

THE UNDER-REPRESENTATION OF AFRICAN AMERICAN WOMEN IN  
INFORMATION TECHNOLOGY IN THE DALLAS/FORT WORTH, TEXAS AREA

by

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## **ABSTRACT**

The purpose of this phenomenological study was to explore the background and experiences of under-represented African American women in leadership positions in the information technology industry in Dallas/Fort Worth, Texas. The problem was that upper management had overlooked African American women who are well educated, qualified, and competing for leadership roles. 10 African American women were interviewed to obtain the lived experiences. The interview guide was used to understand and analyze data collected from the 10 participants on their lived experiences in senior-level positions to answer the following research question: How do under-represented African American women in a leadership position within the information technology industry describe their background and experiences while seeking senior management leadership positions? The interview questions were administered to provide findings that detailed the history of life, career path, and lessons learned. After coding the results, eight emergent themes were identified. These themes were influenced by Information Technology, organizational leadership practice, leadership development, career development, educational awareness, sacrifices, experience with racism and sexual orientation, and men promoted to leadership positions. The study indicated the increased amount of African American women who are not receiving the opportunity to break or crack the glass ceiling. Another study on African American women in the government sector could benefit other women who aspire to be in a senior leadership role in information technology, since this study only focused on 10 African American women in leadership positions in the information technology industry in Dallas/Fort Worth, Texas.

## **DEDICATION**

This dissertation is dedicated to my father, James Earl Robinson. He was my hero and the best support system. He was diagnosed with prostate cancer in 2004. I watched him fight hard every day. It was amazing to see him do all of the things that he loved to do and go places where he loved to go. My parents had four daughters. Out of the daughters, I was the only daughter who did not have a bachelor's degree. My father approached me one day and asked if I would go back to school to acquire a bachelor's degree. He planted this seed in 2008, and it grew. On November 24, 2009, I enrolled in the Bachelor of Computer Science Management program at the University of Phoenix. As I was nearing the end of my program, my father began asking me when was graduation. I did not know it then, but I know now that he was trying to hold on for life to see me graduate. On Wednesday, June 1, 2011, he passed. Because of his strength, I did finish the program in August 2011. The point is that whatever you may be going through, as hurtful as it may be, do not allow that situation to stop you. I believed that I did what he wanted me to do. Because of his strength, I continued and completed the Masters of Information Systems with the University of Phoenix and now the Doctorate of Organizational Leadership and Development program. My dad knew that there was something bigger inside of me. Father, I miss you so much, but I know that you are looking down and watching your Daughter #3.

I am dedicating this degree to my mother, Stella Louise Robinson. She is one amazing woman. Her strength is contagious, and wisdom is timeless. My mother has always been the driving force and the glue to my family. I thank you for your constant prayers and support. I Love You, Mom.

To my loving husband, Jeffery Sargent I dedicate this degree to you. Your compassion, support, understanding, and vision for the family show genuine love. Thank you for staying up

with me encouraging me to get my work done and with excellence. Thank you for covering me in prayer. Thank you for your patience. Your love has sustained me unconditionally. You have been with me from the beginning, and I would make this journey again with you. I Love You, Jeffery.

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## Chapter 1

### Introduction

African American women in corporate America have faced challenges to gain a firm foothold in leadership circles, especially in the field of information technology. One of the reasons may be due to their colleagues' perceptions of them (Baskerville-Watkins & Smith, 2014). According to Baskerville-Watkins and Smith (2014), African American women in the workplace are marginalized. Kinkade (2012) asserts that women are breaking barriers by reaching top senior management positions, except the African American women. According to Baskerville-Watkins and Smith (2014), because African American women continue to struggle to break barriers, they are perceived as unqualified and with unacceptable training (Baskerville – Watkins & Smith, 2014).

Women in the information technology field earn less than their male counterparts (Kinkade, 2012). Researchers assert that, contrary to current legal frameworks dating back to the Civil Rights era (U.S. Census Bureau, 2010), a significant percentage of biased employment decisions were the result of discriminatory motivation. Unconscious biased social behavior driven by learned stereotypes played a larger role in discrimination today. Prejudiced actions were largely the result of stereotypical ideas, of which the prejudiced individual may have been completely oblivious. Baskerville-Watkins and Smith (2014) believed that people were unaware of their unconscious biases.

In Chapter 1, the background of the problem, the purpose of the study, and significance of the study provided the aim and objective for the under-represented African American woman leader in information technology. The nature of the study and the appropriateness of the method present a potential design of support for the proposed population, sample size, proposed data

collection instrument, and the proposed data analysis approach. The research question was established as the question of study while supporting the theoretical framework, which held the theory of this research study as an outline. The definitions of terminology were utilized to provide the meaning of a significant word for clarification, whereas, scope, assumptions, limitations, and delimitations illustrated how situations were in one's control while describing the boundaries that the study had set.

### **Background of the Problem**

Women have made great strides in enhancing their status in corporate America in recent decades (Hanton, 2015). Waller (2016) asserted that women possessed fewer corporate official positions than men. Catalyst Research (2017) listed Fortune 500 organizations where African American women were under-represented. Catalyst Research (2017) found that women held roughly 15.7% of employment in a corporate office, and African American women ranked considerably lower at roughly 2.7%. In light of this measurement, African American women were altogether under-represented and underutilized in places of administration in the corporate division.

According to Baskerville-Watkins and Smith (2014), the field of information technology had historically been male-dominated and was viewed by many to be too technical for women to comprehend, design, or maintain. Baskerville-Watkins and Smith (2014) state that, because information technology was a male-dominated field, it was necessary to encourage women to move towards their goals. Peck (2016) stated that there was a 1.7% increase in the representation of women in the information technology industry, and a significant push to increase participation in groups for African American women.

Lanier (2018) believed African American women were often overlooked for senior management or executive positions in the technology industry. This qualitative phenomenological study discussed the under-representation of African American women in information technology in leadership positions. This study was important because the results of the research may assist other African American women with similar desires to accomplish their goals (Kirton & Greene, 2007). This study was a phenomenological study because the researcher wanted to gather knowledge on why African American women were the most underrepresented group in the corporate pipeline in information technology. The phenomenological study contributed to providing diversity in the workplace (Kirton & Greene, 2007). African American women have revolutionized the country's economy by penetrating the workforce in the United States which was previously dominated by White men, beginning in the late 1960s and early 1970s (BOLS, 2010). Seventy-six percent of companies have become more racially and ethnically diverse since the 1980s, except in the roles of senior management in the information technology positions (BOLS, 2010).

### **Statement of the Problem**

The general problem was the under-representation of African American women in senior management roles in information technology in Dallas/Fort Worth, Texas. The problem was that upper management had overlooked African American women who are well educated, qualified, and competing for leadership roles. African American women have it particularly hard to gain a position in senior management. Peck (2016) stated that African American women hunger for a seat at the senior level and executive table. Unfortunately, they are close to invisible at the highest ranks of corporate America. Only 29 percent of black women said the best opportunities at their company have gone to the most deserving employees (Williams and Dempsey, 2014).



This study uncovered the problem and provided attention to diversity in gender and race. The solution to this problem was to raise awareness and encourage women to speak up and be more ambitious at work. Holder, Jackson, and Ponterotto (2015) stated that African American women represented the largest female minority group to obtain educational degrees. The National Center of Education Statistics numbers signified that African American women lead with educational degrees in gender and racial groups from 1999 to 2010. According to Berdahl and Moon (2013), African American women were the most educated group in the United States, yet they make up less than 2% of the existing leadership positions for information technology in corporate America. The under-representation of African American women still exists today in spite of the U.S. Census Bureau (2016) projecting an 18% increase in technology occupations for African American women from 2012 to 2022. The phenomenological study explored the background and experiences of under-represented African American women in leadership positions in the information technology industry.

### **Purpose of the Study**

The purpose of this phenomenological study was to explore the background and experiences of under-represented African American women in leadership positions in the information technology industry. Phenomenology was a philosophy of human experience (Bernard, 2013). The goal of phenomenology as an approach for conducting qualitative research was to explore lived experiences enlightening the nature of the human condition (Vaivada & Blinstrubas, 2011). The obstacles African American women have encountered while seeking to acquire a senior management role is worth researching. The study assisted in understanding the significance of leadership styles to sponsor advancement. This study explored the lived experiences of 10 African American women leaders in a face-to-face interview. These

interviews were audibly recorded and transcribed in pursuant of the African American women's background and experiences.

### **Significance of the Study**

According to Hays and Wood (2011), phenomenologists sought to understand the individual and collective internal experience, (Wertz, 2005) as well as how participants intentionally and consciously thought about their experience. Moustakas (1994) believed that the phenomenological approach provided a logical method to continue analyzing and synthesizing data to accomplish the understanding of lived experiences. The qualitative phenomenological research described the critical analysis of methods of phenomenological modes. The qualitative phenomenological research provided a generalized perspective that emphasized the flexibility, techniques, and procedures of the research.

Kyale (1983) focused on sequence and coherence of the methodological approach that defined the phenomenological approach as the philosophical foundation for the qualitative phenomenological research strategy. In phenomenological research, validity included trust, honesty, and accuracy of the individual sharing his or her lived experience. Research validity was categorized as internal validity and external validity. Hoyt and Bhati (2007) wrote internal validity involved ensuring that the design explored the purpose statement. Huberman and Miles (2002) reported the first concern of most qualitative phenomenological researchers was with the factual accuracy of their account or distorting the things seen. Phenomenology method used the knowledge provided by participants regarding their experiences as awareness (Vaivada & Blinstrubas, 2011).

### **Significance of the Study to Leadership**

The qualitative study was significant for understanding and identifying how employed African American women could benefit different corporations in the information technology position. Hays and Singh (2011) believed that studying the significance of leadership provided solutions an African American woman sought in her quest to excel in corporate America. Hays and Wood (2011) referenced how organizations could profit by African American women's leadership, particularly because African American women were often role models in their community. These significances demonstrated bi-cultural leadership and unity. The results from the study of enhancing African American women in organizations provided an additional contribution to the body of knowledge. This study delivered additional information to leadership styles and literature for corporations. The significance of this study to leadership was to assist African American women to achieve the fundamental steps to acquire senior management positions.

### **Nature of the Study**

A qualitative phenomenological research design was most appropriate and effective for the study of lived experiences. Creswell (2004) stated that the qualitative phenomenological study described lived experiences. Sanders (1982) defined phenomenology as a qualitative research method that explored the significance of individual experiences. According to Moerer-Urdahl and Creswell (2004), the transcendental phenomenological method was appropriate if the purpose of conducting research was to understand the lived experiences of individuals concerning an identified phenomenon. This study focused on two methods, which were face-to-face interviews and analyzing documents and material (Brinson, 2006). The study consisted of a face-to-face interview to help collect emerging themes for data collection to sample 10 African American women with two or more years of experience as a senior in information technology in

Dallas/Fort Worth, Texas area. Participants were recorded using a digital recording device, and their interviews were transcribed and saved as Word documents on an encrypted flash drive. The data will be kept for three years, and then destroyed by deleting the file.

### **Research Question**

Leedy and Ormrod (2016) suggested that the research questions were normally conducted to elicit data that directly related to the successful conclusion of the research project. The ultimate goal was to gather important information. This data was then used to construct the answers from the research question. The answers were in the qualitative phenomenological research to describe the lived experience of the African American Women. The qualitative phenomenological study explored the lived experiences and observations of African American women held upper management positions in Dallas/Fort Worth, Texas. The impediment in a leadership position in information technology for an African American woman led to the following research question:

**RQ1:** How do under-represented African American women in a leadership position within the information technology industry describe their background and experiences while seeking senior management leadership positions?

### **Theoretical Framework**

This qualitative phenomenological study modeled three theoretical framework methods. Theoretical frameworks were regularly used to affirm the gap in learning. The first method is through leadership theories that define the ability to inspire followers as an individual (Smith, 2007). For this study, Fielder's Contingency Theory was used to understand leadership. Secondly, the perspective through understanding the differences in gender and race in the workplace was used from the Feminist Theory. Smith (2007) believed that gender presence and

racial imbalance were more noticeable in corporate America. Thirdly, to understand the barriers African American women encounter in the workplace through the Black Feminist Theory. The vital issue of this study was the gap in learning and understanding gender representation in upper management for information technology positions in Dallas/Fort Worth, Texas for an African American woman. Organizations are generally shaped by broader processes driven by social and cultural forms (Lounsbury & Ventresca, 2003).

### **Definitions**

The following definitions were associated with the identified terms:

**African American.** African American was a term used interchangeably to reference individuals of Black or Americans of African descent (Rastogi, Johnson, Hoeffel & Drewery, 2010).

**Executive.** Executive referred to positions obtained within mid-level (director or manager) or senior level management (vice president, president, (CEO) chief executive officer, (CTO) chief technical officer, and (CIO) chief information officer) within an organization (Groysberg, Kelly, & MacDonald. (2011).

**Glass ceiling.** Glass ceiling referred to invisible barriers in which qualified individuals were prevented from advancing upward in their organization (Lewis, 2017).

**Information Technology.** Information technology was the study of designs, developments, applications, implementations, or support of computer-based systems (Wong, 2017).

**Minority.** A minority were people who were ethnically or racially different in comparison to the majority group (Ross & Thomas, 2008).

**Senior management.** Senior management was used for high-rank or top positions within an organization (Groysberg, Kelly, & MacDonald. (2011).

### **Assumptions**

According to Wilding and Whiteford (2005), the lucrative career in information technology (IT) was absent with the representation of African American women. The assumption for this study was that each participant would provide information from their experience during the participant's career advancements. A phenomenological design was selected to gather the essential details of these concerns. In use of the design choice, the participants were assumed to be open, honest, and to provide clear answers when presenting information about their experience. Wild and Whiteford (2005) believed that the phenomenological study method provides a platform for the researcher to share the lived experience while recording the participants.

### **Scope, Limitations, and Delimitations**

According to Hoyt and Bhati, (2007), limitations were defined that established partitions, abnormalities, reservations, and qualifications in every study. Research biases can be a limitation in this study because the researcher used a small group of 10 African American women leaders in the Dallas/Fort Worth, Texas area was interviewed. The results of the study provided the outcome of learned behavior that impact African American women in the field of information technology. Corporate Diversity Report (2010) stated that African American women overall have less representation on senior management teams than they do on corporate boards, representing 10.44% of executive managers, compared to 30% of their actual proportion of the U.S. population.

According to Johnson and Waterfield (2004), the ability to generalize the findings of the research to a larger population was the external validity of the study (Johnson & Waterfield, 2004). The primary limitation of this study was in the area of external validity because data were collected from only 10 African American women in information technology positions in the Dallas/Fort Worth, Texas. The qualitative phenomenological approach in this research enabled the women in the study to provide descriptions of their personal experiences in obtaining an information technology leadership role within companies in the Dallas/Fort Worth, Texas area. According to Priest (2002), individuals with lived experiences were the best source for real exploration.

The phenomenological approach, which was a method of reflection that provided a logical, systematic, and coherent resource for carrying out the analysis and synthesis needed to arrive at essential descriptions of experiences. Moustakas (2004) described experiences as the images resulting from interview transcriptions that included thoughts, feelings, examples, ideas, and situations that portray what comprises an experience, (p. 47). Moustakas (2004) further summarized the phenomenological research approach that involved collecting descriptions while preserving the spontaneity of subjects' experiences. Concerns with wholeness, with examining entities from many sides, angles, and perspectives until a unified vision of the essences of phenomena or experience was achieved (Moustakas, 1994). Priest (2002) sought meanings from appearances to arrive at the essence of intuition and reflection on conscious acts of experience, leading to ideas, concepts, judgments, and understandings. Priest (2002) understood the root questions that gave direction and focused on the meaning, themes that sustained an inquiry, awakened further interest, and concern, and accounted for our passionate involvement with

whatever was being experienced. Subjects and objects were integrated into what was seen and how it was seen, with whom it was seen and with the individual identity (Moustakas, 1994).

### **Summary**

Chapter 1 introduced the proposed research by describing the background of the problem, purpose of the study, and the significance of the phenomenological study. The nature of the study and the appropriateness of the method provided support for the design through the population, sample size, data collection instrument, and the data analysis approach. The research question established the study for support from the theoretical or conceptual framework as the outline. The definitions of terminology provided the meaning of significant words for clarification in the study. Lastly, the scope, assumptions, limitations, and delimitations in Chapter 1 delivered information describing the set boundaries of the study. Each component was important to the development of the qualitative phenomenological research. Van Wagner (2006) stated that phenomenology was the systematic attempt to uncover and describe the structures, the internal meaning structures, of lived experience. Through the phenomenological research method, the study was learned from shared experiences. Through the phenomenological research methodology, the researcher wanted to discover the underlying meanings of the participants' shared lived experience to arrive at a deeper understanding of the phenomenon being studied (Van Wagner, 2006).



## Chapter 2

### Literature Review

The purpose of this qualitative phenomenology study was to explore the lived experiences of under-represented African American women in leadership positions in the information technology industry. According to Meyerson and Fletcher (2000), there were some developments African American women need to obtain to break the glass ceiling. Glazer-Ramo (2001) stated that African American women face pre-imposed barriers that keep many from cracking or even breaking the glass ceiling. Igasaki (2010) discussed that many of these barriers were categorized as the difference between what corporate leadership said it would like to happen and what was going on within the company. According to the Government Accountability Office (2010), the barrier stemmed from the White male perception that they are losing in the corporate game and that hiring African American women was a direct threat to advancement. The structure developed challenges in which many senior management leaders hire only people who are most like themselves culturally and ethnically. Because of this mentality, these managers do not hire African American women unless their clients demand an increase in minority hiring.

Workplace practices, which were strengthened by societal standards, have added to the biased glass ceiling. Men have set the strategies and established the standards in business. These strategies have been exacerbated by societal standards about the role of men and women. While workplace environment segregation was unmistakable as moving a representative off of a key task or neglecting to advance them even though they were qualified, it can likewise be extremely inconspicuous and exceptionally difficult to demonstrate.

Leadership in the workplace has characterized as being able to impact another person to take after one's lead (Kouzes, 2003). As indicated by Northouse (2007), the initiative was not reliant on the position, title or benefit; however, it connected with the ability to impact others by making a dream and motivating by promotion. Clawson (2006) accepted that numerous components cooperate in the capacity of administration and that, eventually, the administration is tied in with being able to oversee self before overseeing others. Pioneers were individuals who choose what should be done inside an association and got it going (Kouzes, 2003). Worldwide chiefs who were pioneers comprehended this and searched for the hidden importance of authority in different areas.

### **Introduction**

Chapter 2 included the literature review for current information of substantive findings of theoretical and methodological contributions to the study of the under-represented African American women leaders in information technology. The reviewed literature was to understand the under-representation of African American women in leadership in information technology in Dallas/Fort Worth, Texas area. The historical and current perspectives assisted in understanding societal, racial, intellectual, and emotional settings that shaped lives from past to present. In support of the past and present, the current study revealed the identities of racial and gender. The theoretical literature and conceptual framework explained the phenomenology theory, which clarified why the study of the under-represented African American women leaders in information technology in the Dallas/Fort Worth, Texas area was a research problem.

The purpose of this qualitative phenomenology study was to explore the lived experiences of under-represented African American women in leadership positions in the information technology industry. Chapter 2 condensed peer reviews and research articles

relevant to the study. Race, hiring methods, laws against discrimination was revealed in the literature. Appropriate to the study, were representatives from Fortune 500 companies shared experiences in diversity, gaps in wages, leadership theories, organizational theories, and barriers associated with breaking the glass ceiling.

