to think though problems are coming up with their own solutions) then the thoughts of success keep them at the level of success. If expectations are lower for one group than another, then the cycle of inequality continues. If only one group is taught about freedom and shown how to attain and take advantage or options, then the other group is left in the dark. This is purposeful in our educational system. The withholding of knowledge is how power is kept with those who have it and kept from those who don't have the power.

The rules of the "culture of power" are clarified through the attainment of knowledge. Students must learn ways of talking, ways of writing, ways of dressing, and ways of interacting (Delpit, 1988) that will allow them to attain power in the society they are a part of. That means, it cannot be acceptable in a place where they are supposed to get formal education, for students to use language that is also not formal. The "culture of power" (Delpit, 1988) does not leave much room for those who don't assimilate. Until the group with the privilege, is being able to decide who is taken seriously, who receives attention, who is accountable to whom and for what (Johnson, 2006, p.33) changes to those who are different from the ones currently with power, it must be real with our future. If you want power you must become a part of the power. In order to change who is power, you must change it from the inside out!

Lisa Delpit's (1988) culture of power refers to the rules that control the maintenance, the acquisition, and the distribution of power among the majority. She states the following, "Empowerment-Something has to happen to empower those who lack power to be able to have a chance at change." Kohn states, "At the very least, [what those who have attained some portion of the power must do is educate] people typically lacking in wealth, self-confidence, or political savvy [so that they] can be provided with the skills to be more effective advocates for themselves and their children. "This is true empowerment. Parents have to let other parents know that they can advocate for their children as well. The children are the future. If they continue the legacy of being power poor,

then the power structure stays intact. People are in desperate need of a power shift. Societies have to be educated in order for it to happen effectively. Everyone must remember that "Since people make systems happen, then people can also make systems happen differently" (Johnson, 2006, p. 82). It is up to the people who are affected by the system to change the system. Individuals must acquire the knowledge to know how the system operates in order to know how to change it. When the system is in operation, those who have attained knowledge and power in the system must do their part to educate and empower those who lack the knowledge. This knowledge allows people to think and question the way the systems in society operate and want to change what they feel is not just. If the knowledge of people can be limited, they are less likely to question the way the system operates and those who have power within the current system can continue to enjoy it (Schwelbe, 2008).

## **The Values and Attitudes of African American Women**

### ***Attitudes***

The attitude of the African American female has been shaped by their history. While these women come from diverse backgrounds and class cultures, they share a general history in the United States of America. These women come from a history of being slaves, nursemaids, rape victims, caretakers, hard workers, fighters, video dancers, and more. These images have created a stereotype of African American women having bad attitudes, being loud, being bossy, in need of direction, hard, difficult and unprofessional bitches (Golden, 2004; Jones & Shorter-Gooden, 2003). These attitudes and resulting stereotypes have also shaped the reactions that some of these women have towards life, work and society. For many, it has pushed them to want to succeed despite their barriers (Chonchas, 2006).

### ***Influence***

Attitudes are also affected by the influences that surround individuals. Influences can come from anything, media, religion, family, trends, and culture. In African American culture, the mother holds a great influence. Golden (2004) portrays this influence with the following questions: "Why do we remember the words of our mother more than any

other? Why does a mother's assessment of her daughter resonate in the chambers of that daughter's heart like the Ten Commandments? Like the laws of gravity? Like a destiny that you simply cannot escape? (p. 12)"

### ***Appearance***

The idea of having a destiny that is inescapable is directly tied to this next topic. The appearance of a person is often altered in ways that it can be to make them more acceptable in a culture. Schwelbe (2008) says that we use appearance as a way to know what to expect from people and things. He continues by mentioning that, while we encounter many people, we do not always get to know them well, so we use their appearance also to learn how to figure out who they are and what they are quickly to decide if we want to be involved with them. Appearance is used as a quick judgment of a person. There are many parts of a person's appearance that can be changed; clothing and hairstyles are an example. But then, there are traits that cannot be changed without the aid of lots of funds and plastic surgery, for instance, skin color and other genetic physical traits.

The idea of having a stigma that a person cannot take off is a challenge. The way that African American women look has been something that has and always will set them apart. African Americans come in an array of shades, with an abundance of hair textures, and a hodgepodge of facial and physical features. The darker hue of the skin of this group of people is typically what first identifies them as a part of the African American group of people. This perception is something that is hard to change though many have tried. Fairer colored skin in the African American has been associated with a better life, better love, more power and more acceptance by the mainstream; thus the attempts by many to use measures to brighten their skin (Golden, 2004). This also attributes to those who try to "Whiten" themselves through straightening their hair and have eye colors that are usually attributed to the White race, they are trying to get away from the dark skinned, kinky haired ugly (Golden, 2004). Like the effects of the stereotypes attributed to the African American women because of attitudes, negative thoughts about appearances have had a dual effect on this group of

women. Both have caused women in this group to reset the world and its culture of Whiteness; or it has pushed them to want to be “the smartest, the baddest at whatever they choose to do” (Golden, 2004, p. 26) in the world.