### **Title Searches and Documentation**

The current literature review included current analysis to ensure scope, pervasiveness, and significance of all topics correlated to African American women leadership in information technology. The current literature review included references from 174 sources. Of the 174 sources, 83 were from peer-reviewed journals and books, 87 sources were from scholarly professional published articles, and four dissertations. The online research database for results were from the University of Phoenix's ProQuest, EBSCO Host, historical data, books from the Public Library, University of Phoenix's Dissertations, All Dissertations, Yahoo and Googles Search Engines, Webster's Dictionary Online, Google Scholar, Journal of Leadership Studies 2012 Volume 6 Number 2, 2014 Volume 8 Number 2, 2016 Volume 9 Number 4, and 2016 Volume 10 Number 1.

The key research words used for the literature review were: leadership, leadership model, women in leadership, African American women in leadership, leadership styles, leadership theory, development, corporate America, executives, information technology, business women in the information technology industry, executive women in the information technology industry, upper management, qualitative, transcendental study, race, racism, gender, employment, employment with ethnicity, employment demographics, phenomenology, glass ceiling, hiring methods, laws for hiring, labor statics, inequality, discrimination, mentoring, feminist theory, Black feminist theory, organizational theory, loop theory, and minority women.

## Historical Perspective

Racial and ethnic disparities have impacted the processes of how information is gathered. Most research is a combination of general categorization levels that included Whites, African Americans, Asians, Hispanics, and American Indians. Studies have shown statistics with general categories of American people within each of the referenced groups. Lee (1993) confirmed that additional studies had been determined to identify and compare subgroups within each of the major racial and ethnic groups, making distinctions by country of origin, and generation within the United States. The data changed over time while new findings were discovered.

Despite actions in the legislation, racism and inequality continued to challenge the workforce for African American women (AAUW, 2016). The most obvious perspective, yet sometimes hard to grasp, was the preconceived notions of African American women (Allen, 1997). Many times, people were raised to believe certain generalizations about a group of people and thus did not associate African American women with a higher level of thinking or higher level positions (Norwood, 2013). These types of thoughts and stereotypes are unconscious perceptions and biases of African American women, meaning people have these notions without even thinking about it or consciously knowing that they are biased against African American women (Allen, 1997). Since these biases exist, African American women are sometimes not considered for positions because they are not thought of as being capable of performing at the level needed for management level positions in the workforce.

Norwood (2013) asserted that we live in a world built on a caste system, where darker-skinned individuals are relegated to the lowest rungs of society. Norwood (2013) went on to say the color cast became sharper, clearer, and less penetrable. Because many are unaware that these preconceived notions exist, it is sometimes difficult to correct or change these stereotypes

or thoughts. Agencies can address these biases through thorough training and development of their management teams. The Department of Interior (2012) initiated efforts to implement the inclusive workplace concept while creating a workplace in which everyone is fully engaged and where their skills and talents were fully utilized. Agencies can also provide role-playing opportunities to address these concerns as well. Being open and acknowledging that these biases exist were key to correcting these notions and promoting a change in mindset within the organization.

### **Current Perspective**

Research shared the differences between racial and ethnic groups based on unemployment rates that reflected a variety of factors. The factors were not all measurable. The U.S. Census Bureau (2012) provided geographic areas of the country of concentration while facing the degree of discrimination in the workplace. The U.S. Census Bureau (2012) explained, black women have the highest rate of poverty for those 65 years of age and above (21%), followed by Hispanic women (20%), Asian women (13%), and White women (9%), (U.S. Census Bureau, 2012, p. 5). These statistics from the Women Color Fact Sheet supported in understanding the gaps and barriers that African American women face.

Wheeler-Johnson (2012) explained how gender established the pay scale between women and men. As research expanded, the difference in pay between genders and ethnicity has resulted in low margins (U.S. Census Bureau, 2012). Discrimination was still veracity, and the actual lens demonstrated the different forms of insight. The extremity line of racial practice and profiling increased across industries. National Archives and Records Administration (2012) sought to expose the separate but equal acts while leveraging the separate and forgotten

movement. National Archives and Records Administration (2012) believed in the strong foundation of civil rights enforcement of the administration.

### **Technology**

The technology was an important entity of life because people use the technology of some sort on a daily basis. Companies have recognized the importance of technology and have created models to incorporate a system that strives for success. The technology was a resource that, like financial and human resources, was pervasively important in organizations. Managing technology was a basic business function, (Burgelman, Christensen, & Wheelwright, 2009, p. 13). Thinking strategically about technology meant raising the question of how a particular technical competence or capability may affect an organization's future degrees of freedom and its control over its fate, (Burgelman, Christensen, & Wheelwright, 2009, p. 20). The strategy has the potential of restricting a pervasive operation of technology.

According to Burgelman, Christensen, and Wheelwright (2009), the technology required careful competency assessments, market factors, and identify development. According to Burgelman, Christensen, and Wheelwright (2009), because of the matured stages of technology, leadership advancement in all ethnicity is extremely important to the cultural environment. The technology was an intricate part of life, and people have continued to use the technology of some sort daily, which advances technology (Mayhew, 2018). This advancement has ensured that there are needs for a diverse management team to assist with the organizational culture (Dishman, 2017). Wong (1994) stated organizations continue to recognize the significance of technology while designing organizational models to coincide with their business to strive for success. According to Mayhew (2018), cultural diversity and technology in the workplace include many factors, such as age, gender, ethnicity, socioeconomic status, and income.

### **Race in Leadership**

Cultural background influenced leadership styles. Minorities in leadership adopted a nurturing, inclusive, dynamic, engaging, and inspiring leadership style that has fallen under transformational leadership. The transformational leadership style inspired, displayed respect, and acted genuinely in the professional and personal advancement of their subordinates. Stewart (2016) stated that minorities led according to the dominant culture. The ability to lead and connect with other groups separated them inadvertently from leading in the dominant culture. Many non-minority supervisors felt that minority leaders were privileged.

Race has affected the perception of leadership (Lizette, 2017). An applied suggestion is that affirmative action policies have not advanced African American women leaders enough to upper management positions. Therefore, more inclusive workplace settings are needed to promote valuable diverse efforts and an environment where minority leaders can learn. Ospina and Foldy (2009) believed that race influences enactments and perceptions of leadership in as much as leadership also influences how race is understood. It is important that leadership development programs help leaders see the complexity of the issue and think about race in a variety of ways, (Ospina and Foldy, 2009, p. 889).

### **Gender in Leadership**

Yap (2010) stated that researchers and policymakers are limited in formulating recommendations based on information only about employees without consideration for the employers. The challenge was that the change in diversity brought negative attitudes and the difference range from nationality and gender. Dalton (2008) believed that research of positive attitudes towards cultural diversity could increase project and innovative performances. This performance can impact more than ethical or demographical challenges. Dalton (2008)

discovered that a culturally innovative workplace in gender and ethnicity produced successful and high-performance measures.

Developmentally, women and men are different. The focus evolved from the debate about whether women and men are developmental in leading. Ayman and Korabik (2010) expressed how leadership research was not often voiced concerning how race and ethnicity influence the involvement of leadership. The involvement did not consist of experiences from racial or ethnic minority leaders. Ayman and Korabik (2010) stated that African American women leaders strongly embraced their ethnic and gender identities. Ayman and Korabik (2010) believed the social identity and lived experiences were associated with minority status and observed the influencing of leadership, which presented challenges and strengths.

### **Leadership Development in Women**

Leadership and perseverance were key ingredients for success. Leadership was the ability to manage and organize time, energy, money, and communication with the tools and skills of success. Leadership for an African American woman was essential. Literature concentrated on the decline of African American women leadership in senior management roles with the shortage of African American women in leadership positions. According to AAUW (2016), despite the compelled case for equality of gender representation at all levels of an organization, even with the best of intentions, unconscious bias distorted critical decisions influencing who moved ahead within an organization, (p. 1). Developed women leaders were essential and important in the workplace because organizations increasingly strived for leadership development and societal improvement.

### **Leadership Development in African American Women**



African American women leaders can make companies stronger and more profitable. Why are there still so few African American women executives? (AAUW, 2016, p.1). Studies have shown that African American women executives were ranked significantly higher or more favorably than that of their White counterparts. African American's in leadership or supervisory roles give more support to their subordinates, placing greater emphasis on task completion and removing obstacles that could hinder getting the job done.

African American women in higher positions have been the challenge when creating diversity. McInnes (1999) stated that building a foundation for a diverse workplace required re-evaluating recruitment efforts, interacting with agencies and institutions that support diverse groups, and rebuilding the organization's image. This developmental process allowed plans to be organized to support a corporation's diversity objectives. McInnes (1999) believed that the process could happen by encouraging the organization's recruiters and decision makers to improve employee outreach. This approach could aid inequality and diversity to enhance diversity in an organization. Carter (2007) explained that African American women face different barriers which prevent some of these women from receiving promotions and recognition. Carter (2007) researched and reported the African American women were slow to receive feedback or instructions and lacked networking within their organization.

### **Leadership Development in African American Women in Corporate Environment**

Okoyi, Smith, Clark, and Sherman (2009) stated that African American women in leadership adopt a fostering transformational leadership. They inspire and show respect and genuine acts in their desire for professional and personal advancement. Stewart (2016) stated that minorities lead in direct opposition to the dominant culture. The ability to lead and connect with others separated them from other leaders. The identified barriers for African American

women in corporate America are consistently under-represented. Catalyst (2017) believed the workforce diversity is slowly changing to increase equality in most organizations. Thorough integration in programs of a systemic approach to advance African American Women is recommended.

### **African American Women Leaders in Technology**

African American women continued to collide against the double-paned glass ceiling. The U.S. Equal Employment Opportunity Commission (2013) reported the leadership channel from hundreds of technology companies, which includes Apple, Cisco, Facebook, Google, HP, Intel, Twitter, Yelp, and others reported data to show where the attention in developing women leaders have not occurred. The report suggested that the percentage of African American women leaders have declined despite the diversity initiative program to hire more under-represented minorities in information technology.

From 2007 and 2015, the U.S. Equal Employment Opportunity Commission (2013) reported a 13% decrease in the number of African American women leaders in technology. In the report, Asian women and Hispanic women have a better chance of being promoted to senior management positions than African American women. U.S. Equal Employment Opportunity Commission (2013) report stated that White women are now noticeably more successful in reaching the senior management level positions over all groups of minority men or women. Also, White men are still leading by 47% to be promoted in the managerial or executive positions over White women. We see progress made by White women, so we know information technology companies can change. Now it's time to do the same for minority men and women, (Dishman, 2018, p. 1).

Table 1. *Percentage of Information Technology diversity barriers by ethnicity.*

Talent	Attract and Retain Talent		Promote Talent
Ethnicity Groups	Workforce from 2007 to 2015	Percentage of Professionals in 2015	Equality Index 2015
White Men	31% growth	32%	72% above index
White Women	10% growth	11%	17% above index
Black Men	15% decline	1.2%	41% below index
Black Women	-13% decline	.07%	39% below index
Hispanic Men	32% growth	3.1%	11% below index
Hispanic Women	11% growth	1.7%	58% below index
Asian Men	46% growth	32%	38% below index
Asian Women	34% growth	15%	66% below index

### Leadership Theory

Leadership is explained and understood in different ways. Northouse (2007) believed that leadership is not reliant upon positions, titles or privileges, but by influencing others through visions that are inspired by advocacy. Leadership controls situations that could result in a positive or negative outcome. There are different leadership theories functioned by skills and characteristics. Peretomode (2012) said that there is no certain theory successfully led through

the effectiveness of leadership styles that are determined by factors both internal and external in an organization. The baseline for leadership assessment and development is to continue a platform where truth empowers others and motivates them to be a better person through critical thinking. The qualitative phenomenological study of the 10 African American women in information technology has different personalities, leadership styles, and the dynamics of human behavior as a research model for making decisions. These leadership theories are Situational, Transactional, Transformational, and Charismatic.

**Situational Leadership Theory.** The situational leadership theory was established by Hersey and Blanchard leadership framework (Hersey & Blanchard, 1996), which focused on the intellectual development process model of three key categories. These categories were the consideration, initiation of structure, and leader behavior. The situational leadership has primarily focused on the leader's psychological and job maturity. According to Hersey and Blanchard (1996), job maturity could perform a job. The performance was the essential factor that determined a leader's behavior. The situational theory of leadership referenced from the leader's actions and words or the follower's perception and emerged in the understanding that individuals are different in leadership maturity.

**Transactional Leadership Theory.** The transactional style of leadership is first mentioned by Max Weber (1947) and Bernard Bass (1981), where leaders promote a following based on rewards and punishments: Set target goals, spoke clear expectations for the leaders of an organization, stated how the followers would be rewarded for their efforts and assurances, and delivered beneficial feedback to keep everybody on task (Vera & Crossan, 2004, p. 224). This style was mostly used by management and concentrated on the undeveloped organizational process of controlling, managing, and planning. Research shows that the transactional leader

worked well and followed the transformational leaders because of the parallel thoughts and patterns (Ohara & Shue, 2014). The transactional leader worked hard while being accountable for dates and deadlines.

**Transformational Leadership Theory.** A transformational leadership style has a balance in capturing committed followers through their technique of using their people person tactic (Clawson, 2009). Clawson (2009) stated that transformational leadership theory focuses on motivation and the value to assist leaders with accessing power through different approaches. Goertzen (2012) identified that ethics are primary, while people are ego-centric. Clawson (2009) understood that a transforming leadership superseded excellent leadership. The entire leadership process could change the individual character from a simple leader to a leader with an honorable philosophy. The transformational leadership style guided people with empowering visions, adding values, goals, and opportunities. Goertzen (2012) said the power in transforming leadership came by recognizing the needs and motives of potential followers while elevating them to transcend personal self-interests, (p. 54-55).

According to Northouse (2007), leaders who inspired their followers to exceed their goals through staff development, empowerment, and individual goal alignment with organizational goals were transformational leaders. Transformational leadership allowed leaders the opportunity to collaborate with employees to classify a needed change (Avolio & Yammarino, 2013). This leadership style created a vision to direct change inspirationally while accomplishing the change with the committed team. This leadership style could cultivate a community of dedicated followers who are influenced by actions, deeds, or personality (Northouse, 2007).

There are many components involved to be a successful transformational leader. One attribute a transformational leader possessed was the ability to empower the team positively while meeting expectations and goals. Uhl-Bien, Maslin, and Opsina (2012) write that the quality of the leader or follower relationships developed in the transformational leadership style is the most desired. A transformational leader can set clear goals and high expectations while providing support and recognition to the followers. Transformational leaders understood that nothing of significance happened unless encouraged by great followers. Burns (2003) stated that through one's strength, vision, and personality, a transformational leader could encourage followers with changing their expectation, perception, and motivation for common goals.

**Charismatic Leadership Theory.** Charismatic leadership theory leaders inspired followers through a vision of a better future. Weber (1947) defined charismatic leadership as the hidden devotion of brilliant sanctity, the model character, or the normative designs ordained by the higher power. Oreg and Berson (2011) believed that charismatic leaders are considered ideal leaders. These leaders offer motivational techniques that empower others. Oreg and Berson (2011) asserted that charismatic leaders are respected, admired and trusted. According to Goertzen (2012), followers identified with them and described them in terms that imply extraordinary capabilities, persistence, and determination while being willing to take risks. Oreg and Berson (2011) suggested that these leaders are dependable and often ethical with high moral standards. Charismatic leaders produced positive outcomes with their actions.

### **Contrast and Comparison of Leadership Theories**

The different leadership theories used human emotions and connections to manage and measure a leader's success. According to Avolio and Yammarino (2013), transformational and charismatic leadership involved a different bonding among leaders and followers emotional

attachment, respect, and trust, (p. 6). Hersey and Blanchard (2009) added that charisma is critical to the success of the transformational leader. Transformational and charismatic leaders must possess the ability for followers to gravitate toward them. The transformational leadership theory focused on intellectual and intangible models, while the transactional leader pondered the real theories. Transformational leaders were identified as those who provided feedback, communicated clear goals, and gained a commitment from their followers (Ohara & Shue, 2014).

The situational leader possessed the attraction necessary to appeal to or enticed different followers. Situational, transactional, and transformational leaders are similar because each leader enticed their followers toward a common goal (Ohara & Shue, 2014). No one leadership style is superior to the other. Matching the use of different leadership styles with the performance required better results when used in appropriate scenarios (Hersey & Blanchard, 2009), such as charismatic leadership for gaining support on new changes or transformational leadership to encourage empowerment by way of increased assignments.

According to Norwood (2013), African American women in senior-level positions enabled greater understanding of the explored phenomena. Although several corporations implemented diversity initiatives, research covered models conducive to building cultural cohesiveness (Ohara & Shue, 2014). This study encouraged African American women to assist in increasing cultural cohesiveness within corporations. The current consensus was to bring more African American women into key leadership roles. This initiative required corporate leaders to step up and develop programs to nurture talent to ensure diversity to include African American Women. It was critical to understanding how to diversify the workplace while ensuring opportunities were available to African American women.

African American women regularly pursue senior management positions, and they are often treated as though they are virtually invisible (Norwood, 2013). Despite their proven abilities, African American women who are highly qualified for leadership positions and who are ideal candidates for senior management roles are overlooked due to corporate biases (AAUW, 2016). Holder, Jackson, and Ponterotto (2015) stated even those who occupy key positions are overlooked and undermined in the decision-making process. African American women have been led astray, believing their voices are not necessary.

### **Structural Functionalism Theory**

Structural functionalism theory was the developmental principle that saw society as a complex system whose parts worked together to promote solidarity and stability (Moffitt, 2018). Marxism was a structural theory where people's actions were shaped by society and in particular the economic system, (McLellan and Chambre, 2018). Marxism was a doctrine that was developed by Karl Marx and partially by Friedrich Engels in the mid-19th century. The structural functionalism theory consisted of three ideas. These ideas were philosophical anthropology, a theory of history, and an economic and political program. In an organization, structural functionalism was a sociological model with efforts to demonstrate societal functions the way it does while targeting the relationships in an organization. Organizations thrived from people from all ethnicity and gender. Organizations were successful when leadership was diversified within their business structure.

**Contingency Theory.** Contingency theory was a leadership style that thrived on a person's ability to be flexible. Bunch (2012) contended that how one defined leadership competencies varied from industry to industry. Effective leadership depended on numerous factors and variables, such as the nature of a task, the leader's personality, and the dynamics of



the group being led. Contingency leaders changed their style depending on the audience and environment. According to Bunch (2012), great emphasis was based on the leader's psychological disposition. The leaders' psychological thought process was critical to the leader's success. This factor ultimately determined the likelihood of success for the leader's ability to lead, to influence and show how effectively the leader exerts control over their group.

**Feminist Theory.** The Feminist Theory was to understand the gender equalities in various fields of communication, social roles, and experience of leadership. According to Grosz (2010), feminist learning challenged leaders to focus on gender. Feminist theories focused on women with the respect of understanding gender inequality. The view of feminism has narrowed the focus to gender fairness and has ignored the fact that oppression was of both gender and race. Thus, the commonality of gender and race on leadership development was recognized with minimal attention. Equally, models and standards of Black feminist theories have been identified with new research for African American women leaders.

**Black Feminist Theory.** The black feminist theory provided a platform to allow African American women the opportunity to speak from experience unbeknownst to other women. According to Beal (1970), Black feminist theories of gender and race could not be separated. Collins (2000) believed that Black feminist theory consisted of an inner emotional place where African American women were marginalized and treated differently than White and other minority women. African American women were in an unusually difficult position. According to hooks (1984), this group of women is at the bottom of the career ladder. African American women's social status was lower than any other group.

### **Organizational Learning Theory**

Organizational culture provided organizational participants with a blueprint of the values, beliefs, language, and actions of the organization. Rutherford (2001) explored the strong male influence of organizational cultures and its impact on gender equality and found that, in many cases, gender has been embedded as part of its culture. Bagguley (1991) examined the exclusion of women from the higher levels of employment and found both informal and formal barriers existed, which suggested that organizational culture could be exclusive. An organization with a learning culture encouraged continuous learning and believed that systems influence each other, (Nabong, 2015, p. 1). Nabong (2015) believed that constant learning elevates an individual as a worker and as a person, which opens opportunities for the establishment to transform continuously for the better. In a corporate setting, one's behavior can either add a positive or negative outcome to a situation.

### **Loop Theory**

Argyris and Schon's (1974) single-loop theory was derived from the theory of action, which posits that peoples' actions were guided by mental maps. These theories manifested in unspoken ways via methods in use, as well as verbally through espoused theories.

Understanding single-loop learning, one must become familiar with the terms used to define the context of the organizational theory. It is also imperative to contrast single-loop learning with double and triple loop learning.

**Single-Loop Learning Theory (Follow the Rules).** Single-loop learning theory exposed the types of learning that took place within an organization to represent an aspect of a broader concept of organizational culture. Argyris and Schon (1974) identified single-loop learning theory as the foundation for the knowledge and behavioral change found in an

incremental learning system. Vliet (2014) defined single-loop learning theory as what occurred when organizations sought to fix the problems within its current structure without altering.

An example for single-loop learning theory would be when an African American woman discovered that the hiring manager who provided excellent feedback, comments and stated that she was the best fit for the position during an interview went absent. After days of no response or acknowledgment of any sent correspondence or call, the African American woman became discouraged from the lack of communication.

**Double-Loop Learning Theory (Changing the Rules).** Double-loop learning theory also referred to as reframed investigation for how organizations remain aware of existing organizational structures. According to Vliet (2014), this kind of learning involved creativity and critical thinking. Double-loop learning theory initiated the understanding of tasks that were being completed rather than a more efficient process for completing them.

To continue with the above example of the hiring manager who did not see the benefit of hiring the African American woman who possessed the required credentials for the position continued with double-loop learning theory. The double-loop learning theory would occur when the African American woman would engage the hiring manager in a discussion about their decision not to hire the African American woman. Whether the expectations and requirements were realistic or not realistic was based on the decision of the hiring manager. The results of the discussion could be that the expectations and requirements were changed or that communications between the African American woman and the hiring manager were improved.

**Triple-Loop Learning Theory (Learning About Learning).** Argyis and Schon (1974) defined the triple-loop learning theory as transformational learning that involved questioning an organization's work processes and tasks, but also examining individuals' points of view and

attitudes. African American women experience rejection, or lack of acceptance, in corporate America more than any other group (Ohara & Shue, 2014). This theory only scratched the surface of how corporations could change their culture to be more accepting of individuals based on race and gender. In conclusion, of the prior example, the triple-loop learning theory would occur after an engaging discussion with the hiring manager and the African American woman. During the dialogue, each person can discuss the presented questions and provide answers while offering ways of learning for a guideline.

### **Hiring Methods**

African American women were represented in the information technology workforce in percentages that was far lower than their percentages in the population as a whole (Tapia & Kvasny, 2004). A process to increase qualified employment candidacy is through recruitment. Recruitment was important in the workforce because it was a method used to find qualified talent. Recruiters should look broad, effectively, and gear towards all prospective candidates to reach a variety of qualified individuals. According to Kirton and Greene (2007), recruiters should take reasonable recruitment measures to ensure that the workforce consisted of a diverse group of people with various socio-economic and educational backgrounds and different levels of creativity and knowledge. Searching for qualified candidates could mean that agencies think outside the box or consider nontraditional methods of recruitment. However recruitment was done, it should reach an assortment of potential candidates to ensure that the best individuals were placed in the right positions to promote their growth and skills.

Some organizations have gone the extra mile to ensure that under-represented individuals are targeted by using job posting sites, career fairs, reaching out to colleagues or other professional contacts, and newspaper or social media postings. There was a need to deepen our

understanding of retention issues for women and minorities to inform intervention strategies (Tapia & Kvasny, 2004). These techniques are beneficial and provide a better pool of candidates than other recruitment practices.

Some of the more traditional recruitment events hinder African American women from getting better opportunities. The U.S. Equal Employment Opportunities Commission (2013) stated that since recruiters typically recruit from the more prestigious, well-known universities, which may not have as many African American female students, many African American women miss out on the higher level or higher paying job opportunities as a result. Another recruiting technique that caused issues for African American women is that many of the managerial positions and internships were not offered or even advertised at institutions with a large African American female student population. When those jobs were not advertised for African American women, then they are not aware and cannot receive higher level positions and internships.

The recruitment agencies should try techniques such as partnering with historically black colleges and universities (HBCUs) as well as African American women's professional organizations. Agencies should consider ways to promote internship opportunities to attract African American women and focus on what the individual must offer, rather than the school they attended (U.S. Equal Employment Opportunities Commission, 2013). Through this process, the opportunities for African American women could increase across the board and help to bridge the opening in the recruitment of quality African American talent.

### **Gap in Corporate Wages**

The U.S. Census Bureau (2012) stated that in 2015, working women in corporate America were paid 80% of what their male counterparts' earnings. Blau and Kahn (2007) stated that if this

trend continues, men and women will not reach equal pay until the year 2152. The inequity in pay affected all women, but it adversely affected African American women. African American women's annual income is lower, compared to non-Hispanic and Asian American women. However, within these ethnic groups, there was a smaller pay gap in non-Hispanic and Asian American counterparts. Not only was the pay scale not equal for African American women, but it was also worse for full-time working mothers. Amble (2007) discussed how African American women were often criticized while receiving an overwhelming amount of work after reaching the senior management positions.

Blau and Kahn (2007) explained the gap of compensation as pay related to gender. Women continued to earn considerably less than men on average, and the convergence that began in the late 1970s slowed noticeably in the 1990s, (Blau & Kahn, 2007, p.33). Pay differences have been a factor since 1970, and as of the current situation, change is slowly happening. Gender-based pay disparity existed, and the projection for correction was still in progress for an African American woman. Blau and Kahn (2007) believed that childbearing impacted some of the compensation difference. When women took a leave of absence to deliver and care for a child, their time away from the business was longer than the average six to eight weeks off. This option has allowed this change.

Ludden (2010) informed that women currently earned 77 cents for every dollar earned by men. Ludden (2010) explained how marital status was accounted for, a small but significant residual gap remained. Well established societal sexism created the unconscious bias between the capabilities and proper gender roles of women. Ludden (2010) believed that employers were not immune to this effect and the undervaluation of a woman's ability affected hiring practices while leading to the continuing wage gap.

Smith (2011) stated the disparities ranged from \$1,000 to \$10,000 salary gap between African American women and White American women, not even figuring the pay differences between men and women. In each industry, the salary difference was greater between the two races. For example, African American women degree holders in the computer networking or telecommunications industry earned an average salary of \$54,000, as opposed to White women degree holders, who earned \$56,000 in this field. In comparison to the architecture industry, African American women earn an average salary of \$55,000, while White women architects earn an average of \$65,000. Smith (2011) provides inclusion of where African American women's pay differs to White American women with degrees.

### **Laws and Regulations against Discrimination**

Companies are not fully abiding by the laws and regulations put in place, specifically Equal Employment Opportunities (EEO) regulations (U.S. Equal Employment Opportunity Commission, 2013). Many organizations technically complied with these regulations, but the commitments to these regulations were often dismissed. The purpose of EEO regulations was to provide fair hiring practices in agencies for all, no matter, race, religion, age, etc. Agencies must take the top-down approach for the regulations to have an impact, meaning that the leadership team must embrace and communicate these principles for the necessary measures to be in place for all levels within the organization. The U.S. Census Bureau (2012) stated the lack of enforcement caused management not to be held accountable for their actions which undermined the importance of EEO laws and regulations in the workforce. This action caused the public and employees to believe that the government does not take discrimination seriously.

Companies should measure their management teams on equal employment to change how lax most companies were with EEO laws and regulations. Companies should not reward

those engaged in any discriminatory behaviors (U.S. Equal Employment Opportunity Commission, 2013). U.S. Census Bureau (2012) stated that publicizing when companies are found guilty of discrimination and by punishing senior management as well as the lower management and others who discriminate can deter them from further discrimination in the future. Taking a more active role in administering the EEO regulations made it harder for companies not to comply with the regulations in the future, thus promoting change and opening doors for African American women.

The government challenges involved the lack of consistent monitoring and law enforcement. Government Accountability Office (2010) said that there was poor data collection of employment-related data and poor dissemination of data. According to Kinkade (2012), this was in addition to finding that African American women are disproportionately represented in working-class jobs where the possibility of promotion is virtually nonexistent. The report also stated that when African American women do shatter the ceiling, their compensation is far less than that of their counterparts. African American men with professional degrees earned only 79% of the amount earned by White men who held the same degrees in the same job categories.

### **Barriers Associated**

Some factors have worked against African American women in the corporate sector. These factors were biases and perceptions, lack of professional networking, poor training and development, the lack of proper hiring practices which gravitated towards African American women, inequalities in the workforce hindering career advancement, education disparities, and laws and regulations in place to protect African American women from discrimination. Department of Interior (2012) knew the transformation was being embraced internally and externally with stakeholders, particularly since President Obama issued his Administrative



Order. As a result of these, many were disadvantaged affecting African American women in the workforce, they were not given the same opportunities and thus were not as successful in the workplace.

The structural theory built on Kanter's (1977) seminal research on women in corporations. From this perspective, the occupational behavior and status of women and men were determined not so much by the characteristics they brought with them into the workplace, but by the structures, they encountered there which limited women to low-status jobs (McIlwee & Robinson, 1992, p. 14). Thus, women often have less opportunity to advance, and less access to power than men do was a labyrinth. The labyrinth is the creation of male-dominated leaders organizing a scarcity of women in leadership through leadership power. Kanter (1977) used the term tokens that described the percentage of women who reached the upper echelons of their organizations, given their high visibility and minority status.

According to Hennig and Jardim (1977) and Mattis (2002), women's exclusion from the informal network of power relations within organizations was a formidable barrier to career advancement. Women were not well integrated into the organization's dominant coalition, often referred to as the good ole boy network, (Burke, 2002, P. 66). Organizations need to include initiatives to help in resolving an inclusive recruiting strategy to be successful. According to Burke (2002), the good ole boy network was the biggest challenge women have while reaching top management levels. In addition to attending meetings where a bunch of guys sits together around a table making all the decisions. Unfortunately, male corporate leaders are inclined to select people as much like themselves as possible when promoting into management. The practice of the good ole boy network and labyrinth leaves no consideration for promotion time. Instead, the women are silenced and are virtually absent. Kanter (1977) stated that researchers

agree that the challenges were pervasive and posed barriers to women and minorities that men do not face.

**Lack of Mentors and Social Networks.** Research by Catalyst (2017) identified barriers to African American women's advancement as the lack of mentorship and role models, exclusion from informal communication networks, stereotypes, and preconceived notions of roles and abilities, shortage of substantial line experience, visibility, challenging tasks, and personal and family responsibilities. Per the U.S. Equal Employment Opportunity Commission's (2013) bipartisan Federal Glass Ceiling Commission reported, while women and minorities account for two-thirds of the population and 57% of the workforce, they occupied only 3% of senior management positions in a Fortune 1000 company.

Traub (2011) posited that African American women faced the lack of peer and superior mentoring and made professional contacts with senior management superiors inside and outside of the organization, (p. 30). Nobel (2007) believed that mentoring is key to career development and advancement for individuals. Thus, the lack of mentorship could hinder or delay that success. Both formal and informal mentoring, as well managerial and peer support, were important to assist African American women on a successful career path.

According to Baskerville-Watkins and Smith (2014), mentoring may have been more important for women because women have a far more difficult time obtaining mentors than men. The U.S. Equal Employment Opportunity Commission (2013) cited a study wherein 73% of African American women senior management leaders with informal professional mentors experienced more rapid salary and total compensation growth compared to those without an informal mentor. This study further showed how important it was to have a mentor when wanting to grow in the workplace. Feller (1996) asserted social studies research had established

a direct correlation between having mentors and increased occurrences of job growth, promotions and salary increases. Since mentoring was key to success, it should be a high priority for all employees with upper-level career aspirations to team up with a mentor to help them achieve their career goals (Clutterbuck, & Ragins, (2002). According to the U.S. Equal Employment Opportunities Commission (2013), in addition to mentoring, developing key relationships with upper-level management and other professional contacts was important for a diverse workplace. It can help build trust and skillset and allow African American women to be recommended for various jobs when using internal contacts. These contacts in the workforce could put in a good word for African American women aspiring to higher level roles. The lack of networking and making professional contacts caused African American women to have a weak social network. Network connections and word of mouth were the more critical factors in gaining employment.

Clutterbuck and Ragins (2002) believed that a diverse workforce in an organization has an advantage over the New World economy. Clutterbuck and Ragins (2002) explained the importance of mentorship to use a proactive instrument for diversified organizations, employment initiatives, and to demonstrate the correlation of mentoring program could offer to recruit, advanced and preserved the unique and innovative workforce. Lester, Hannath, Harms, Vogelgesang, and Avolio (2011) believed that mentoring assisted in developing a leader. Mentorship created models for designing and structuring a leader for the roles. These researchers believed that effective mentoring tailored to the apprentices' developmental needs should enhance and accelerate their development as leaders.

**Poor Training and Development.** Marable (2006) stated that the limit factor for African American women was insufficient training and development resources, thus hindering

African American women from developing the same skillset as others. Marable (2006) believed the lack of skillset caused various issues like not including African American women with the chance to act in supervisory positions or provided as many developmental opportunities as their White counterparts. Proper training and development opportunities could lead to higher levels of performance and in turn, higher performance evaluations, which eventually led to promotions and higher paying jobs (Stewart, 2016). According to McMahon (2010), when African American women were not given these same training opportunities, it limits their ability to receive higher performance scores.

**Inequalities in the Workforce.** Many times, the mere perception of inequality among African American women in the federal workforce hindered their career progression. U.S. Equal Employment Opportunities Commission (2013) stated that researchers have affirmed that perceptions of unfairness or inequality impacted the career advancement of under-represented groups. It was human nature not to put forth the needed or extra effort if one did not feel as if they would be rewarded for their efforts (League of Black Women, 2011). According to Feller (1996), African American women have the notion that their efforts would not be recognized or would not get the same results as their White counterparts many will feel less motivated or inclined to put forth what is needed to produce the higher results.

According to the U.S. Equal Employment Opportunities Commission (2013), in its most recently published results from the Career Advancement Survey, the MSPB found 56% of African American employees reported great or moderate discrimination against African American women on the job. Because African American women felt that this discrimination existed, they did not believe that their hard work would truly pay off (U.S. Equal Employment Opportunities Commission, 2013). The perceptions of inequalities were real and caused many

issues for African American women, preventing them from pursuing career advancement opportunities (Tapia & Kvasny, 2004). These types of issues could be offset by management committing to address inequalities. Management actively communicated its commitment to a diverse workforce.

**Education disparities.** Education disparities created gaps for African American women in the federal workforce. According to Johnson, Stone, and Phillips (2008), due to social inequalities, African American women did not have as many opportunities as others to get higher education or training. It was harder for African American women to have attained higher level degrees and received the same educational knowledge as White Americans (Johnson, Stone, & Phillips, 2008). Although there has been significant traction to close the educational gap, there was still a trace of the past hurdles that affected the workforce today.

According to England (2012), educational issues hindered the advancement of many African American women because, in most cases, higher level management positions required a higher level of education, and fewer African American women had the level of education needed to gain employment in those jobs. Even when education was comparable, because of the other obstacles, African American women faced, they were still not considered for the upper-level management roles like their White counterparts.

Companies should line up education and job requirements with each candidate because it was crucial to the job function to close that educational gap (Lent & Brown, 2012). According to the U.S. Equal Employment Opportunity Commission (2013), whenever feasible, agencies should allow the professional experience to replace educational experience. Finally, agencies should promote educational institutions to encourage students towards less common fields of study, such as science, engineering, math, and technology (U.S. Equal Employment Opportunity

Commission, 2013). The demand is high for these areas, but not many students pursue these type of degrees, so a push for this type of knowledge will open doors for many African American women (U.S. Equal Employment Opportunity Commission, 2013).

### **Breaking the Glass Ceiling**

The barriers to corporate culture delayed women's development and advancement and presented a range of corporate initiatives to increase the glass ceiling (Catalyst, 2017). The glass ceiling will not break until African American women are pulled into the boardrooms and no longer have to work twice as hard for half of the recognition (Lizette, 2017). The U.S. Equal Employment Opportunity Commission (2013) stated that African American women held just 1.9% of board seats in the Fortune 500, compared to 12.7% for White women. The disparity of constrained opportunity showed the lack of upward mobility for African American women in corporate America. Literature concentrated on the decline of African American women leadership in senior management roles with the shortage of African American women in leadership positions.

Harriet Tubman was considered one of the first African American women leaders. Her leadership guided over 300 slaves to freedom in 1849. She encouraged other African American women to be leaders. According to Fairchild, Kowitt, Leahey, and VanderMey (2014), records showed Rosalind G. Brewer as the first African American woman CEO of a Walmart division, Kim D. Sanders as the first African American woman COO of M & F Bancorp, and Ursula M. Burns as the first African American woman CEO of Xerox Corporation. These were a few African American women who broke the glass ceiling. According to Lizette (2017), Black people today were standing on the shoulders of these pioneering giants who have shaped and influenced the fabric of this country.

## Summary

Chapter 2 consisted of information on under-represented African American women in senior management positions. The focus of the qualitative phenomenological study was to research lived experiences of 10 African American women leaders in the information technology roles in Dallas/Fort Worth, Texas. African American women encountered sexism, discrimination, exclusion, and a lack of career advancement opportunities (Bailey, Wolfe & Wolfe, 1996, & Scales, 2010). The literature review stated African American women were under-represented in the senior product or project manager, information technology manager, chief executive officer (CEO), the chief technical officer (CTO), chief information officer (CIO) roles in Dallas/Fort Worth, Texas. The struggle of diversity was a composite of inequality. African American women in organizations reported that racism, not sexism, is the greatest barrier to their upward mobility (Bailey, Wolfe & Wolfe, 1996, & Scales, 2010).

Chapter 2 contained the literature review of past and current information on applicable findings of theoretical and methodological contributions to the study of the under-represented African American women leaders in information technology. The historical and current perspectives of social, cultural, intellectual, and emotional settings shaped lives from previous to current to reveal the identities of racial and gender in this study. The theoretical literature and conceptual framework of the phenomenology theory explained why the research was a study for under-represented African American women leaders in information technology in the Dallas/Fort Worth, Texas area. Chapter 2 contained literature from peer reviews and research articles that were relevant to the study of race, hiring methods, laws against discrimination. Diversity, gaps in wages, leadership theories, organizational theories, and barriers associated with breaking the glass ceiling were explained for African American women leader in information technology.