## **Critical Analysis of Research Findings**

The literature reviewed shows that, while there have been studies on the differences between female and male leadership and the barriers to female advancement (Grogan, 1999), there is a need for extended study to increase the knowledge of advancement tactics focused solely on women; African American women specifically. Race and Power structures appear to play a role in the lack of attainment of the position of Superintendent for these women, as shown in the critical and social power theories. While the critical theory speaks to the freedom from what holds you captive, in this case, gender and race, the social power theory speaks to the importance of networking and influence by those who hold and want to hold power. These both are important to the recruitment, retention and training of those African American females who desire to be Superintendents in the Public School system.

Race, gender, power, empowerment, attitudes, influence, and appearance all play roles in the perceptions of African American females and those who are viewing them as potential leaders. It is important to understand the views of those who are in power, the cultural majority, and those who desire power, in this case, African American females pursuing positions of educational leadership. Understanding these perceptions can allow potential leaders to know what type of influence they need to exude to get in the positions they desire.

Through qualitative research methods, the study shows a holistic and personal view of the journeys that those who have been successful in the attainment of the position of Superintendent and have accomplished. Completing a case study and interviews with current and former Superintendents will present themes and patterns for success through their experiences. Further research using direct report interviews and a focus group will extract more themes in the area of perceptions and create connections between the thoughts and views of those who have successfully attained the position of Superintendent and

those who are qualified to and may or may not aspire to be in the power position.

The previous research, while well done in methodology and framework, lacks the true hope for the future of so many who have been oppressed. The research does not provide ways to maintain and increase the numbers of African American female Superintendents in this country. The research sticks very closely to limited points of view, either just race or just gender, rather than taking the time to piece these different concepts together to look at the bigger picture. Educational leaders have to look at the details and the whole blueprint to analyze the situation they are in and to make the appropriate changes for forward progress. Research in this area needs to take that same approach. It has to find a way to influence readers to want to change the current situation and take action. Also, coming from the point of view of success, gives more hope rather than coming from the point of view of limitation there for closing the doors on future opportunities for change.

## **Research Design and Methodology**

The research questions lend themselves for qualitative study because the goal of the research is to find themes that present themselves in the experiences of the women who are successful in the field. Conducting case studies would aid in revealing these themes. Looking at three women from different places that are successful in their eyes and the eyes of others helps to shape the picture of what happens with this group as a whole. Also, the researcher is not looking for a specific goal to be reached, but to question a phenomenon of only three African American female Superintendents in existence at the current time in the selected Southern State (Creswell, 2009).

To conduct a qualitative study, it would be ideal to do interviews of the same sample population from the quantitative study. The study extracted perspectives from all stakeholders involved and found out what differences are there in their perceptions. Also, doing case studies of women who are examples of successful African American female educational leaders will provide the insight into the factors that may lead to their success. The information showed firsthand knowledge of their personal journeys and therefore dissected themes and patterns. These women

were recruited based on their position in the school system and their geographic location in the state. The focus group members were through random selection with concentration on their gender, race, and position in the district.

### ***Case Study and Phenomenology***

Readers of the study are able to examine these cases and use them as springboards to examine other cases to see if the findings are consistent. Finding patterns in behaviors and activities that lead women in this group to positions of leadership provides insight into the potential materials and methods that could be used to recruit, retain, and train future leaders who are a part of this demographic. This will improve the diversity in the field which aids in the global model most schools and school systems are moving towards.

### ***Case Study Description***

By looking into the lives of African American female education leaders who are successful, insight was provided on their journeys to success. In order to keep the study narrowed and specific, the leaders will all work in a Southern State. The main subjects in this study will be three African American women; one current Superintendent and two former Superintendents. This sample covered the spectrum of the prior and current lives of the African American female Superintendent in North Carolina public K–12 education. To review these cases, multiple methods of qualitative research were used, such as observations and interviews. This aided in getting an overall view of each subject's entire journey. Record of the study was kept with specifics from each observation and clear record of interviews including tape recordings when possible.