## **Chapter 3**

### **Method**

Chapter 3 provided a description of the research method and design used to conduct the qualitative phenomenology study of the lived experiences of under-represented African American women in leadership positions in the information technology industry. As stated by Bevan (2014), many researchers approached this study under qualitative methods. As no one qualitative method had been established, the social science discipline tended to be structured from different conventions that were formulated in qualitative research (Christensen, Johnson, & Turner, 2014). Each qualitative research had dedicated components which validated the findings (Bernard, 2013). Cohen, Kahn, and Steeves (2000) stated all qualitative research must include a dedicated method section which indicated the appropriate research method, the sample size, and the data analysis that was divided into the data collections and results. The consideration in the qualitative research was focused on the data type, collected data, analyzed data, and the results of the presented data. All of these findings were explained to the participants.

The characteristics of qualitative research studies from Hesse-Biber (2011) stated that qualitative research was often based on or include non-probability sampling. This information may consist of a variety of components. For example, a blend of people, organizations, societies, samples of natural behavior, verbal, written, and visual material were all samplings for qualitative research. These samplings were important because data was formulated to assist with understanding how respondents or participants were selected. This sample was explained and justified thoroughly because this document contained rationale data source that identified the views of each respondent or participant whether the data was a response, no responses, or refusals.



Creswell (1998) stated that qualitative researchers were often interested in selecting a purposive or judgment sample. The form of purposive sample preferred was considered by the meticulous questions of research. Researchers began the projects with a particular set of values that stimulated the ideas regarding social reality. The process guided the questions that were asked and the research design method. These values and beliefs were known as the research paradigm. This represented the position taken during the research process. Creswell (1998) stated that having identified and articulated your research position before you started your project was critical because it served as an important guide which made coherent, ethical, and theoretically informed choices at every stage of the research process.

Qualitative research was appropriate when used in face-to-face interviews. This technique was helpful when the researcher investigated a specific subject matter to focus on while new information was gained in regards to the topic. These interviews normally occurred in a session focused on the main topic of the researcher interest. The objective allowed actual discoveries from the concentrated discussions to gather qualified qualitative data. The purpose of this qualitative phenomenology study was to explore the lived experiences of under-represented African American women leaders in the information technology industry in the Dallas/Fort Worth, Texas area.

In Chapter 3, the current study provided the research method and research design used to ensure that the correct research method was used. The chapter discussed the population search, the sample of all participants studied to collect information for a decision, and a field test ensured that the appropriate questions were asked to establish unbiased results. Also in Chapter 3, an interview protocol instrumentation of the interview questions was presented to develop the qualitative study, and the use of informed consent from the participants stated full permission of

the possible risks and benefits. The data collection was utilized in Chapter 3 to gather, measure, and discover useful information for the qualitative study. Lastly, validity and reliability were reviewed to define and measure bias or any distortion in the qualitative study.

### **Research Design**

In this study, the general problem was the under-representation of African American women in senior management roles in information technology in Dallas/Fort Worth, Texas. The qualitative phenomenology study's purpose was to use an approach which conducted qualitative research based on the lived experience of participants. The phenomenological approach, which was a method of reflection, provided a logical, systematic, and coherent resource for carrying out the analysis and synthesis needed to arrive at essential descriptions of experiences (Moustakas, 2004). Moustakas (2004) described experiences as the images that resulted from interview transcriptions that included thoughts, feelings, examples, ideas, and situations that portrayed what comprised an experience.

The common problem of the study consisted of the under-representation of African American women in information technology. Winter (2007) believed that African American women's leadership success in senior management positions were important because it showed the diversity and the opportunity to change. Winter (2007) believed the ability to live the experience provided opportunities to use lived experience and working knowledge to establish value. The workplace was racially diverse in the 21st century, but striking disparities continued within a corporate culture (Bouie, 2011).

According to Yap (2011), biased gender representation was developed within information technology positions. Yap (2011) believed the conclusion to the problem was to increase employment of African American women in computer technology in the related fields of project

management, information technology management, and operations management. These changes stimulated growth (Yap, 2011) and drove cultural diversity in the technology industry (Yap, 2011). A culturally diverse workplace helped to provide a collection of ideas to advance businesses. African American women believed different organizational standards existed between them and their counterparts (Parker, 2005). It was important to address the issues relevant to African American women in the information technology industry (Hite, 2004). Every day there were new discoveries and insights on lived experiences. McMahon (2010) believed African American women gave insight and added value to an organization. Studies were performed to assist with leveraging and ensuring opportunities to diversify all employees were met (Hite, 2004). Understanding these challenges, obstacles, and the barrier was key.

### **Appropriateness of Research Methods**

Merriam (2009) stated the method and design for a qualitative phenomenological study sought to understand an individual's feelings and experiences. The purpose of this study was to explore factors for African American women who were under-represented and to achieve the necessary occupational changes for diversity. Marable (2006) stated that qualified African American women leaders were under-represented and devalued, while Norwood (2013) stated that African American women were quick, independent thinkers and excellent communicators. Hard work and the ability to understand that challenges come in different forms created endurance (Norwood, 2013).

### **Phenomenology**

Phenomenology was an umbrella term which enveloped both a philosophical development and a scope of research approaches. Phenomenological development was started by Husserl (1859-1838) as a fundamentally better approach for performing rationality. Later

theorists, such as Heidegger (1889-1976), had recast the phenomenological venture and moved far from philosophical teaching which concentrated on awareness and (interpretive) dimensions (Husserl, 2001). According to Moustakas (1994), phenomenology was essential to the conventional style of reasoning, which was an approach that concentrated on the study of consciousness and the objects of direct experience. Phenomenology thought about structures of cognizant experience as experienced from the principal individual perspective, alongside significant states of understanding. Moustakas (1994) stated the focal structure of an affair was its purposefulness, the way it was coordinated through its substance or importance toward a specific question in the world. Phenomenology accentuated the significance of individual points of view and translation (Husserl, 1970).

The term phenomenology appeared in the 18th-century compositions of Johann Heinrich Lambert, Johann Gottfried von Herder, Immanuel Kant, Johann Gottlieb Fichte, and Georg Wilhelm Friedrich Hegel (Moustakas, 1994). In 1900, Edmund Husserl used the term phenomenology to mean vivid psychology with sources of Franz Brentano. Franz Brentano reintroduced the idea of purposefulness into present-day theory. Brentano's notion of purposefulness was the deliberate idea of cognizance or the interior experience of being aware of something (Cohen, Kahn & Stevens, 2000). From Brentano, Husserl embraced the view that reasoning comprises depiction and not casual clarification (Moustakas, 1994).

Phenomenology studies experienced, how we understood and interfaced with things around us in our human world, including ourselves and other individuals. Husserl (1931) used the term supernatural in phenomenology to allude to resistance to the devotion of any sort (Moustakas, 1994). Moustakas (1994) distinguished supernatural phenomenology as a logical investigation of the presence of things, of marvels similarly as we saw them and as they appeared

to us in cognizance (p. 49). Farber (1943) recognized the elements of supernatural phenomenology as that it is the primary technique for information. It was an intelligent approach since it looks to differentiate beliefs. Phenomenological studies provided awareness of a lived encounter of the studied participants.

### **Population, Sampling Frame, and Sampling Method**

According to Gay, Mills, & Airasian, (2009), the population was a group of individuals with the same or similar characteristics that generalized the results of a study. The age or demographical attributions for each participant was not a consideration in defining the population studied. Silverman (2016) reported there was one woman in the 100 top-paid CEOs in Dallas/Fort Worth, Texas. Although no African American woman made this report, the results provided data to support this study. This sample included 10 African American women with two or more years of experience as a senior product or project manager, information technology manager, chief executive officer (CEO), the chief technical officer (CTO), chief information officer (CIO) in the Dallas/Fort Worth, Texas.

The eligibility criteria for this study were women participants from Dallas/Fort Worth, Texas. Each participant had to identify herself as an African American woman with two or more years of experience as a senior product or project manager, information technology manager, chief executive officer (CEO), the chief technical officer (CTO), chief information officer (CIO) in the Dallas/Fort Worth, Texas area. Hoyt and Bhati (2007) stated qualitative phenomenological research emphasized the viewpoint of the study participants. According to U.S. Department of Labor, Bureau of Labor Statistics (2015), IT leadership roles included chief executive officer (CEO), the chief technical officer (CTO), and chief information officer (CIO).

### **Informed Consent**

An informed consent form explains what is being done, for what purpose, and suggests any risk factors for each participant in this research. Hoyt and Bhati (2007) stated that through the informed consent, potential study participants were made aware that their participation is voluntary and that any aspect of the research was private to protect their well-being. The consent form suggested clauses that the participant could withdraw from or stop the research study at any time. Before the qualified candidates were interviewed, each participant introduced to the research via email and a printed ink signature during the interview. The Informed Consent Form (see Appendix C) provided information on the research purpose of the study, methods for each participant, and protective measures used for confidentiality.

### **Field Test**

A field test would be conducted before the data collection (Cochran, 2007). The researcher would normally field test the instrument. The instrument was demonstrated on three dissertation members with expert knowledge of the research topic as a test that results in effective feedback. The experts would not answer the questions on the questionnaire instrument because these answers would provide prior data for testing purposes. The purpose of the field test was to assist the researcher with refining or improving the questionnaire instrument or interview questions. Also, the field test may direct the researcher to change the data to avoid vagueness and bias while being authentic.

Before the data was collected, a field test was performed from the interview questions. The field test was used to strategically check the reliability or validity of a data collection instrument. There were four questions for a field test (see Appendix F) to feedback from the interview protocol instrument (see Appendix E). This data collection instrument gathered the intended data for this study.

## **Interview Protocol Instrument**

According to Leedy and Ormrod (2016), interviews were always extensions of normal conversation. Interviews established and created relationships temporarily with the interviewers. As the right questions were asked, accurate responses were provoked from the depicted questions from the participants. According to Leedy and Ormrod (2016), in the way interview questions were designed, it was important that the questions did not exhibit unacceptable vagueness in expressing the interviewer's intentions. A total of 21 questions were developed in the Interview Protocol Questionnaire (see Appendix E). Each question was layered by the participant's history of life, career path, the definition of leadership, and lessons learned. These four categories would provide an understanding of the ultimate research question. The research question for this study that was guiding the inquiry was How do under-represented African American women in a leadership position within the information technology industry describe their background and experiences while seeking senior management leadership positions?

## **Confidentiality**

Privacy and confidentiality of participants were critical in research, which included protecting the identity of research participants (Kaiser, 2009). The participants were gathered from the Chamber of Commerce of Dallas, and Fort Worth, Texas. The prospective participants were called after the data was reviewed from the Chamber of Commerce of Dallas, and Fort Worth, Texas. These initial phone interviews were placed to qualify the right participants for this study, which allowed the opportunity to schedule a face-to-face appointment. The privacy of the individual participant was the priority. An assigned code within the documentation and from the recording will be used to ensure confidentiality. Researchers took great care in the protection of both the identity and contributions of each participant in a study (Kaiser, 2009). The researcher

was the only one to access the document. This step provided and ensured greater protection in the confidentiality of each participant. Therefore, the data was gathered from audio tapes, handwritten notations, audio recorded transcriptions, and saved on an encrypted flash drive. The data was kept for three years and then destroyed by deleting the file.

### **Data Collection**

The data collection consisted of a face-to-face interview with 10 African American women to develop common or contrasting emerging themes. The qualitative phenomenological research relied on four methods for gathering information. This study focused on two methods. The first method was a face-to-face interview with each participant. The second method analyzed and translated the information from the participants into a qualitative method (Brinson, 2006). The 10 African American women who were in senior management roles for about two years or longer were encouraged to respond to the interview questions based on their lived experiences. The researcher, in turn, described the phenomenon as accurately as possible and remained true to the facts (Burns, 2002). Best practice in qualitative phenomenological research recommends that all unstructured interviews be recorded (Brinson, 2006). Participants were recorded using a digital recording device, and their interviews were later transcribed and saved as Word documents on an encrypted flash drive. The data was kept for three years, and then destroyed by deleting the file.

### **Data Analysis**

The goal of phenomenological data analysis was to communicate a full explanation of the lived experience of the participants (Cohen, Kahn & Stevens, 2000, p. 72). There were different types of qualitative phenomenological research (Moustakas, 1994), which was the study of lived experience (Laverly, 2003). Data analysis in the phenomenological approach comprised of



decoding and explaining gathered qualitative phenomenological data in a descriptive script which reported the central research question. The qualitative phenomenological study consisted of experiences, feelings, and viewpoints of individuals in an interview process (Hays & Wood, 2011).

The objective of phenomenological data analysis was to give a depiction that precisely caught and conveyed the importance of the lived involvement for the sources (Cohen, Kahn and Stevens, 2000, p. 72). A subjective, phenomenological was explored distinctive research in phenomenological about reasoning (Moustakas, 1994), which was the study of lived involvement (Lavery, 2003). Data analysis was vital because it explained the findings of the study. If the information were not analyzed, it could have ruined the discoveries of the examination given incorrect data. In phenomenology, there was a certain structure strategy used for information analysis (Moustakas, 1994).

After completing the interviews, the approach to organizing and analyzing the data in the phenomenological qualitative study was established on the transcendental phenomenology. The transcendental phenomenology approach was based on principles identified by Husserl (1931) and translated into a qualitative method by Moustakas (1994), which held promise as a viable procedure for phenomenological research, (Moerer-Urdahl and Creswell, 2004, p. 1). The transcendental phenomenology method was best understood from procedures that involved an approach that needed to be illustrated by a qualitative study. Secondly, through illustration, each step in the data analysis process of transcendental phenomenology used a study of the ripple effect. The ripple effect was based on ten participants that shared their lived experience as they attempted to move their career into an upper management position in information technology. According to Moerer-Urdahl and Creswell (2004), transcendental phenomenology worked well

for methodology studies as it provided logical, systematic, and coherent design elements that lead to an essential description of the experience.

As indicated by Creswell (2002), information technology software like QSR International NVivo 12 unscrambled the coding and data examination process. QSR International NVivo 12 was used to break down the data from the interviews. The coding procedure began with individual meetings that were transcribed and imported into the QSR International NVivo 12. The QSR International NVivo 12 arrangement offered an entire toolbox for quick coding, careful investigation, and thorough administration and examination (Creswell, 2002, p. 237; QSR International, n. d.). Creswell (2002) believed the QSR International NVivo 12 finds, translations, and was exact. This procedure of triangulation enhanced the precision of the study as it approved the results against writing and topic specialists (Creswell, 2002).

### **Reliability and Validity**

Reliability and Validity were two essential aspects of research. Thorough attention to validity and reliability made the transformation between the interviewer and interviewee to be seamless. Answers and findings from the interviewee were sincere and the truth because these answers were vital components in the qualitative research. The qualitative research was where the researcher's subjectivity was swayed or added bias to the interpretation of the information or for the research answers to be questioned or seen as suspicions. Charmaz, K. (2006) suggested that as qualitative researchers, we should not struggle to understand and interpret the meanings, experiences, and actions of the people we studied from the stories they told.

Maxwell (2005) described reliability as the degree to which the results were an accurate representation of the participants under study. According to Creswell (2002), the criteria for judging quantitative research differed from that of qualitative research. The validity of the

phenomenological research was valid because the study was motivated by participants with the required experience. An individual interview was conducted for the 10 participants in this study. The allotted time for each participant was approximately 45 to 90 minutes. Each participant had the opportunity to speak openly and honestly. After gathering the answers, each participant had the opportunity to review and validate their responses via email transmittal after the transcription was completed.

The reliability of this phenomenological study was supported by an involuntary journal with logged and supported entries. Validity was obtained from the related experiences in the interviews to make sense, contain meaning, and allow the researcher to conclude the population studied (Creswell, 2007). Regular entries were made to capture the process, logical reflection, and the participants' voice. Merriam (2009) notes regardless of the type of research, validity and reliability were concerns that were approached through careful attention to a study's conceptualization and the way in which the data were collected, analyzed, and interpreted, and the way in which the findings were presented (p. 210).

### **Summary**

Chapter 3 included descriptive details of the qualitative phenomenological research design used in this study. In Chapter 3, discussions of the population search, the sample of all participants studied for data collection, and the field test was presented to ensure that the appropriate questions were asked to establish unbiased results. Also in Chapter 3, the interview protocol instrumentation of the interview questions utilized the development of the qualitative study. Informed consent and confidentiality processes were followed based on the University Institutional Review Board (IRB) Guidelines. The objective of this study was to explore the

lived experiences of under-represented African American women for improvements with openings and profession choices that were coordinated in the information technology careers.

The purpose of this qualitative phenomenology study was to explore the lived experiences of under-represented African American women leaders in the information technology industry in the Dallas/Fort Worth, Texas area. The research design, appropriateness of research methods, and data collection of the qualitative study influenced the results of reliability. The design data was gathered in a face-to-face interview with 10 African American women with more than two years of experience in their management roles. The data collection was utilized in Chapter 3 to gather, measure, and discover useful information for the qualitative study, which ensured the current study provided the research method and research design of all components.

## **Chapter 4**

### **Results, Data Analysis, and Transferability**

The purpose of this phenomenological study was to explore the background and experiences of under-represented African American women in leadership positions in the information technology industry in Dallas/Fort Worth, Texas. The objective of this study was to increase the 1.7 percent representation of African American women career advancement in the information technology industry by encouraging diversity from this research study. The study provided results of the challenges from hiring methods, gaps in corporate wages, mentors and social networks, poor training development, inequalities in the workplace, and education disparities.

African American women were faced with challenges while attempting to break the glass ceiling. The study consisted of a face-to-face interview to help collect emerging themes for data collection to sample 10 African American women with two or more years of experience as a senior manager or executive in information technology in Dallas/Fort Worth, Texas area. The phenomenology approach assisted with categorizing the themes and patterns of the lived experiences of the 10 African American women leaders. Chapter 4 did contain the data analysis and resulted from the interview and interview protocol instrument. The interviews obtained information from the participants who experienced the challenges of pursuing upper management in the information technology industry. The data collection process was presented, which included the method of participant recruitment and each participant's demographics. The interview process used open-ended questions with each participant to gather information for this study.

### **Data Collection**

There were 21 interview questions asked to each participant. All of the participants answered the interview questions which were relevant to the research questions. Moskal, Leydens, and Pavelich, (2002) stated that validity and reliability were two essential aspects of research. Thorough attention to validity and reliability made a seamless transformation between the interviewer and interviewee. Charmaz (2006) believed that the answers and findings from the interviewer must be sincere and the truth because the answers were vital components in the qualitative research. Moskal, Leydens, and Pavelich, (2002) believed that the qualitative research was where the research subjectivity could sway or add bias to the interpretation of the information or for the research answers to be questioned or seen as suspicions. Charmaz (2006) suggested that qualitative researchers should not struggle to understand and interpret the meanings, experiences, and actions of the people studied from the stories they tell.

Heidegger (2011) stated that phenomenology was originally and essentially a philosophical discipline. The core of the qualitative research was to understand the research questions and to identify research design through words to build a significant image without compromising its richness. Englander (2012) stated that researchers were active in trying to develop a critical approach to event studies, which were increasingly seeking the rich understanding of what was to be understood as an event and what the study of events embraces. Charmaz (2006) believed that in a qualitative research study of data that the gathered information was required information. The questions from the researcher's bias and the researcher's competency could sway the trustworthiness of information considerably. Charmaz (2006) believed that not all methods fit the situation and not all methods fit the worlds to which the research participants belong. Ensuring that there was no persuasion of bias actions would

provide a positive and accurate finding. Therefore, the interviewer and interview questions were influenced by validity and reliability in the phenomenological research.

Qualitative research was established from the ability of the subject to deliver information that applied to the research question. Van Manen (2014) knew that cultivating questions in an applied field allowed research questions to materialize. Heidegger (2011) believed that avoiding inaccurate or insufficient data that the researcher must use their judgment based upon the best available evidence to choose subjects who knew enough, could recall enough, and could respond precisely to asked questions. Van Manen (2014) stated that systematic theoretical sampling selected subjects to the findings and stated to emerge in the course of the study. In this stage, it was important to continue with theoretical sampling until no new data was acquired.

### **Format of Study**

The questions in the introductory segment of the interview protocol questionnaire gathered personal background about each participant. The second segment asked questions about the participant's career path. The third segment focused on lessons learned. The interview guide was used to interpret and analyze the data collection from the 10 participants. Once the researcher reached the goal of 10 to 12 qualified participants, the researcher would send an official invitation letter by email to each participant that outlined their involvement in this study. The participant would also receive informed consent to advise them of the potential risks of being a research subject (See Appendix A: Letter or Email Soliciting Participants and Appendix B: Informed Consent Specifications). The participants could agree to be a part of the study, or they could decline. The participants understood that the interview was entirely voluntary and that she could withdraw from the study at any time during the study by informing the researcher verbally, by phone, or via email. If the participant agreed to join this study, she would be asked

to take part in a face-to-face or a telephone interview to gather information on how African American Women in the Dallas/Fort Worth, Texas area could obtain their leadership position within information technology.

The researcher scheduled 12 interviews immediately after the approval of the IRB Application within one day. The Letter or Email Soliciting Participants and Informed Consent Specifications were sent to each participant to review before their scheduled interview session. Two participants sent an email to the researcher explaining that she had decided not to continue in the research. One participant was a Vice President of a worldwide bank in the Dallas, Texas market. She feared that her name and responses would be revealed which would jeopardize her position and job. The researcher gave her a call that reassured her that the information would be confidential, that a pseudonym or a Participant Code would be assigned to her, and that all of the information would be confidential. She did resend her consent to be interviewed, and she apologized for not moving forward. The second participant was a Sr. Project/Product Manager in the health industry from the Fort Worth, Texas market. She did not give a reason why she did not want to continue in the research. The researcher did not make any calls to her. There were ten administered interviews, and these interviews were completed in ten days. Six interviews were face-to-face. Out of those interviews, two participants were from Fort Worth, Texas while the other four were from Dallas, Texas. There were four telephone interviews, and each participant was in the Dallas, Texas location. Each participant in this study lived in the boundaries of the two major cities in the state of Texas. Dallas/Fort Worth, Texas was approximately 30 miles apart in the distance depending on one's current location.

### **Research Question**



The interview guide was used to understand and analyze data collected from the 10 participants on their lived experiences in senior-level positions to answer the following research question: How do under-represented African American women in a leadership position within the information technology industry describe their background and experiences while seeking senior management leadership positions? Each interview participant answered and mentioned factors of racism and gender absentmindedness. Because of the unfair experiences, each participant believed that a change culturally with diversity would encourage other African American women to venture in the Information Technology industry. O'Neal (2017) believed that if you do not fully see the problem and you do not understand the problem, then you cannot drive change. The importance of these women was their lived experiences and their endurance in reaching a senior role in the information technology industry. Some of the women had set higher goals to obtain while the other women were looking towards retirement.

There were many reasons for studying this particular group of women. Roberts, Mayo, Ely, and Thomas (2018) stated that African American women rely more heavily than others do on resilience, because of the frequency with which they encountered obstacles and setbacks resulting from the intersecting dynamics of race, gender, and other identities. The researcher needed a group of African American women who provided greater insight on their career advancement through their lenses to help demonstrate inequalities in the workplace. Secondly, each participant met the criteria for the study. The eligibility criteria for this study were women participants from Dallas/Fort Worth, Texas. Each participant had to identify herself as an African American woman with two or more years of experience as a senior product or project manager, information technology manager, chief executive officer (CEO), the chief technical officer (CTO), chief information officer (CIO) in the Dallas/Fort Worth, Texas area. Thirdly, the

importance of studying this group of women was to share their lived experience on how each woman obtained her goal to help other women who may experience a similar challenge with the knowledge to achieve their goal. This study was a phenomenological study because the researcher wanted to gather knowledge on why African American women are the most under-represented group in the corporate pipeline specific to information technology. "African American women have experienced the greatest challenges. Yet they have received the least support and efforts to increase diversity but does not adequately address the magnitude of the issues she has faced," (O'Neal. 2017). In this study, each participant shared their experience and knowledge in moving beyond their obstacle to acquiring their goals with an outcome of shared common viewpoints and unbiased responses to the interview questions.

### **Data Analysis**

The results were transcribed with data entered into an electronic format that combined the responses. Mays and Pope (1995) stated that qualitative data collection was more time consuming and expensive research that it was not usually practicable to use a probability sample. Journal Analysis was used to conduct the First Cycle in Vivo Coding Method (Saldana, 2009, p. 48) to analyze each interview syntax and decode the data by determining keywords and phrases that were common amongst participants. The coding pulled common keywords and phrases to capture the data. Carcary (2011) believed that data analysis was an iterative process and required reflection and interpretation on the researcher's part on several levels.

Transcendental as it related to Vagle (2014) stated that self-reflective paradox, vulnerable to the exposition by transcendental argumentation in a way analogous to say the exposition of radical skeptics' self-reflective paradoxes, resulted from central concepts and values. Clarke (2006) stated that researchers must be mindful of the impact their questioning

could have on subjects, especially those who were vulnerable, and suggested that a reflexive approach could help minimize the risk of harmful effects.

### **Field Test Procedure and Results**

Before conducting the main study, a field test (See Appendix F) was performed to test the logic of the interview questions with three participants. The field test was demonstrated on three dissertation members with expert knowledge of the research topic as a test that resulted in effective feedback. The experts did not answer the questions on the Interview Protocol Questionnaire Instrument. The purpose of the Field Test (See Appendix F) was to assist the researcher in refining and improving the interview protocol questionnaire instrument. The Field Test resulted in ensuring that the limitations or other weaknesses in the interview design were removed. Also, the field test allowed the researcher the opportunity to make necessary revisions before the study. A field test strategically was used to check the reliability or validity of a data collection instrument to ensure that the interview protocol questionnaire would include the appropriate questions. Specific interview questions would be asked to gather the data collection. The data collection process did consist of a face-to-face or telephone interview with 10 to 12 African American women to develop common or contrasting emerging themes to analyze and translate the responses from the participants into a qualitative method.

### **Sampling**

The researcher would need 10 African American women to complete this study and to reach saturation. The research participants would be recruited using the purposive sampling. The purposive sampling technique would allow the researcher to select participants with specific qualifications that reflect the purpose of the study. The participants were identified from

professional networking, church organizations, referrals from those members and colleagues, which was called the snowballing technique.

During the recruitment process, the researcher identified participants that were suitable for this study. The criteria for each participant was that she needed to be an Africa American women, have held a position as a senior product, project, or relatable titles in information technology, two or more years of experience in the role, to reside in the Dallas/Fort Worth, Texas area, and in the age range of 21 to 50 years old.

Once the researcher reached the goal of 10 to 12 qualified participants, the researcher sent an official invitation letter by email to each participant that outlined their involvement in this study. The participant received an Informed Consent that advised them of the potential risks of being a research subject (See Appendix A: Letter or Email Soliciting Participants and Appendix B: Informed Consent Specifications). The participants could agree to be a part of this study, or they could decline. The participants understood that the interview was entirely voluntary and that they could withdraw from the study at any time during the study verbally, by phone, or via email to the researcher. If the participant agreed to join the study, she was asked to take part in a face-to-face or a telephone interview to gather information on how African American Women in the Dallas/Fort Worth, Texas area could obtain their leadership position within the Information Technology industry. Also, the participant was informed that the study would be about 45 to 90 minutes and that a Demographic Questionnaire and an Interview Protocol Questionnaire would be presented (See Appendix D: Demographic Profile Questionnaire and Appendix E: Interview Protocol Questionnaire). The Demographic Questionnaire would provide detailed information about the age range from 21 to 50 and up of

each participant. The Demographic Questionnaire also states each participants' educational background, technical certifications, and their current position.

The Interview Protocol Questionnaire consisted of a series of questions to gather data to develop common or contrasting emerging themes for analyzing and translating the answers into a qualitative method. Each interview would be scheduled within the week for a telephone interview or face-to-face interview at the Dallas/Fort Worth, Texas local public library in a reserved, quiet study room for convenience. The Interview Protocol Questionnaire consisted of a series of questions to gather data to develop common or contrasting emerging themes for analyzing and translating the answers into a qualitative method. Each participant was assigned a Participant Code to keep their identity confidential from any outside party. The assigned Participant Code was stated in the documentation and the recording for confidentiality. The privacy of the individual participant was the priority. The researcher was the only one to access the document. The names and any other identifiable information would be disassociated from responses during the recording and coding process. The participant was informed that she would be recorded using a digital recording device. Each participant's recording was transcribed and saved as Word documents on a password-protected computer in a locked office in the researcher's home for three years and then destroyed by deleting the files. All digital, electronic, paper documents were kept in a locked box in the researcher's home for three years. The digital and electronic copies were deleted, and all paper documents were professionally shredded after the three years. The data analysis did begin with each transcribed interview. The results of the interview were a collection of identified themes from the participants who lived the experience.

The QSR International NVivo 12 software was used to unscramble the coding and data examination process. The software allowed the researcher to store and to sort all data in one

platform for qualitative open-ended questions and interviews (QSR International, n. d.). The researcher ensured that the study question was clear before importing it in the QSR International NVivo 12 software. After confirming accuracy, the researcher opened the transcript selection and transcribed each participant's interview responses into the QSR International NVivo 12 software to provide emergent themes from the created nodes. Nodes were containers that stored research content for each theme. The Nodes were created based on the translated interview responses to develop the themes and assist with visualizing meaningful findings and conclusions. The researcher journaled key responses from the participant have to code how those responses strategically related. In this qualitative research, the thematic analysis in the QSR International NVivo 12 software was used to pinpoint the most common patterns and emergent themes within data. The coding strip in the QSR International NVivo 12 software was opened to display what the researcher coded. The interview responses were more finely coded within the Node to narrow the themes down. After the researcher reflected on the participant's responses, a broad coding plan was developed to organize the data based on hierarchy. Emergent themes were identified and categorized. The QSR International NVivo 12 software divided the data from the interviews easily.

There are no foreseeable risks in this research for participating in this study. The risk for this study was minimal because research participants would not ordinarily be encountered in life. Collecting the information that was only important to the research would reduce the potential risk. The data would not be shared or discussed. There would be no cost to participate in this research study. Table 1 represented the Demographic Data of the study participants.

Table 2. *Demographic Data*

<b>Participant Code</b>	<b>Age Group</b>	<b>Degree Attained</b>	<b>Certifications</b>	<b>Children</b>	<b>Years in Technology Industry</b>	<b>Years in Current Position</b>	<b>Current Title</b>
Danielle	40-49	Bachelors in Math and Computer Science	None	3	31	10	Sr. Support Analyst
Paige	40-49	Bachelors in Education	ITIL and Training	2	3	3	IT Training Manager
Brenda	50+	Some College	Hospitality and Sales Certifications	3	36	13	Director
Chrystal	21-29	None	A+ and SPLUNK	0	8	2.5	Sr. Tech Analyst
Whitney	50	Bachelors in Computer Science and Bachelors in Management	None	3	22	2	Director
Stephanie	40-49	Bachelors in Computer Science	A+, MCP, and ITIL v3	0	15	10	Service Desk Manager
Becky	40-49	Bachelors in Computer Science	PMP and Admin Asst Sales	3	4	3	Sr. Product Manager
Catherine	40-49	Bachelors in Computer Science	A+	0	14	3	Sr. Application Manager
Robin	40-49	Bachelors in Computer Science and Master in Information Systems	PMP, ITIL, and Professional Scrum Master	3	14	6	Sr. Project Manager
Tiffany	50+	Bachelors in Management	None	2	33	17	Sr. Program Manager

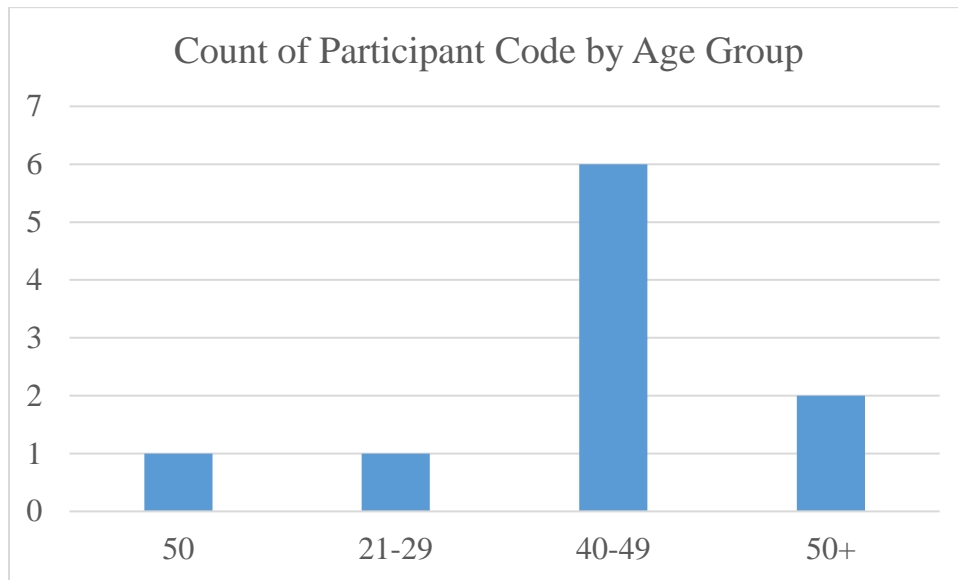
### **Demographic Data**

For this study, qualitative data was gathered from face-to-face or telephone interviews.

The Demographic Profile was used to collect general information regarding the participant age,

degree attained, certifications acquired, amount of children, number of years in technology, the amount time in the current role, and the professional title. Figure 1 demonstrated the age group for each participant.

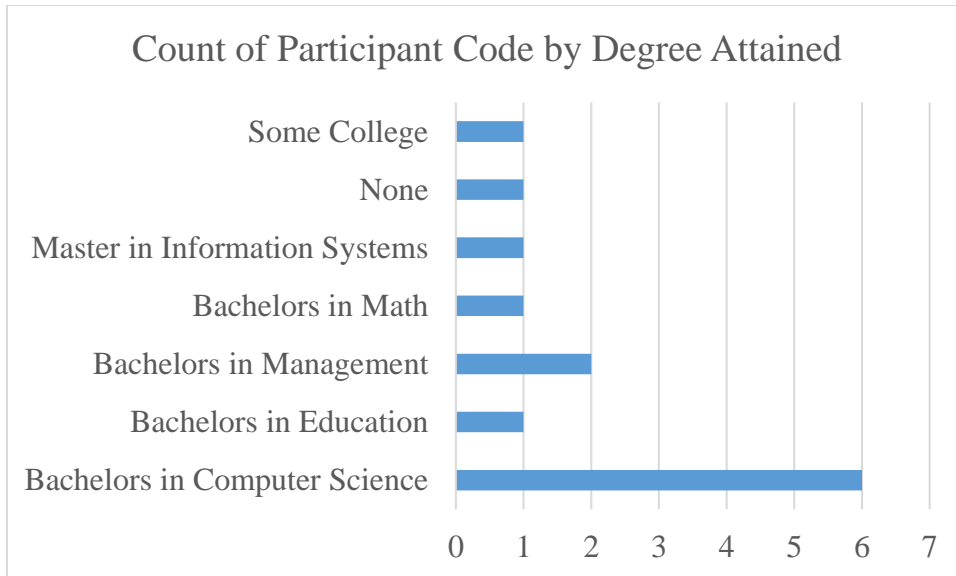
Figure 1. *Age*



**Age.** The participants fall in three of the four age group categories. Two was in the 50+ group, and one participant just turned 50 this year. Six participants were in the age group of 40 - 49. One participant was in the 20 - 29 category. Figure 2 provided the degree attained by each participant.

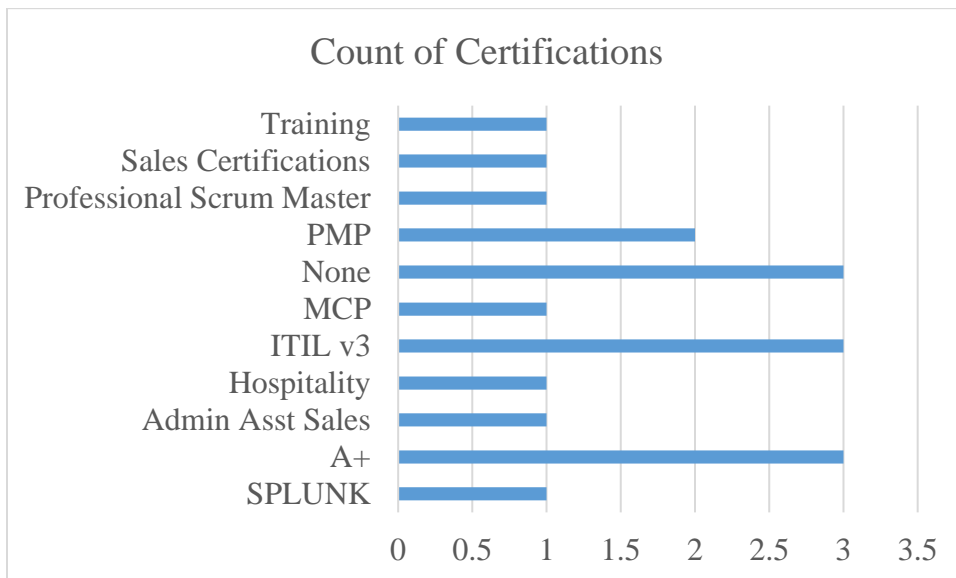
Figure 2. *Degree Attained*





**Degree Attained.** The majority of the participants held a bachelor's degree. As you can see, the participants have a similar educational background. Figure 3 provided the certifications that each participant has attained.