### ***Qualitative questions used in this study***

1. What is your background?
2. What is an experience that you had that led you to pursue the Superintendency?
3. How do you believe your colleagues view you as a leader?
4. How do you use your power to influence what occurs in your district?
5. How do you know that your influence is effective?
6. What value do you hold most dear?
7. How has race affected your journey to the Superintendency?
8. How has gender affected your journey to the Superintendency?
9. What is your leadership philosophy?
10. Why is education so important?
11. How has your educational background influenced your decisions as an educational leader?
12. Who has been the most influential person in your journey to the Superintendency?
13. In this Southern State, what roadblocks do you believe are in place for African American females who could potentially pursue the Superintendency?

### ***Interviews***

By interviewing former African American female Superintendents, the perspective of a person who completed the journey will be shown. The interview was one on one and the questions would cover what led up to tenure, time as a superintendent, and the life post. Knowing what happened with this subject will show how others can find a path and take the positive steps taken to make the road easier and avoid some of the obstacles that may have hindered the subject.

### ***Focus Groups***

The focus groups consisted of groups of African American female school administrators, administrative degree holders, administrators in training (degree seekers), and general educational professionals. The focus group should be no larger than five to eight women. Gathering this group of people together with effective discussion starters can extract a dialogue that can give insight into the thoughts and perspectives of these women and how they think about success, leadership, and the world of education. The clear questions with opportunity for conversation after each was asked which allowed for easy flow of conversation and aided in the record keeping process. The focus group needed to be in a relaxing atmosphere for the educators to have open discussion in a non-threatening environment.

## *Qualitative questions for the focus group included*

1. Why are you an educator?
2. What is your educational philosophy?
3. How does your educational philosophy encourage you to stay in your position or aspire for more?
4. When you think of a leader, what comes to mind? What makes a good leader?
5. A bad leader?
6. What are the different power levels in education and how are they attained?
7. When you think of a superintendent, what characteristics come to mind?
8. Do you or would you ever aspire to reach superintendent status?
9. Why or why not?
10. What roles do you think gender plays in education? Classroom and/or leadership?
11. Why do you think the demographics of school leaders are skewed? What roles do attitude play in the attainment of educational leadership positions?
12. What are the values held in the educational system? Do state, region, and geographic area change the educational system and how it is run?

## **Description of the Research Design Methodology**

Qualitative research methods are most effective when embarking on a study that utilizes open ended questions which seek to discover how and why (Creswell, 2009). Furthermore, in cases where the in-depth study of the minute aids in the understanding of the complex, case studies can enhance the understanding of qualitative inquiries.

Jones, Arminio, and Torres (2006) stated that qualitative research is the methodology used to highlight and understand the lives and world of human beings. This research methodology is complex, compelling, and ever changing because humans are in a state of constant evolution. As people change so do the results of qualitative research. As a result, there will always be more research to conduct and new connections to be made. Since this research is done about humans and human nature by a

human, there are automatic connections of the researcher to the research. These connections have been criticized and called bias by critics, but proponents of qualitative research see it as the power behind the research (Jones et al., 2006).

The study involved three African American female Superintendents from a Southern State (North Carolina). By studying the individual cases of the Superintendents, the information gathered provided an overall picture of their journeys to positions in educational leadership. This information provided clarity of successes and failures and to open the door to further inquiry in this field. By looking through the lenses of the critical and power theories, inferences and connections will be made between the lives of these women and their professional ascension. The Research Phenomenology had a subjective perspective grounded in the experiences of the subjects who were under study. Readers of the investigation will be able to examine these cases and use them as springboards to examine other cases to see if the findings are consistent. To find patterns in behaviors and activities that lead women in this group to positions of leadership will provide insight that can assist in increasing the number of African American females in the position of Superintendent. This will improve the diversity in the field which aids in the global model most schools and school systems are moving towards.

## ***Open-ended Conversational Interviews***

The conversations provided the answers to specific questions about their professional journeys and life experiences. The open ended questions will allow for a consistent focus for each interview. Conversational style interviews will allow for the interview to be open and adaptable to the individual's personality (Conrad & Schober, n.d.). Focus Groups were used to gather information from African American women who are in the field of education, but are not at the executive level of Superintendent, which provided insight into why they would or would not want to gain the position, why they are, where they are professionally, and what could or should be done to increase the power levels of African American women in education. These focus group participants were separate from those whose cases are studied individually.

Observations on the individuals whose cases are studied were observed in their working environment. These observations will provide additional insight into their success and power roles in the workplace as shown in Figure 1.

## The Research Design Characteristics

### The Target Population

The population at large are African American public school Superintendents in the United States of America from the Southeast. The sample will include African American female Superintendents in a Southern State. These participants have been selected because they show a specific region and culture of African Americans, females, and educational leadership.