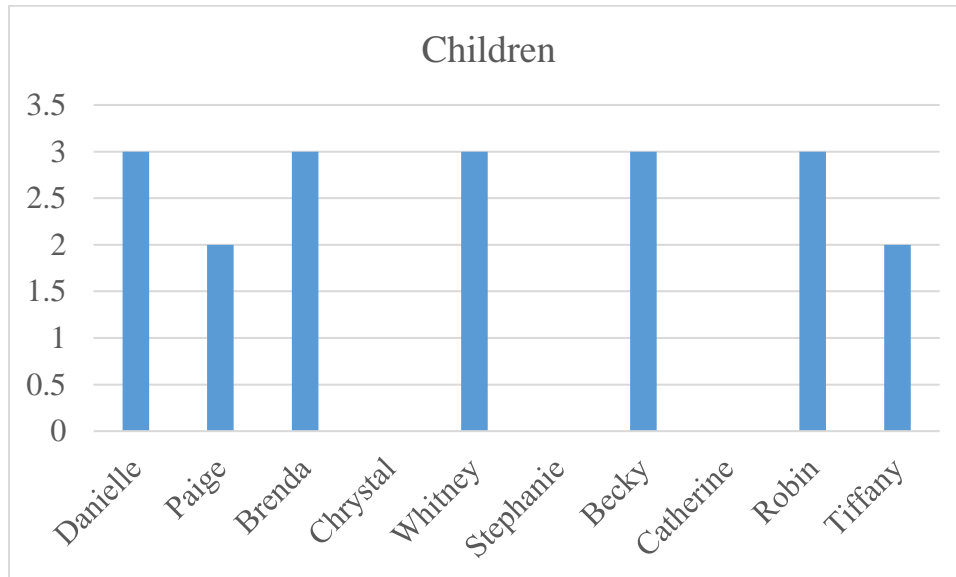
Figure 3. *Certifications*



**Certifications.** Six participants held information technology certifications. These certifications are ITIL v3, A+, PMP, MCP, and the Professional Scrum Master. One of the

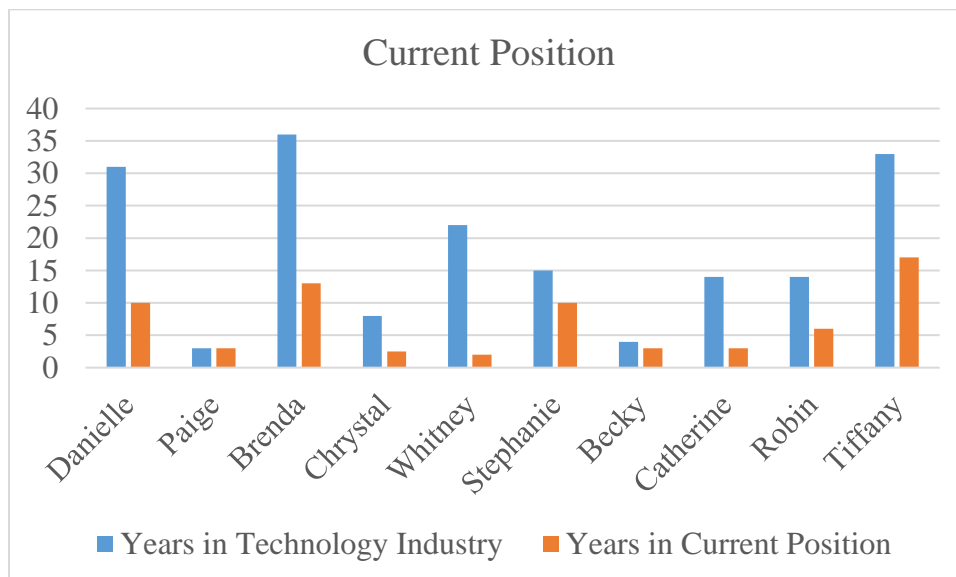
participants had a certification in the hospitality industry whereas two participants have no certification. Figure 4 provided the total number of children of each participant.

Figure 4. *Children*



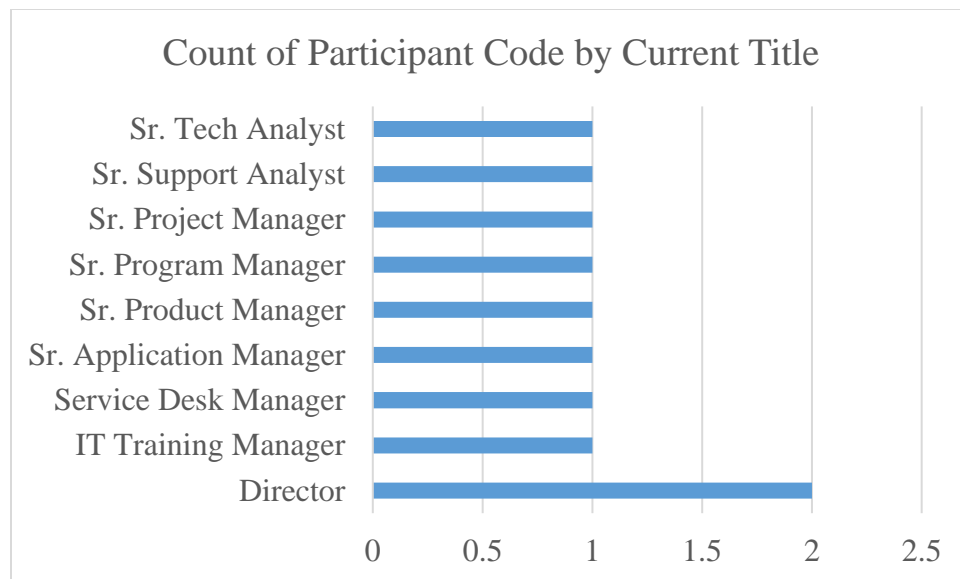
**Children.** All participants except three have a child or children. Figure 5 provided the number of Years in Technology Industry and the Current Position.

Figure 5. *Years in Technology Industry and in the Current Position*



**Years in Technology Industry and the Current Position.** Each participant has been in their current role for two years and more and the highest amount of years in the same job title was 17 years. The average amount of years in the same role for all participants was seven years with the lowest amount of years in the same job title as two years.

Figure 6. *Current Title*



**Current Title.** The participants assumed different job titles. Out of each job title, there were two Directors, two Managers, and six participants who were in a senior role.

### Findings

Moustakas (1994) believed there was a discussion of the methods and procedures that one might employ in conducting a human science research project along with numerous clarifying examples of the research that illustrated specific applications of phenomenological methods. Saldana (2013) stated that filters differed by the researcher and are determined by the researcher's lens. Saldana (2013) stated thematic coding would help to include recording or identify the stories that were linked through the common theme. There were categories to assist with building the framework of thematic ideas. Moustakas (1994) stated that any manner in

which participants could describe their lived phenomenal experience are used to gather data in a phenomenological study.

### **Emergent Themes**

The qualitative study yielded many themes related to the lived experience of the 10 African American women who participated in this study. New insight was uncovered about the participants in leadership positions in the information technology industry. The data was coded to provide similar themes. Table 2 provided a summary of the emerging themes from quotes by the participants.

Table 3. *Emergent Themes*

Themes Influences for Information Technology	
Theme 1:	
Theme 2:	Organizational Leadership Practice
Theme 3:	Leadership Development
Theme 4:	Career Development
Theme 5:	Educational Awareness
Theme 6:	Sacrifices
Theme 7:	Experience with Racism and Sexual Orientation
Theme 8:	Men promoted to leadership positions in information technology industry

#### **Theme 1: Influences for Information Technology**

The participants mentioned that mentorship was an intricate part in their Information Technology development. The following question was asked to each participant: *Please describe the individual or individuals who mentored you as a leader?* Seven out of ten answered in a similar manner. Whitney stated,

I got my start in technology through one of my girlfriends. After my daughter turned two years old, I realized that I did not want to be a stay at home mom and that I needed to be around adults. One of my friends told me that her company was hiring. So I applied with

no experience and no background but with my bachelor's degree in my hand. I went and met with the hiring supervisor, and we had a great interview. I was offered the job as a contractor. Very motivated and driven I excelled quickly. Because of my performance, I was offered a permanent position over other contractors who had been at this company longer. I had a great drive, and I really excelled while being able to communicate effectively. I could retain information easily. Through persuasive speaking, I could buy or sell anything, and that was really all that I did.

Catherine said,

I believed that my father's friend was a great mentor. It was because of him that I attended the University of Texas at Arlington, Texas in 2003. I believed that when I started school, it was very challenging for me. A lot of my professors said I was a great programmer, but I had to work harder to understand the logic. I didn't understand the logic, but I was good at the logic exercises. I had to work a little bit harder to master the classes. I finally got my degree after five years.

Danielle stated,

When I worked in the school district in 1987, I was assigned to an instructor who became my mentor. He took me under his wings and showed me everything that I know now. This instructor taught me how to take pride in my work. He really encouraged me to learn all that I could. He told me one day that the knowledge that I had that no one could take that away from me and that once it was in my head, it was there. The instructor told me to keep my mind straight and not to do drugs. He told me the importance of learning something new while on every job. I had a really good experience with him. Even though he taught me a lot, he was not afraid of me taking his job.

Stephanie said,

At my previous company, one of my co-workers who was a manager who encouraged me to go into management. I still call him today. Going into the management role was a great thing. To this day I still call him for advice. But I got into Information Technology from a guy that I was dating in my early 20s who was in technology, and he knew some of the instructors at the school. He introduced me to them. I found interest in technology, and that was when I decided to go that route. I did really great, and I graduated with honors with a 4.0 and perfect attendance. I believed that I was a good student by nature. Nobody in my family attended college or was in Information Technology.

Becky stated,

I had someone mid-career in one of my professions to show me the ropes. I was introduced to them and had the opportunity to lead a project. I had informal training on how to manage projects. This position was my first opportunity leading a project, and I was under the leadership of an experienced project manager who showed me the ropes and walked me through the processes. She walked alongside me in a shadow to give me the opportunity to lead and make some minor mistakes. Before I could make major mistakes, she veered me back in the right direction and guided me. That was it extremely helpful to me.

Chrystal said,

Yes, I got my start through watching my parents. Both of my parents had degrees in technology. Through their start, I have been able to see how having a degree in technology offers a great compensate for the family.

Paige said,

I had two mentors when I first started training as a manager in technology. The female manager was great. I really appreciated her compassion and her concern for me as an individual more so than being focused on the business. My new current manager was a new influential person. She is my mentor, and she is someone whom I can go to for advice or if I need an opinion about a situation.

### **Theme 2: Organizational Leadership Practice**

Leadership was mentioned and perceived by all participants. The following question was asked to each participant: *What was the definition of Leadership?*

Whitney said,

Leadership was natural. It has to be natural, or it will not work. Leadership was something that you cannot teach. It was something that either you have it or not. There are a lot of people who do not have leadership skills even though they have a leadership role. Being a leader was more about bringing your subordinates up and directing them to the next level. Also, a leader was one who reached goals that they are trying to achieve. I always kept the business in mind, and I always kept my employees in mind. Being a leader actually just manages up and down. When you manage up, you have to accomplish the goals of the business, therefore focusing on strategies. You must be able to communicate the plan to the team and to ensure that everybody was in sync with what the focus should be. Also, you have to manage up and present what the team planned to do and what the team brought to the table to management. Then you manage down. The team needs to understand what the goals are but also how they can make them better either by doing the job or focusing on the target.

Catherine said,

Leadership was not what you said, but it was what you have done. Leadership was being an example and being fair. You know, you do not necessarily have to be close buddies with people, but you must consider the people who you lead.

Danielle stated,

Leadership was being responsible for leading with integrity. Also, leadership was being a leader but not necessary knowing everything but being able to find solutions and answers to get the job done in a way that was not disrespectful to anybody. Leadership required patience.

Stephanie said,

Leadership was being able to train, encourage, and guide staff members or teams. Of course, you have to ensure that the people that you are leading have the right knowledge. You want to encourage your staff members or teams with positivity and at the same time try to increase their career path by asking them what do they want to do or where would they like to grow in the company. Ensure that there were set career goals to accomplish the next level.

Robin stated,

Leadership was being accountable for your work when you are watched but most importantly when you are not watched. Leadership was to show by example. Leadership was giving back to others. Leadership was being fair.

Tiffany said,

Defining leadership was simply leading and directing people. A leader could make the experience difficult and easy for those who are following. Leadership should not be one



who takes advantage of the subordinates nor not being willing to listen and follow. A great leader can follow just as well as they are leading.

Brenda said,

Leadership, in order to be a great leader you have to be a great follower. And you also have to remember the Golden Rule which was to do unto others as you would have them to do unto you. Now, a lot of companies have gotten so legalistic and bottom-line driven profession that it was hard to do those two things.

Becky stated,

Leadership was interesting. I am glad that you asked me that question because most people could relate to being a manager but they could not be a leader without being a manager. I think all managers should have leadership skills. I think leadership has to do with influence and it has to do with being willing to pour in knowledge and pull yourself out without having the fear that the result would be me losing my position or job or whatever the case may be. I think great leaders are willing to share their skill set, experiences, and groom others to take their place. Great leaders can influence people to take responsibility for their career path and not waiting for someone to give them the opportunity. But influencing them enough to set goals and make plans. Ultimately, being in alignment with what God has perfectly ordained for me or for you to do. I lean heavily towards this statement. I just believed that every role that I have or you have was an opportunity to serve in and an opportunity to help someone else in to pour into someone else so at whatever level I am or that you can be used to influence other people to better themselves.

Paige said,

Leadership was being able to get people to choose to follow you. I think by choosing to follow you means that they want to be in alignment with who you are. That truly defines leadership. You cannot force people to do what you are asking them to do. You can look to them to do what you want them to do, but you must aspire them to lead.

Leadership was really connecting with people and showing them respect while sharing with them the vision. The bottom line was showing the team where you want to be and where they can buy in the vision. Even if you are not present, then your team could still see the vision and move forward in leadership without you.

### **Theme 3: Leadership Development**

During the interview, the researcher asked each participant the following question: *Tell me about an experience that shaped your leadership development?* 70 percent of each participant answered the question and mentioned common experiences. Whitney said,

I did not receive formal training. I shadowed co-workers to learn what they did, and the crazy thing was that I ended up writing down the process for my job that others used. I didn't even know it, but after my first year, I moved up three times with a \$10,000 increase each time because I was doing things that people were not doing. I was documenting and making presentations, and before I knew it, I was the voice of the directors. It happened so quickly. I later started sharing Information Technology to the Directors to focus on what to do and not to do. I moved from a coordinator, designer, provisionary, and to a project manager role.

Danielle stated,

What shaped my leadership development was my old instructor. He shared that I needed to learn all that I could learn. There was an incident when I was at Dallas ISD on a new

project, and I had to do some initializing on a new project. I did everything that I was instructed to do. At the end of the day there was a meeting, and in this meeting, there were a lot of error messages shared. These errors happened to be my mistakes that I did wrong. This information was stated in the meeting. The unfortunate was the person who trained me pointed at me and stated that I did the work. I had to explain to the president of that division that I was new to the environment and that I did not know enough to do something wrong intentionally. Also if I did the process wrong that I was given the wrong instructions. My statement kind of put it back on my trainer. I always believed in documentation. The best thing to do in any situation was to take good notes. I stated the process from Step 1 to 10 to the President. I was advised that there were 15 steps. So there were five steps missing. The President shared with the team that I did the process exactly the way I was given. I knew then that it was important to document everything that you do because there are people who have different motives and agendas. I have learned that not everybody was on my side and do not want me to excel. Sometimes people are threatened by new people coming in because they normally come in with new ambition.

Stephanie said,

Well, I have some good and bad people that I worked with. It was just you know the positive was ensuring that the people that I worked with and worked for knows that I care about them. Then the flip side was the bad interactions that have happened with some of my people. While trying to figure out what was the learned lesson and how I handled the situation and if the issue happened again in the future how would I handle it again. People are not always happy with you because you are the manager. Most of the times,

they do not understand and want the feedback that I give them. It was important that I ensure that my staff members or teams adhere to their jobs and make sure that they are doing their jobs. Hopefully, that was with good positive communication. I think that the approach determines the outcome so with either situation you know you have to ensure that as a manager you are approaching with the right attitude. Sometimes people can be crazy, so you have to make sure that you're treating them the right way rather than you are reprimanding them.

Robin stated,

A time that shaped my leadership development was early in my career. I was often overlooked for promotions or new roles, and I did not know why. It was when I asked a hiring manager to explain the difference between the hired person and me. The manager stated that the person had been in the military and gained a lot of hands-on experience as a technician whereas I only had three years of experience in the role. Also, he had a Master Degree in Information Systems whereas I only had an Associates. It was then that I narrowed down what I wanted to do and be in my career. I went on to acquire my Bachelor Degree in Computer Science. After receiving the degree, new opportunities began to open up for me. I would be going back to school to gain a Master Degree in Project Management of some sort to give me a high chance on acquiring the PMO role.

Tiffany said,

During my internship at my uncle's company, I learned that it was important to manage people based on their personality. Understanding people were so key, and the only way to do that was by understanding how one was made up. I had the opportunity to walk alongside a manager who had a difficult employee. This employee could not arrive to

work on time for nothing. I asked the manager if this was a recent activity or was this an ongoing activity. She said that the change was recent. I was not privy to going in the meetings, but I was privy to the process and the outcome. I found out somehow that the employee was going through a life change. This change had really consumed him. After hearing about the issue, I understood why the manager was handling the issue so delicately. The manager was able to offer the employee some resolutions and encouragement to them that their issue would not last long. After watching her manage that employee from that standpoint helped me to know that people are individuals and that as a manager or someone in leadership must be able to manage issues and people separately.

Becky stated,

The experience definitely started when I was young while working at Six Flags Over Texas. I was hired to be a worker at the parking booth where I took money for parking. I just thought it was the best thing since sliced bread. It was my first job. I quickly noticed that there were young people there and they were in a leadership role. From the beginning of witnessing this, I aspired to be one of those individuals. Now I would say then it may have been a little bit of just wanting to have the name tag, title, and people to report to me. But I learned quickly from the young people in those roles that was important how you treat people. I always had respect for people. I work alongside people, and there are people who work under me regardless of what position or title you have we are all in a servant responsibility or position rather it was internal or external.

Paige said,

When I think of the first manager that I spoke of earlier, she knew I was having a really rough and really bad day. Well, I was. I was told that my grandfather was not going to live much longer. After receiving the call, my manager happened to come up to me to discuss a class. She knew that something was wrong because she could tell that something was off with me. She started asking questions. So I shared with her that I received a call that my grandfather was not doing well and that the family did not know how long he was going to live. My manager told me that I needed to be there with my family and that I needed to go home. At the time, I lived in Atlanta, Georgia and my family was in Arkansas. I knew that was a long drive for me and at the time I was the only trainer. Classes were one week long on a week to week cycle. I told my manager that I could not leave because I had a class starting the following week. My manager said that she would run the classes in my absence and that I needed to go check on my family. So for me, that was a phenomenal experience, and it showed me how it was important to see people as human beings and not just workers. It really showed me loyalty. After this situation, she could have asked me to jump off a bridge, and I would have because she showed me that she cared about me and not just the job. From this experience, I try to make sure I treat my employees as individuals and as a holistic person and not just someone who works for me between the hours of 8:00 AM to 5:00 PM.

#### **Theme 4: Career Development**

Five participants mentioned that their career development was from the persuasion of a teacher or a school experience, whereas, the other five participants took a startup position in the Information Technology industry. The following question was asked to gather this information: *How did you get your start in information technology?* Whitney stated,

I would say that my middle school teacher wanted to know what I wanted to be in life. I told him that I wanted to be an attorney. The teacher wanted to know why? I told him that I wanted to defend people who seem not to receive a fair shake with the law. He gave me a scenario, if you had someone that raped one of your best friends and you knew that he was guilty, could you defend them? I was like oh Lord! In the eighth grade, he followed to see if that was still my dream. I changed my mind because I just did not want to be that person who had to defend someone knowing that they were in the wrong or was guilty.