### The Sampling Methodology

Non-probability purposive sampling, with consideration for the purpose of the study, was used in this study (Trochim, 2006). The sample included African American female Superintendents in the designated Southern State. These participants have been selected because they show a specific region and culture of African Americans, females, and educational leadership.

### The Sample Size

The sample is comprised of all of the current and former African American female Superintendents in the chosen southern state.

### Case Study Procedures

- Research and find the names and contact information

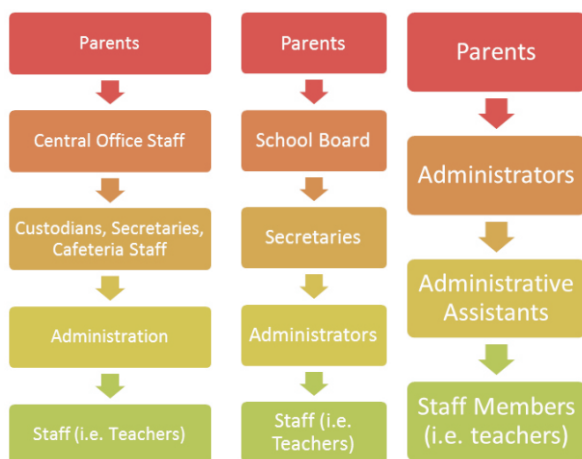


Figure 1. Power Levels Presented by the First Focus Group

of current and former African American female superintendents in a Southern State; and

- Contact these women and request their participation in the study.

### Focus Group Procedures

- Email invitation to African American females in the designated Southern State from counties that do not have African American female Superintendents within a 100 mile radius of the researcher's location to limit travel expenses and increase the probability of participation
- The group will be limited to the first 10 respondents; increasing the probability of at least 5–8 participants arriving at the group. All participants were selected from educators in the specified Southern State. The participants in the case study were three African American Superintendents (former or current) in State. The focus group participants were African American females in the Southern State from counties that do not have African American female Superintendents within a 100 mile radius of the researcher's location to limit travel expenses and increase the probability of participation.

### The Data Analysis Statistical Mathematical Model: The Tri-Squared Test [Tri<sup>2</sup>]

Tri-Squared comprehensively stands for "The Total Transformative Trichotomous-Squared Test" (or "Trichotomy-Squared"). The Total Transformative Trichotomous-Squared Test provides a methodology for the transformation of the outcomes from qualitative research into measurable quantitative values that are used to test the validity of hypotheses. It is based on the mathematical "Law of Trichotomy". The Total Transformative Trichotomous-Squared Test provides a methodology for the transformation of the outcomes from qualitative research into measurable quantitative values that are used to test the validity of hypotheses (Osler, 2013b). The advantage of this research procedure is that, it is a comprehensive holistic testing methodology that is designed to be a static way of holistically measuring categorical variables directly applicable to educational and social behavioral environments where the established

methods of pure experimental designs are easily violated. The unchanging base of the Tri-Squared Test is the  $3 \times 3$  Table based on Trichotomous Categorical Variables and Trichotomous Outcome Variables. The emphasis on the three distinctive variables provide a thorough rigorous robustness to the test that yields enough outcomes to determine if differences truly exist in the environment in which the research takes place (Osler, 2013a).

Tri-Squared is grounded in the combination of the application of the research of two mathematical pioneers and the authors' research in the basic two dimensional foundational approaches that ground further explorations into a three dimensional Instructional Design. The aforementioned research includes the original dissertation of optical pioneer Ernst Abbe who derived the distribution that would later become known as the chi square distribution and the original research of mathematician Auguste Bravais who pioneered the initial Mathematical formula for correlation in his research on observational errors. The Tri-Squared research procedure uses an innovative series of mathematical formulae that do the following as a comprehensive whole: (1) Convert qualitative data into quantitative data; (2) Analyze inputted trichotomous qualitative outcomes; (3) Transform inputted trichotomous qualitative outcomes into outputted quantitative outcomes; and (4) Create a standalone distribution for the analysis possible outcomes and to establish an effective—research effect size and sample size with an associated alpha level to test the validity of an established research hypothesis. Osler (2012a) defined Tri-Squared as:

$$Tri^2 = T_{\text{sum}} [(Tri_x - Tri_y)^2; Tri_v].$$

### The Tri-Squared Distribution

The Tri-Squared distribution is a static mathematical extraction out of the Chi Square distribution. This test is not the only test based on the Chi Square distribution (as it is a mathematical distribution, that is frequently used directly or indirectly in many tests of significance). Similar to the Chi Square distribution the Tri-Squared distribution has the following characteristics: (1) It has only a single parameter (the distribution Degrees of Freedom written as "d.f."); (2) The entire distribution is positively skewed; and (3) The