Catherine said,

When I entered into public school, I was thankful that I was chosen to take part in an engineering program. The mentor engineering program started one week in the summer of my 9th and 10th grade. I have one week to break before going back to school in the summer. I was in five classes every day during the summer. I had an engineering class that taught me civil engineering programming. I also had programming and a logic class. I had extra curriculum classes for problem-solving. I was asked to build a bridge with certain specifications, 50 popsicles, and Elmer's glue. After I built my bridge with the 50 popsicles, it had to go through an engineering process. My mentor at the time who was a junior from Texas A&M taught me and coached me. He was getting his engineering degree so learned a little bit about mechanical engineering was fun. I built the bridge, and one of my legs were about to fall off balance. I was told by my team the bridge was going to break. The instructor began putting weight on top of the bridge to see how much weight the bridge could take before it broke. My bridge stood 50 pounds, and it won first place in the contest for being able to withstand the most weight.

Danielle stated,

I went to Skyline High School, and this school had a computer science program where the students could go to class to learn as much as we could about computers, the industry, and about programming. When I finished the classes, I went off and did on the job type of training. I had the opportunity to go to Dallas ISD to work in the Human Resource Group on a project setting up wiring for the attendance Unisys system. I had to do the wiring from the ceiling like a data drop, and I hooked up everything like the telephones and the computers. I also initialized hard drives. This was a brief description of how I started out of high school through college. During my summer break, I went back and worked at the Dallas ISD.

Stephanie said,

The guy that I was dating in my early 20s was in technology, and he knew some of the instructors at the school. He introduced me to them. I found interest in technology, and that was when I decided to go that route.

Robin stated,

I gained my start in information technology by accident. I was in sales in Dallas, Texas at different companies, and I realized that I was burned out on making sells and trying to convince my prospects to buy from me. I started sending out my resume to different recruiters. I landed my first contract position as a helpdesk analyst. I was grateful that this company allowed me to learn a new skill. This company was patient with me. I would never forget a time that I caused an outage that interrupted many site locations! I should have been fired, but I was not let go. After giving a powerful explanation, my manager and Director saw that, I could still work out and that I would need more training.



To this day, I still wonder how I got the job with no experience. The funny thing was that after that experience I turned out to be a high performer within five months. After a strong tenure of one year, the department was outsourced, and many of us were laid off. I have stayed in contact with my old bosses from that organization. I went back to sales for three months, and I discovered that I enjoyed technology more. I was quickly hired by another company in the technology industry as a helpdesk analyst and I have become a high performer after three months. I remained in the helpdesk analyst role with this company for 18 months. Around the 17th month, I started seeking out and applying for new opportunities. My consistent and outstanding performance helped me to accelerate and move around within the company. In the 18th month, I transitioned into a Business Analyst role. I found that I loved working with reports in excel to pull and analyze data. I was in this role for about two years. I became satisfied and not motivated to do anything else until I was pulled in meetings that my Vice President requested that I attend. These meetings were really engaging and very interesting. I often was told that I added great value in the meetings by management and Project Managers. I was later asked to consider being a Junior Project Manager. I considered, and I did. I was in that role for one year. I was very successful and the first chance that I had I applied for the Project Manager role. I was interviewed and offered the job. The excitement to manage tasks and complete them within budget and on time became interesting. After two years leading many projects as a Project Manager, I applied and moved into the Senior Project Manager role. I have been in this role, for now, seven years. I really loved the experience and desired to move into a PMO role soon.

Tiffany said,

While I was in Florida attending school, I quickly discovered that I could not stand the sight of blood nor did I handle pain well. This experience helped me to know that the medical field was not the one for me (laughing). My uncle was in technology. He came home with new gadgets and contributed to the household nicely. After hanging around him and going to his office, I got a feel for technology. My uncle asked if I would be interested in an internship in a management program. I accepted the offer. This program shaped me and gave me direction on where and what I wanted to do in life. It was a good thing that my major in college was business management because I was able to use the degree in the program. I moved from Florida to Dallas, Texas in 1989 to work for a banking company as an Operational Manager. I stayed in that position for about seven years. I helped to roll out a new service desk system and gained recognition for my input and leadership. Shortly after that, I moved into a Product Manager role. Five years later I was hired on with the same company as a Sr. Program Manager. I have been in this position for 17 years, and I am waiting to retire.

Brenda stated,

I started out doing data entry type work. I took a job as a data entry specialist, and I got a job as a data entry representative. I became very good at what I did. The human resources and I ended up talking about a role that I was interested in. We had a great time talking about the new role and expressing to her that I did not want to be a secretary anymore. I also shared with her about how I wanted to move on. Back then, you could work your way up for pennies. So I went in to apply for the position, I did very well in the interview, and I was offered the job. I fell in love with the business because I could assist people and that was what I wanted to do. Within two years, I was promoted to a

junior manager position in IT. Shortly after that, I moved into my first management position, and I must say that my steps were ordered by the Lord because I moved into different levels quickly. You know it was unforeseen back then because women were not taught technology nor were they taught how to push education or for women to be in management.

Becky said,

I say I did receive my start in technology in a previous role as a Senior Analyst and I loved it! Training was more informal because it was nothing that I was solely responsible for as far as on the project management side. Being that my mentor who showed me the ropes and project management process, I would not say that it was formal. I would say the basis of me getting into the industry I was being nosey and wanting to know about everything and in doing that I dug and dug so deep until I became the subject matter expert. So I evolved into the go-to person, and that's kind of how that happened. That gave me the foundation, and I was able to move into new roles. Purposefully it was not normal. I saw I need, I saw a gap, and I dug deep enough to be able to answer questions and fill in the gap. By doing this, it presented an opportunity for me to be more involved and in the Project Manager role. After being in the role for about four years, I acquired the skills and gained enough knowledge to apply to this position, and be selected as a Senior Product Manager. I have been in this role, for now, three years, and I have learned new skills and new ways of leading.

Chrystal stated,

I was asked to take the lead in helping a branch location that had an outage. This bank location needed assistance with reconnecting. I had the responsibility of speaking with

the branch manager. One responsibility was to reassure her that the issue was under control and that we would get that location back up and running promptly. Because of my previous experience in troubleshooting, I was able to get the branch location back up and running with limited supervision and under the expected time frame. Because of this, I was recognized and placed in a management program for training.

Paige said,

I actually fell into technology because my primary focus was on learning and development. The majority of my experience has been in financial services, but training was training. While working in a technology company I was actually pushed into technology I didn't like it at first because I wanted to do more of the training, but there was no opportunity at the time. I started in the technology company assisting with training. Before that, I took calls at a call center for a credit card company. One day I decided that I was tired of being cursed out and I wanted to do something. I first received acknowledgment in my role, and I was successful in that role. I think when people are successful in their current role that makes it easier for you to be recognized and to move around. I looked around to see if there were processes that I could change for a better workflow. There was a remote representative on duty, and this person wore an orange vest. Their primary responsibility was to answer difficult calls or questions. So I asked my manager if I start helping other people on difficult calls. My manager allowed me the opportunity, and so I did for few hours out of the day. I was doing so well, so then I was asked to do a demonstration showing the expectations for the last segment of the training class. I was able to demonstrate well and was recognized for doing an excellent job just in presenting the customer service expectations in a training class. A light bulb came on,

and I was like people get paid for to train people. I went to my manager, and I asked them for her recommendation to be a trainer. Shortly after that, a Trainer position opened up. I applied for the position, I was offered the job, and that was where my start occurred.

### **Theme 5: Educational Awareness**

Eight of ten participants held a bachelor's degree. Three participants held a bachelor's degree in Computer Science. Two other participants have a bachelor's degree in Computer Science and a Bachelors of Math or in Management. One participant held a bachelor's degree in Education. One participant has a bachelor's degree in Management. One participant held a Bachelors in Computer Science and a Master's degree in Information Systems. One participant has some college whereas one participant with no college degree. The following question was asked to gather this information: *Please describe the individual or individuals who mentored you as a leader?*

Whitney said,

I really did not have anyone in my family that I would say who mentored me. There was something about my teachers that had my interest. I remember I had an eighth-grade teacher who made a great impact on my life. This teacher took the class to different places like the Reunion Arena giving us a view of other places that we did not see on a regular basis. You know I walked home through the hood every day, but it was great to know that there were other things outside of where I stayed. You know there was no one in my family who went to college. I was the first one who attended College.

Catherine said, "My training was both formally and informally. I received a lot of training at the beginning and through grade school. The training was informal and on the job."

Danielle stated, “Yes, I received formal and informal training.”

Stephanie stated,

I would say both because I have acquired my ITIL v3 Certification which was a must in my leadership role. There were management classes that I had to take online that were required for my role. I gained the experience informally through shadowing other managers.

Robin stated,

I would have to say that I received both formal preparations through training classes on the job and then informal training as I shadowed my peers to receive the knowledge.

Tiffany said, “The method of preparation was formally through training in school and in an internship program at my uncle's company.”

Becky stated,

My training was more informal because it was nothing that I was solely responsible for as far as on the project management side and that my mentor allowed me to shadow her while showing me the ropes.

## **Theme 6: Sacrifices**

Nine out of ten participants mentioned their sacrifice from the following question: *What*

*sacrifices have you made to be in leadership?* Whitney stated,

In this role, I have had to sacrifice a lot of fun and family time. One sacrifice is like if my phone rings at 2 AM in the morning, I have to answer it. Sometimes I get a call at my son's concert that requires me to step out and take the call. So whenever you are in leadership, you have to be prepared to have your life interrupted. Whatever the need was when you are in leadership you have to be prepared to take the things that come along

with it. It would be easy for me to be an individual contributor but I know that I have more to offer the businesses and I know that I can make a difference. I have always thought that no matter what role I have been in that I always felt that I could help improve the business overall and that was one of the things that I have been able to do over and over again. This skill has led to one of my successes. And there have been some relationships that I have sacrificed.

Catherine stated,

The sacrifices that I have had to make while being in technology are many. When trying to learn new things or trying to fix issues that are critical required me to work harder and longer hours. When I had family demands, my time became very limited or the time needed to be structured. There was a time where my mother became deathly ill. My father and I took care of her until she died. The sacrifices there were I worked the opposite shift of my father to ensure that my mother had family around her at all times.

This sacrifice meant for me at the time that I worked an odd shift.

Danielle said,

The sacrifices that I had to make in my role was always working and being on call which took away from my family time. I did not recognize the responsibility in the beginning, but I do now. My biggest sacrifice was managing my time at home and time on the job. I want to give my all while I am at work but when I clock out, I do not want to think about work until in the morning or until I go back to work. The unfortunate part was that work comes home with me and I really would like it not to come home with me.

Stephanie said,

I have sacrificed being in relationships, having kids, and traveling with my family. When you are concentrating on work and the demands, you do not make time for those personal things in life. So that's definitely a downfall of being a career-driven woman.

Robin stated,

I have sacrificed a lot of time from my family because of studying so hard to pass classes, gain certifications, and complete Soft Skill Assessments. Also, I have not been able to travel when I wanted to travel with my family because of the demands of the role.

Tiffany said,

I have sacrificed my family and friends just to be where I am now. My family has taken the back burning a lot of days. I do not cook like I used to cook. It was sad, but my family has grown accustomed to ordering takeout food. I do make time to talk to my family about their day and what they have learned during dinner time with no cell phones. This time was important to my parents, and it was important to me.

Brenda stated, "Family time and travel have limited me."

Becky said,

I have made plenty of sacrifices. Fortunately and unfortunately, it just depends on how you look at it, but I sacrifice a lot of family time. I was a single parent for a lot of my early years while trying to build my career at a previous company. Being the inquisitive one and because of the influence and knowledge base that I had, I was called upon a lot. So I found myself being stretched very thin and I missed seeing my children growing up. I was still present, but they got used to me coming home late and working even later. I would also say at some point in my career I voluntary, and involuntary made lateral moves or took a lower-paying job to spend time with my children.



Paige said,

Traveling from my children was very difficult, and that was a sacrifice that I had to make. I had younger children, and I noticed that it became difficult managing my schedule when I started in my career. Traveling was a sacrifice because there were instances when I was not able to be with my family because I was needed in New York or Mexico or wherever. Trying to figure out how I could manage the day to day needs of my children when I was not there was my challenge, and the result was the sacrifice.

### **Theme 7: Experience with Racism and Sexual Orientation**

Fifty percent of the participants answered the following question with the similar experiences: *How have race and sexual orientation impacted you as a senior manager or executive in the information technology industry?* Whitney said,

I have experienced racism, and I have worked with and for people of different sexual orientations so you are saying, someone, who was gay or straight or whatever I treat them the same. I do not treat them differently. I have experienced racism, and I knew it when it happened. I have seen the product of racism when I attend the director's conferences. These yearly conferences consist of several hundreds of directors and above. I am one of only five Black people in the room which gives a very odd ratio. When I have seen this, I become very disheartened, and I recognize that people use the Good Ole Boy system where they do this shake hands and give jobs left and right with their friends. There was a Director job that I applied for some time back. My VP came to me and said that I interviewed better than he did to get his job but unfortunately they gave the position that I interviewed for to someone else. It was a White female who did not work for the company or have any experience in the business. I had to train and teach her what to do.

This experience had happened before where the company hired a White man as the team lead, and I had been doing the job for many, many months. Although I did not get the job and he did, I was the one training him too. The unfortunate thing was that he was hired but only stayed for two weeks, and he quit because he could not handle the workload.

Robin said,

I believed that race and sexual orientation impacted me as a senior manager in the information technology industry because the model of acceptance views and would place a male in roles like VP, CEO, CTO, CFO and higher. Breaking the glass ceiling to be a PMO was going to be challenging because white men have assumed that role and the hiring manager places a white man in that position. I am ensuring that my work experience and education acuirements would line up with the job requirements. We would see what happens when the time comes!

Tiffany stated,

I have seen how race and sexual orientation have impacted me as a senior manager in the information technology industry through missed promotions and career advancements. I think back to the time when I asked a previous manager why I did not receive the position with the promotion that I knew that I had. Shortly after the manager hired the male to fill the position, he ended up quitting. The same manager hired another White male to backfill the role. Witnessing this experience again was very hurtful. I think that I would stop there and say men are promoted more and faster than a woman.

Becky said,

I have experienced racism in the past. I was in a meeting, and while I was sitting at the table, I was completely ignored, and nobody was directing a question towards me or

making a comment towards me. I had to speak up and interject in the discussion. I have been blessed to be in positions like that and when I speak or say something that I added value to the conversation. At that point, the light bulb went off, and everyone was like okay we need to continue to involve me in those conversations because she brought value.

Paige said,

I can say that race and sexual orientation impacted me as a senior training manager in the information technology industry through promotions and moving around within the organization.

### **Theme 8: Men promoted to leadership positions**

Nine out of ten participants mentioned the male dominancy in the Information Technology industry. The following question was to each participant: *Why are more men promoted to leadership positions in information technology?* Whitney stated,

You know it was assumed that men are better leaders than women. People have determined that companies with female leaders do better. A woman that led the company or work in a higher position has a different voice. The female voice was more of a balance. It was presumed that men are better leaders than a woman. But I would say I have had some great male leaders, and I have had some lousy male leaders. I have had good female leaders, and I have had some lousy female leaders. It really depends on what that person can bring to the table.

Catherine stated,

I did not think more men were promoted in the roles until I noticed that there were a lot of men and just a few ladies in my meetings. Since then I have noticed the ratio more. I

am a supervisor and three other ladies, and I was like there are more men in this organization. I really noticed that even more then. I think that if there were more women present, there would be more women in leadership positions. One thing that I know are women are naturally detailed oriented, very good communicators.

Danielle said,

I believed that more men are promoted in leadership because it matched the appearance of the corporation model. Most of the corporations are owned and managed by men. The supporters or the end users would rather deal with people who look and sound like them. The thought process was old school thinking, but I believed that men want women at home. Not to say that women cannot do stuff, but men would prefer women to be at home dealing with children. Women may stay late to finish the work. But men nine times out of 10 men would not leave before the work was completed or would not have to leave early to go pick up the kids. The responsibility normally falls on the woman. This was why I believed men are promoted more in leadership roles.

Stephanie said,

I think that it was just the way America was shaped or the world was shaped. We are not that far out of slavery where women are able to vote. I think some countries have just allowed women to drive. I remember hearing somewhere where a country just allowed women to drive two weeks ago! I think it was the way that America or the world has been, sadly to say.

Robin stated,

Men are promoted to leadership positions in information technology faster because I believed it was the norm. Men have fewer responsibilities at the home front than the

women. Men are viewed to provide for their family and landing major roles of the sort would help them be the leader in their homes.

Tiffany said,

I believed that men are promoted to leadership positions in information technology more and faster because they can relate to each other whereas a female may be a good fit but she may be too emotional and opinionated in order to get her point across. Most companies may frown up against. And then some men may not want to deal with the emotions in the workplace because they may deal with it already at home.

Brenda stated,

This was a pretty much a dominant male-driven industry. Most men would stay late to get the job done and go in earlier. Those days are gone for many women because men have made it difficult for women to move up in roles. I have seen and know some successful women who are or were in the executive roles, but they sacrificed a lot to maintain their position.

Becky stated,

When you look at senior leadership across the board, for financial risk control, there are men in position. I cannot say why it is, but just think about it, there are men that are in support of other men and even if you get a female in a CEO type role, I hate to say it, but it was really just to fill a quota. I am not just saying that those individuals are not talented, but they have to be talented. Asian or an African American woman would have to have a certain level of skillset. However, it was very lopsided. I do not know if that was because I have not looked at the statistics but individuals that go to school and get technology related degrees are a factor. I do know how many females are PMOs with a

project management certification. I don't know what any of this looks like but what I do know was when I sit in meetings, in classes, and when I sit on projects that I am sitting around the table with a lot of men.

Chrystal said,

I believed the information technology department was very sexist. It feels like we are going back to the old days where the men were dominant over the women. Also, this reflection showed the mentality where the man took care of everything. Also, it seemed like a man thinks a woman cannot stand up for herself. If you have an open-minded company, I believed that women can be in a leadership role and that they can be successful in the role.

### **Transferability**

The primary transferability was in the area of external validity because data were collected from only (1) 10 African American women, (2) in information technology positions, (3) and in the Dallas/Fort Worth, Texas. African American women were yet imperceptible in positions of authority. The 10 African American women in this study represented a unique group of women who have accomplished positions of senior leadership in corporate America given the obstacles that they have had to overcome in their career paths. Because of the constrained measure, this study comprised constraints that influenced the validity of this qualitative methodological limitation. The phenomenology method included research of 10 African American women with shared experiences that formed similarities and meanings that embodied the essence of leadership (Creswell, 1998). Validity was an important aspect of qualitative research because of approval. Moskal, Leydens, and Pavelich (2002) defined validity as the degree to which the evidence supported that the interpretations of the data were correct

and the manner in which interpretations used were appropriate. Moskal, Leydens, and Pavelich (2004) stated validity was acquired or achieved effects are truthful.