Degrees of Freedom are mathematically written, "[C - 1][R - 1]" which is equal to the distribution mean. Unlike the Chi Square distribution, the Tri-Squared distribution has the following characteristics: (1) The distribution Degrees of Freedom never changes, therefore, it never approaches the Normal Gaussian Distribution (the bell curve); (2) As a static test, the Tri-Squared Degrees of Freedom is always [C - 1][R - 1] = [3 - 1][3 - 1] = [2][2] = 4 = the distribution mean; (3) The distribution mode is always [d.f. - 2] = [4 - 2] = 2; (3) The distribution median is always approximates [d.f. - 0.7] = [4 - 0.7] = 3.3; (4) Due to the static or unchanging nature of the distribution, the distribution skew is always positive with the d.f. always equaling 4; and (5) The distribution formulae uses brackets "[ ]" in its formulaic notations to emphasize "a concentration on" for purposes of clarity. The Tri-Squared distribution is the foundation for the Tri-Squared Test which comprehensively incorporates the following Tri-Squared formulae: The Calculated Column Standard Deviation, The Calculated Row Standard Deviation, and The Sample Effect Size. The Tri-Squared Test is designed to create a comprehensive holistic research methodology from calculations conducted on the Standard  $3 \times 3$  Tri-Squared Table which produces the following: (1) A positive result; (2) No information on the variable relationship direction; and (3) Associated Effect Size, Sample Size, and Alpha Levels (Osler, 2012a).

### Rationale for the Research Statistic and Associated Research Methodology

The data from the initial pilot study was made into trichotomous or "trivariate" through the grouping of the initial research instrument questions into the following three Trichotomous Categorical Variables:  $a_1$  = Leadership Experiences;  $a_2$  = Leadership Values; and  $a_3$  = Leadership Outcomes. The following three following Trichotomous Outcome Variables:  $b_1$  = Positive;  $b_2$  = Negative; and  $b_3$  = Not Applicable. The Tri-Squared Statistical model was used to analyze data to determine the attitudes and perceptions of faculty as leaders. Many statistical measures used in education are based on the experimental research designs that require scientific methodologies and cannot be implemented in educational institutions without violating the legal policies



or severely disturbing the learning environment associated with instructional climate. To promote the previously mentioned efforts towards empowering faculty in the areas of social justice, empowerment, and environmental equity, novel statistical measures and methods are required that are specifically designed for education and educational environmental needs. The Tri-Squared statistical model provides scientific subsequent measures based on rigor and grounded in the foundation of longstanding educational research, fundamental educational theory, and innovations in qualitative, quantitative, and mixed methods research designs native to the specifics of pedagogy and andragogy (Osler, 2012b).

### The Tri-Squared Test Research Design Methodology

The Total Transformative Trichotomous-Squared Test provides a methodology for the transformation of the outcomes from qualitative research into measurable quantitative values that are used to evaluate the validity of hypotheses. The advantage of this statistical model is in its design, which is a comprehensive holistic testing methodology and consistent in holistically measuring categorical variables which are relevant to educational and social behavioral environments, where the established methods of pure experimental designs can be easily violated. The unchanging base of the Tri-Squared Test is the  $3 \times 3$  Table based on Trichotomous Categorical Variables and Trichotomous Outcome Variables. The emphasis on the three distinctive variables provides a thorough rigorous robustness to the test that yields enough outcomes to determine if differences truly exist in the environment in which the research takes place. The Tri-Squared analysis procedure uses an innovative series of mathematical formulae that do the following as a comprehensive whole: (1) Convert qualitative data into quantitative data; (2) Analyze inputted Trichotomous qualitative outcomes; (3) Transform inputted Trichotomous qualitative outcomes into outputted quantitative outcomes; and (4) Create a standalone distribution for the analysis on possible outcomes and to establish an effective research effect size and sample associated alpha level to test the validity of an established research hypothesis (Osler, 2012b).

### Validating Research Outcomes: Tri-Squared Test Results

The Tri-Squared Test statistical analysis procedure was used to analyze and validate the initial data outcomes that were a result of the initial study (Osler, 2012b). An alpha-level of 0.995 was considered in light of the research context that was evidence-based in the prescribed schools that had restricted and controlled learning environments that allowed for very few chance factors to affect the outcomes of the research investigation ( $n_{Tri} = 11$  with  $11 \times 3 = 33$  items per the outcomes of the Trichotomous Variables on the Inventive Investigative Instrument: The Webb-Osler Leadership Batteries). This was coupled with the data gathered from administrators that allowed for minimal chance factors to affect research outcomes. The 0.995 estimate was reasonable for this particular study based on the calculated Tri-Squared Effect Size. In addition, due to the exploratory context and nature of the research investigation (in an area where little previous research has been done regarding gender, ethnicity, and education administration leadership) a less stringent level of significance of 0.995 was the best fit for the research study. The study yielded the following final results using the Tri-Squared Test in the standard Tri-Squared  $3 \times 3$  tabular format as shown in Table 1.

Data Analyzed Using the Trichotomous-Squared Three by Three Table is designed to analyze the research questions from an Inventive Investigative Instrument with the following Trichotomous Categorical Variables:  $a_1$  = Leadership Experiences [the summation of the outcomes of the assessment instrument item 1];  $a_2$  = Leadership Values [the summation of the outcomes of the assessment instrument item 2]; and  $a_3$  = Leadership Outcomes [the summation of the outcomes of the assessment instrument item 3]. The  $3 \times 3$  Table has the following Trichotomous Outcome Variables:  $b_1$  = Positive;  $b_2$  = Negative; and  $b_3$  = Not Applicable.

The Tri-Square Test Formula for the Transformation of Trichotomous Qualitative Outcomes into Trichotomous Quantitative Outcomes to Determine the Validity of the Research Hypothesis:

$$Tri^2 = T_{sum} [(Tri_x - Tri_i)^2; Tri_i]$$

$$Tri^2 \text{ d.f.} = [C - 1][R - 1] = [3 - 1][3 - 1] = 4 = Tri^2$$

Table 1 illustrates the qualitative mathematical application

of the Trichotomous-Squared ("Trichotomy-Squared", "Tri-Squared" or "Tri-Square") statistical analysis procedure. The results are: Tri<sup>2</sup> Critical Value Table = 30.095 (with d.f. = 4 at  $\alpha = 0.995$ ). For d.f. = 4, the Critical Value for  $p > 0.995$  is 0.207. The calculated Tri-Square value is 30.095, thus, the null hypothesis ( $H_0$ ) is rejected by virtue of the hypothesis test which yields the following: Tri-Squared Critical Value of  $0.207 < 30.095$  the Calculated Tri-Squared Value. The  $3 \times 3$  Table (Table 1) reports the qualitative outcomes based on the Inventive Investigative Instrument Trichotomous Categorical Variables according to participant responses as the Trichotomous Outcome Variables. Table 1 shows that the participants highest selected variable was the "Not Applicable" Trichotomous Outcome Variable ( $a_3b_2 = 10$ ) on the Trichotomous Categorical Variable of either "Leadership Outcomes" (indicative of all three groups "Leaders in Standing", "Leaders with Aspirations", and "Future Leaders" that were participants in the research study). The mathematical formula for the Tri-Squared is reported illustrating the final outcome of the research hypothesis test: the null hypothesis ( $H_0$ ) is rejected at  $p > 0.995$  is 0.207. Table 2 follows and provides the outputted quantitative outcomes of the Tri-Squared Test.

### Quantitative Outcomes of the Tri-Squared Test Calculation

The quantitative mathematical application of the Trichotomous-Squared ("Trichotomy-Squared", "Tri-Squared" or "Tri-Square") statistical analysis procedure (Osler, 2012) had the following results: Tri<sup>2</sup> Calculated Tri-Squared = 30.095 (with d.f. = 4 at  $\alpha = 0.995$ ). For d.f. = 4, the Critical Value for  $p > 0.995$  is 0.207. Thus, we can

		TRICHOTOMOUS CATEGORICAL VARIABLES		
		$a_1$	$a_2$	$a_3$
TRICHOTOMOUS OUTCOME VARIABLES	$b_1$	6	8	0
	$b_2$	0	0	10
	$b_3$	5	3	1

Table 1. Outcomes of Tri-Squared Test

reject the null hypothesis ( $H_0$ ) by virtue of the hypothesis test: Tri-Squared Critical Value of  $0.207 < 30.095$  the Calculated Tri-Squared Value. "Tri-Squared" is the mathematical transformation of qualitative data into quantitative data for the purpose of validating a research hypothesis (clearly illustrated in this Table 1). Table 2 illustrates and validates the process of transforming qualitative data into quantitative data as a means of in-depth mixed methods for the purposes of discrete data analysis. Thus, there is support according to the research data that ( $H_1$ ) there is a significant difference in the perceptions of the research participants regarding leadership as determined by the Tri-Squared Test in terms of: (1) Leadership Experiences; (2) Leadership Values; and (3) Leadership Outcomes.

### Data Analysis Procedures

The data analysis was conducted to give cohesion to all of the data gathered in the study. Charts were created to separate the information about the different areas looked for in the observations. Sections included time, type of interaction, tone and attitude of the Superintendent and other party(ies) involved, as well as, position, race and gender of other party(ies) involved and any additional comments about the interaction.

The information from the interviews and focus groups were transcribed by the researcher and an outside transcriptionist. These transcribed sessions were read two times in their entirety by the researcher. The first time was to see the holistic nature of the session; the second time was to extract themes. The themes were be charted as they fell under the research questions. The information from each session was to be combined and aligned from each participant in the focus groups. The information from the case study participants was charted together but separated from the focus groups. Direct Report information was also given in its own chart. The overarching themes were extracted from all sessions. This methodology comes from Kleiman's (2004) phenomenology findings. She describes a number of steps that will help explain a phenomenon, including the review of data, defining meaning units, determine essential meanings of your findings, and then verification of the findings by returning to

the raw data (Klieman, 2004). Once all of the aforementioned data sources were charted and coded to align with the overlying themes, then patterns and evidences were used to draw conclusions and report them in the form of tables.

## Case Study Research Design

The case study consisted of three Superintendents, two formers and one current. They served in three different counties, and each had an individual journey that connected to the journeys of the other participants. None of the leaders served in the Western part of the State. Two of the participants served as Superintendent in only one county, the other served in two counties. A report from a direct report was only gathered from the currently sitting Superintendent. Each of the Superintendents served in public education for 30 or more years. The former superintendents are retired. Table 2 demographics were determined through interviews in which summary information was acquired (this information is aggregated in Table 2)

## Table Two Summary

Table Two aggregates demographical data from focus groups in terms of Age, Academic Position, Educational Background, and Personal History. The vast majority of the candidates interviewed were middle aged African American women who were highly educated. Their Personal History denoted that they came from educated parents who most likely attributed to their academic pursuits in education. These women were seasoned professionals in their career who were more than aptly qualified to serve in administrative leadership positions in their relative districts. The focus groups met on two separate days. The separation of the groups allowed for decreased risk to confidentiality and provided a greater opportunity for all parties to express their thoughts in a limited amount of time. Each of the groups was prompted with the same twelve questions. They were prompted to answer the questions one at a time. Additional thoughts could be expressed at the end of each person's response.

## Further Focus Group Summaries

The first focus group consisted of three educators. They ranged in age from 34 – 47. Their years of educational

experience ranged from 12 – 23 years. Their specialty areas included: Special Education, Administration and Counseling. The second focus group consisted of four educators. They ranged in age from 31 – 55. They ranged from 7 – 31 years of educational experience. Their specialty areas included: Special Education, Administration, and Speech Pathology. Every one of the focus group participants from both sessions held a Master's degree, though this was not a part of the criterion to be a part of the groups. One holds a Post Master's certificate and other one is in progress of attaining her Educational Specialist Post Master's certificate. The focus group members work in 6 different school districts. None of them work at the same school. None of the focus group participants knew each other before the session.

## Summary of the Focus Group Results

The conversations, observations, and interviews that occurred with the women in this study presented many thoughts and issues. Many similarities were seen through the discussions about race, gender, power perceptions, values, and attitudes. Race was the most consistent barrier presented. Though all of the descriptors affected the journeys of the participants, race had the greatest impact.

## Summary

This research study asked the question: how do race, gender, values, attitudes, and power perceptions influence the success of African American female Superintendents? This question was rooted in the minimal numbers of African American female Superintendents in the designated Southern State. Out of 115 school districts, there are only three African American female Superintendents. There was also the historical basis of White males dominating the field overall (Brunner & Peyton-Claire, 2000). Getting knowledge of the journeys of those women who successfully broke through barriers to attain the position of Superintendent in the State would prove to be useful to those who work in the field and who may choose to follow in their footprints.

For this study, a qualitative methodology proved to be best since the researcher was attempting to answer the questions how and why through conversations and interactions with the participants. (Creswell, 2009) This qualitative study used the designs of case study and

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phenomenology. The case study involved three African American female current or former Superintendents from a Southern State. The information gathered painted a picture of each of their journeys to attain the position of Superintendent. The critical and power theories were used as lenses through which to make inferences and connections. Since phenomenology concentrates on the subjective perspective and experiences of the subjects of a study, these cases can be used as springboards to examine other cases to see if the findings are consistent.

As a result of this research study, there is a heightened awareness of the journeys taken by those African American women who attained the position of Superintendent in a Southern State. The various challenges they have had to overcome establish a baseline for learning for those others who want to follow in their footsteps while avoiding any obstacles that they do not have to incur. Learning from the experiences of others is the best way to not repeat their mistakes and move forward. This research implies that while gender does play a part, race is the most difficult obstacle

Age	Current Position	Years in Education	Years in Current Position	Other Positions Held	Degrees	Mother's Education	Father's Education
34	Elementary Principal	12	2	English Teacher, Assistant Principal	BA Literacy and Philosophy, Post Master's Certificate Educational Leadership	Bachelor's	Bachelor's
47	Resource Teacher	23	11	Cross – Category BED, Self – Contained Teacher	BA Human Services/ Psychology (minor: Music), MEd Learning Disabilities	High School	Associate
39	Guidance Counselor/ Test Coordinator	18	7	Social Studies Teacher (9 – 12), Senior Seminar Teacher	BA Education (History/Social Studies), MEd Counseling Education	Bachelor's	Bachelor's
55	Executive Director of Program Services	31	4	Preschool Lead Teacher, Elementary School Teacher, Middle School Assistant Principal, Elementary Principal	BS Elementary Education, MS Reading Education, MS Education Administration and Supervision	High School	High School
31	EC Facilitator	7	2	Instruction Assistant	BS Psychology, MAT Special Education, MSA Educational Leadership (in progress)	Bachelor's	Master's
32	EC Teacher	9	6	ELA/Social Studies Teacher (middle), Pre K Teacher	BS History (minor: Political Science), MEd Teacher Leadership, EdS Curriculum and Instruction (in progress)	High School	High School

Table 2. Focus Group Participant Background Information

for African American females to overcome when attempting to attain power in the educational leadership structure. Another large obstacle that is blocking these women is the motivation to take on the responsibility of the Superintendency. There has to be an appealing factor that makes this group of women look beyond the negative aspects of the position and desire to attain the power of influence that comes along with the position instead. It can also be implied from this study that women who aspire for the position of Superintendent must learn to exhibit some masculine characteristics in terms of how people perceive how they utilize their power. Assertiveness and aggression were shown to at times be necessary for these women to attain the position of power (Dana & Bourisaw, 2006). More feminine forms of power, for example, providing more empowerment, seem to keep them in the role successfully.

## Findings and Recommendations

The findings were collected through focus groups, interviews and observations. The data was extracted from African American female current and former Superintendents, those who directly reported to them, and those who could potentially replace the Superintendents in the field of the same gender and race. Having the participation of all of these different individuals will assist in not only showing the journeys of those who attained the power, but also how those who work with them view them and their success and the views of those women who are the potential future of African American educational leaders.

## Recommendations

The researchers make the following recommendations for future research investigations:

- Mentors are needed to nurture potential African American female educational leaders.
- Clear connections between the Superintendency and the classroom are needed to be made to encourage some classroom teachers to broaden their power and influence.
- Leaders need to be taught the difference between ruling through words and influencing through example. In ruling, the leader is thinking more about themselves

than those that they lead. Influencers think more about the people they lead than themselves, the leader (Bennett, 2010).

- The business of education needs to be a greater portion of the advanced education of future educational leaders.
- There needs to be research conducted to assess the views of non-African American educators on the effect of race, gender, values, attitudes and power perceptions of African American female educational leaders.
- Research should be conducted to attain the national measures of the obstacles of African American female educational leaders.
- Further research is needed to begin to shift the culture of African American females and starting to urging young girls to become leaders.
- Further research is needed to discover what is being offered in the education programs for those who aspire for the Superintendency.

This study could lead to those who are in the field of training future leaders to create new elements to add to their instruction. There could also be the establishment of a mentor program for those women who aspire for the position of Superintendent to capture them at an earlier stage in their career. This early mentoring will hopefully assist the future leaders in finding the path to get to power sooner and make a greater impact for a longer time. Women who begin to take the steps to change the educational leadership demographic will need the support and influence of these mentors to break through the glass ceiling. Getting these women to look up to the glass ceiling to desire to break through must also be targeted. There are many African American female educators who have no desire to go beyond the classroom or the individual school building. There is a great need by these women to be impactful to the students. The desire to impact them with more power is not always present. Also, understanding the journeys of women who have attained the position before them, will allow the new candidates to have previous knowledge of their obstacles so that they can be avoided. Finding paths around those obstacles or ways to move over

them will assist future African American female Superintendents in their journey to the position of power. The attainment of this power is not an easy path, but it can be one that changes the face of the American power structure and impact changes in society as well.

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