During this research, the researcher searched for answers to evaluate that the measurements were correct or not correct. According to Moskal, Leydens, and Pavelich (2002), there were dangers of validity that confirmed or created issues regarding the accuracy of the data. The results of the application should statistically test in the concluded answer of the outcome. They were internal threats, external threats, statistical conclusion threats, and construct validity threats Moskal, Leydens, and Pavelich (2002). Moskal, Leydens, and Pavelich (2004) stated the necessary condition in interpreting research was to identify internal validity. External validity occurred when the researcher provided wrong assumptions from the data sample. External validity addressed the question of generalizability that could generalize the obtained results. As a result of the purposive, the model choice strategy for members, the qualitative study was constrained in light of the fact that the remarkable beneficial encountered of the 10 African American women could be entirely summed up as comprehensive, intelligent, and consistent with the general population of other African American women leaders in Dallas/Fort Worth, Texas.

### **Summary**

Data collection in research was normally general in drawing from numerous sources of evidence through observations and interviews. Golafshani (2003) recommended that there were six forms of data to gather: Documents, collection records, interviews, direct observations, participant observation, and physical objects. Each document after development assisted in decreasing potential errors. Golafshani (2003) understood that a questionnaire helped to gather information on knowledge, attitudes, opinions, behaviors, facts, and other information.

The outcome of Chapter 4 concluded with similarities that resulted from data collection by interviewing 10 African American women individually to gather the results of this study. The results of the data collection were centered on the Field Test questions and results. Based on the description of the samples the demographics profiles were structured to gain an understanding of each participant. The interview questions were administered to provide findings that detailed the history of life, career path, and lessons learned. After coding the results, eight emergent themes were identified. These themes were (1) Influences for Information Technology, (2) Organizational Leadership Practice, (3) Leadership Development, (4) Career Development, (5) Educational Awareness, (6) Sacrifices, (7) Experience with Racism and Sexual Orientation, and (8) Men promoted to leadership positions in information technology industry. The eight emergent themes strongly referenced that even though shared traits were common in this study, African American women have particular qualities and individual impacts, which added to their roles as a leader and fortify their leadership limitations. This basic perspective demonstrated many sides from the perception of African American women, separately, that anchored an expansive development of leadership profiles to improve leadership programs for future African American women leaders.



## Chapter 5

### Conclusions

The purpose of this phenomenological study was to explore the background and experiences of under-represented African American women in leadership positions in the information technology industry in Dallas/Fort Worth, Texas. This study explored the lived experiences of African American women through the lens of 10 African American women leaders in a face-to-face interview. The study consisted of a face-to-face interview to help collect emerging themes for data collection to sample 10 African American women with two or more years of experience as a senior manager or executive in information technology in Dallas/Fort Worth, Texas area. The phenomenology approach assisted with categorizing the themes and patterns of the lived experiences of the 10 African American women leaders. This chapter discussed the relationship between the findings and the theoretical framework while connecting the findings to the significant literature.

### Research Question and Emergent Themes

This final chapter provided an interpretation of the findings and emphasized key emergent themes and their relationship to the primary research question, *How do under-represented African American women in a leadership position within the information technology industry describe their background and experiences while seeking senior management leadership positions?* Eight themes emerged from the qualitative data. These themes are (1) Influences for Information Technology, (2) Organizational Leadership Practice, (3) Leadership Development, (4) Career Development, (5) Educational Awareness, (6) Sacrifices, (7) Experience with Racism and Sexual Orientation, and (8) Men promoted to leadership positions in information technology industry.

The results were important to the study of leadership development because strengths and weaknesses of the lived experiences provide diversity. Olsen (2012) believed the importance of organizing a research study was to understand the topic to conclude with the desired results. The results from this study advised that African American women aspired to advance in their career and believed that she could obtain the leadership position. This study was valuable aspirations because other African American women who have similar aspiration would have a guideline to acquire this goal.

This qualitative phenomenological study would discuss the under-representation of African American women in information technology in leadership positions was important because the results of the research could assist other African American women with similar desires to accomplish their goals. The qualitative phenomenological study was modeled from three theoretical framework methods. The first method was through leadership theories that define the ability to inspire followers as an individual. Secondly, the perspective through understanding the differences in gender and race in the workplace was used from the Feminist Theory. Thirdly, to understand the barriers African American women encountered in the workplace through Black Feminist Theory. The vital issue of this study was the gap in learning gender representation for African American women in information technology companies in senior management positions in Dallas/Fort Worth, Texas. The emergent themes (1) Influences for Information Technology, (2) Organizational Leadership Practice, (3) Leadership Development, (4) Career Development, (5) Educational Awareness, (6) Sacrifices, (7) Experience with Racism and Sexual Orientation, and (8) Men promoted to leadership positions in information technology industry referenced elements that shared traits of common responses.

**Theme 1: Influences for Information Technology.** Most people would tell you that you should have various mentors to fill different roles in your professional and personal life, (Giang, 2015). Seventy percent of the participants experienced similar influence into the Information Technology industry. Each participant mentioned have strong mentors or a family member who influenced their Informational Technology involvement. Giang (2015) also stated that if you are a minority woman, you need at least one minority woman mentoring you. Catherine said, I believed that my father’s friend was a great mentor. Danielle stated, “When I worked in the school district in 1987, I was assigned to an instructor who became my mentor.” Stephanie said, “At my previous company, one of my co-workers who were a manager encouraged me to go into management.” Chrystal said, “Yes, I got my start through watching my parents.” Paige said, “I had two mentors when I first started training as a manager in technology.” These scenarios were similar experiences that ignited the desire to learn more about the technology industry.

**Theme 2: Organizational Leadership Practice.** Increasing diversity in organizations was not about doing the right thing—it was essential to success (Catalyst, 2017). Unanimously, each participant recognized that the successes of their organization were a depiction of diversity. Organization leadership practice was the result of inclusion that provided a variety of culture. Chrystal stated, “Leadership was taking charge and taking responsibilities for yourself and others.” Paige said, “Leadership was really connecting with people and showing them respect while sharing with them the vision.” The participants understood that their lived experience have shaped them and their leadership model. Organizational leadership practice was a catalyst in businesses and having the right people to administer leadership roles were an intricate piece for success.

**Theme 3: Leadership Development.** In a leadership role, the challenge can be great because of perception. Traub (2011) stated that the double standards for female and male leaders were still perpetuated in today's workplaces. In this study, seventy percent of the participants believed that the Information Technology industry were male driven and operated. Sczesny (2003) indicated that holding leadership roles could be problematic for women because the schemas that people held of leaders were different from those they held of women. Danielle stated, "That Men do not like to get instructions from women. Stephanie said, "People are not always happy with you because you are the manager. Most of the times they do not understand and want the feedback that I give them. Developing a mindset of stick-to-itiveness as the leader was required in the information technology industry for African American women."

**Theme 4: Career Development.** Each participant stated that she attended some form of training in a school environment or teaching setting. Fifty percent of the participants stated that their training provided the foundation and path to pursue informational technology. Sczesny (2003) noted that women might not be aspiring to these roles because they were not aware that leadership positions were open to them. The development of each participant in this study was similar. Each similarity involved the amount of training and the challenges that each participant faced when applying the training in their organization. Often, women faced challenges when working in male-dominated organizational cultures because to achieve success; women typically have to adapt to the organizational culture by taking on male attitudes and values (Traub, 2011). Danielle stated,

"I have learned that everybody was not on your side and did not want you to excel. The factors that influenced my persistence in the technology field were knowing that I have to

stay on top of the industry. This field was always changing, and it was important that I knew what I am talking about or knew where to go for the answer.”

**Theme 5: Educational Awareness.** While it could be argued that academic and professional interest in technology was declining among all genders, the gap was more pronounced in African American women. In this study eighty percent of the participants have attained a Bachelor’s degree, one participant have some college, and the other participant with no college attainment. Johns (2013) stated that 60 percent of women held a bachelor’s degree in Information Technology and the percent was increasing. Women account for 77.4 percent of the workforce. The importance to continue education beyond high school was the goal to accomplish. Robin said, “The goal to continue education was to give some hope or inspiration that the challenges in advancing in my career could reduce obstacles for me as an African American woman.” Whitney stated, “I was the first one who attended College.”

**Theme 6: Sacrifices.** There are many sacrifices that women make to advance in their career. The unfortunate outcome was that the family suffers. Ninety percent of participants articulated that their family suffered in one way or another as she advanced in her career. Marcus (2016) stated that the sacrifices I made to build a career were many and I struggled every day with my desire to be the best parent as an ambitious woman. Work-life balance was indeed a myth. One was expected to sacrifice something to advance in their career. Whitney stated, “In this role, I have had to sacrifice a lot of fun and family time.” Catherine said, “When I had family demands my time became very limited or the time needed to be structured. This study provided the individual sacrifice for each participant through their lived experience.”

**Theme 7: Experience with Racism and Sexual Orientation.** Today discrimination was indirectly demonstrated unconsciously. The participants mentioned several actions of discrimination in Theme 7. Becky stated in her interview that,

There were not a lot of people that look like me, and that was when the stakes are higher. You do have to fight a little bit harder for a seat at the table or a voice because it was not common that a person that looked like me was going to be valuable or a value. Catalyst (2017) stated that it would take aspiring and indigenous women to be a part of the shifting demographic landscape in the technology industry.

Fifty percent of the participants believed that racism and sexual orientation are factors in the Information Technology industry. The organizational practices were the result of organizational imbalances that were discriminatory. In this study, the African American women in leadership positions have experienced favoritism because of race and sexual orientation.

**Theme 8: Men promoted to leadership positions.** Majority of the participants have recognized that more men are promoted in leadership positions. Corporate policies and practice subtly maintained the status quo by keeping men in positions of corporate power (Lockwood, 2004, p. 2). Organizations that could find ways to include all available talent enhanced the opportunities for diversity and maximized the potential for growth and innovation (Catalyst, 2017). Each participant discussed specific scenarios and the results of being overlooked and invalidated. Ninety percent of the participants stated that the representation of male dominance in the Information Technology industry was increased. Danielle said,

The type of work that I do was a job that most White men are doing. In the last 30 years, the changes were more apparent. I am the only black female and the only woman in my group. Working around all men was difficult.

Northouse (2007) stated that the leadership viewpoint of African American women in senior management positions have the opportunity for inclusion to provide essential strategies for respectful entry into the white male-dominated culture of organizations.

### **Theoretical Implications**

The findings of this study suggested additional studies were performed to help understand the under-representation of African American women in leadership positions in the information technology industry in Dallas/Fort Worth, Texas. The themes that emerged from this study are consistent with the African American women who make up 5.0 percent of executive or senior-level officials and managers (Catalyst, 2017). Women of color represent 9.8 percent of all first or mid-level officials and managers whereas White, Hispanic, and Latina women represented 61.7 percent (Catalyst, 2017). The study indicated the increasing amount of African American women who are not receiving the opportunity to break or crack the glass ceiling. African American women have represented the largest female minority group. This group has been overlooked for senior management and executive positions in the technology industry.

### **Implications for Leadership**

This qualitative study was significant for understanding and identifying how employers could embrace African American women and see them as professional additions in the Information Technology industry for companies. The study addressed the research question: *How do under-represented African American women in a leadership position in the information technology industry describe their background and experiences while seeking senior management leadership positions?* The rationale of this study was to enhance and understand the challenges that African American women faced and provided solutions for incorporating this group of minorities. The objective of this study was to increase the 1.7 percent representation of

African American women in the Information Technology industry. African American women could be leaders to break cultural barriers and other obstacles to move forward in their career while shattering the glass ceiling.

### **Recommendations for Future Research**

Another study on African American women in the government sector could benefit other women who aspire to be in a senior leadership role in information technology, since this study only focused on 10 African American women in leadership positions in the information technology industry in Dallas/Fort Worth, Texas. Also, non-profit industries, other races, other cities in Texas, and other states to Texas would benefit other women who aspire to be in senior management roles from the Information Technology industry. The experiences from the research would provide rich details of that experience of breaking the glass ceiling to leadership roles in those sectors. Vagle (2014) believed the conclusion of all phenomenological research depends on the researcher's ability with collecting opulent stories from people who have experienced the phenomenology that was in question.

### **Recommendation for Organizational Leadership**

The framework of the study explored participants' experiences with the under-representation of African American women in corporate America. The recommendations for organizational leadership were to 1) encourage all organizations to ensure equality of race and gender in senior management positions, which could benefit businesses and the economy. 2) Encourage business leaders to support diversity initiatives through recruitment practices. 3) Encourage African American women who was offered roles in senior management positions and that the awareness becomes priority globally in all organizational sizes. 4) Encourage



mentorship programs in organizations to implement platforms fostering leadership opportunities for African American women.

### **Conclusion**

Discussed in Chapter 5 were the qualitative phenomenological research limitations, the five emergent themes, recommendations for leadership, and recommendations for future study. The phenomenological study was explored to understand the background and experiences of under-represented African American women in leadership positions in the information technology industry in Dallas/Fort Worth, Texas. African American women have represented the largest female minority group and they have been often overlooked for senior management or executive positions in the technology industry. This qualitative study was significant for understanding and identifying how employers embraced African American women and see them as professional additions in the information technology industry for companies. Olsen (2012) believed the importance of organizing a research study was to understand the topic and apply the right method to conclude with the desired results. The rationale and result of this study was to enhance and understand that the challenges that African American women faced could offer solutions for incorporating this group of minorities. The objective of this study was to increase the 1.7 percent representation of African American women in the information technology industry. There were no direct benefits to the participants. The benefit of this study was to gain a better understanding of career attainment for an African American woman in Dallas/Fort Worth, Texas within information technology. Each participant's data would, directly and indirectly, benefit from this research study.

### **Reflections**

Given the researcher's findings, African American women must progress toward becoming and remaining perceptible inside their organizations and networks. African American women should focus on applying for senior management roles, executive positions, and board membership opportunities in their organizations. Aspiring African American women should continue striving towards higher education to add greater value professionally to ensure that they are qualified to receive any position in the organization. This study supported my recommendations and beliefs that African American women could be in leadership roles as senior management or executive position with preparation and aspiration.

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## APPENDIX A: LETTER/EMAIL SOLICITING PARTICIPANTS

DATE

Tawanna Sargent, B.S, M.I.S.,  
P.O. Box XXXX  
Desoto, Texas 75115

Salutation

Dear Participant,

My name is Tawanna Sargent, and I am a student at the University of Phoenix working on a Doctorate in Business Management and Leadership Development. I am doing a research study entitled The Under-Representation of African American Women in information technology in the Dallas/Fort Worth, Texas Area. The purpose of this phenomenological study is to explore the background and experiences of under-represented African American women in leadership positions in the information technology industry in the Dallas/Fort Worth, Texas Area. Your participation will assist in gathering rich information that is needed to expand knowledge on this topic that is incomplete.

You are invited to participate in this qualitative phenomenological research interview via face-to-face, over the telephone, or by video call through the use of Skype. Your participation in this study will take no longer than 45 to 90 minutes. Your participation will involve a sequence of questions to identify how African American Women in the Dallas/Fort Worth, Texas area can obtain their leadership position within information technology.

If you have any questions about the research study, please call me at 469-834-7478 or email me at [tsargent1974@gmail.com](mailto:tsargent1974@gmail.com). For questions about your rights as a study participant, or any concerns or complaints, please contact the University of Phoenix Institutional Review Board via email at [IRB@phoenix.edu](mailto:IRB@phoenix.edu). Please review the attached Informed Consent Form for more details.

To schedule your interview, please respond to this email at [tsargent1974@gmail.com](mailto:tsargent1974@gmail.com) or by contacting me at 469-834-7478 by XXX XX, 2018.

Thank you for participation in this research study.

Sincerely,

Tawanna Sargent  
Doctoral Student in Business Management and Leadership Development  
University of Phoenix

Enclosure: Informed Consent Form

## APPENDIX B: INFORMED CONSENT SPECIFICATIONS

### Informed Consent Specifications

#### TITLE OF STUDY

The Under-Representation of African American Women in information technology in the Dallas/Fort Worth, Texas Area.

#### CONTACT

If you have any questions about the research study, please call me at 469-834-7478 or email me at [tsargent1974@gmail.com](mailto:tsargent1974@gmail.com). For questions about your rights as a study participant, or any concerns or complaints, please contact the University of Phoenix Institutional Review Board via email at [IRB@phoenix.edu](mailto:IRB@phoenix.edu).

#### PURPOSE OF STUDY

The purpose of the research study is to explore African American Women's lived experiences as a leader in information technology industry. This study solicits your participation in a qualitative phenomenological research study in a face-to-face interview. The responses of the face-to-face interview will provide identifiers of influence while gathering rich information from the lived experiences.

#### PARTICIPANTS

The sample size will consist of 10 individual participants. You are invited to participate in this research study because you are an African American woman who currently or has previously held an esteemed leadership title within the information technology industry for more than two years. The study participant is over the age of 18 years old and older.

#### PROCEDURES

Your participation will involve a sequence of questions to identify how African American Women in the Dallas/Fort Worth, Texas area can obtain their leadership position within information technology. You can decide to be a part of this study or not. If you agree to be a participant in this study, you will be asked to be interviewed to gather information for this research study. Your participation in this study will take no longer than 45 to 90 minutes. Your participation in this research study is entirely voluntary. Once you start, you can withdraw from the study at any time. The results of the research study may be published but your identity will remain confidential, and your name will not be made known to any outside party.

#### BENEFITS OF PARTICIPATION

The benefit of this study is to gain a better understanding of career attainment for an African American woman in Dallas/Fort Worth, Texas within information technology.

#### RISKS OF PARTICIPATION

There are no foreseeable risks to you in this research or direct benefit to you for participating in this study.



**COST**

There will be no cost to you to participate.

**DURATION OF RESEARCH PARTICIPATION**

Your participation in this study will take no longer than 45 to 90 minutes. Your participation in this research study is entirely voluntary.

**ALTERNATIVES TO ADDITIONAL RESEARCH**

You will be informed of any additional research participation opportunity. You may continue the research or opt out of the participation.

**CONFIDENTIALITY**

Your identity will be kept confidential by a Participant Code. This Participant Code is a pseudonym to keep your identity anonymous. The interviews will be recorded and transcribed. The data will be coded to assure that your identity is protected. Data will be kept secured and saved on a password protected flash drive. The data will be kept for three years, and then destroyed by unlocking and deleting the file. The results of this study may be published.

**PARTICIPANTS RIGHTS AND WITHDRAWAL**

You may decide not to be part of this study, or you may want to withdraw from the study at any time. If you want to withdraw, you can do so without any problems by stating your decision verbally or in writing. A confirmation of your withdrawal will be provided via email within 48 hours of receipt. Please send your withdrawal to any contact method

**Mail To:**

Tawanna Sargent  
P.O. Box XXXX  
Desoto, Texas 75115

**Email To:**

Tsargent1974@gmail.com

**Phone Call:**

469-834-7478

**SIGNATURE AND ACKNOWLEDGMENT**

By signing this form, you agree that you understand the nature of the study, the possible risks to you as a participant, and how your identity will be kept confidential. When you sign this form, this means that you are 18 years old or older and that you give your permission to volunteer as a participant in the study that is described here.

Signature of the research participant \_\_\_\_\_ Date \_\_\_\_\_

## APPENDIX C: INVITATION TO PARTICIPATE IN RESEARCH STUDY

### Invitation to Participate in Research Study

Dear Participant,

My name is Tawanna Sargent, and I am a student at the University of Phoenix working on a Doctorate degree in Business Management and Leadership Development. I am doing a research study entitled The Under-Representation of African American Women in information technology in the Dallas/Fort Worth, Texas Area.

The purpose of the research study is to explore African American Women's lived experiences as a leader in information technology industry. This study solicits your participation in a qualitative phenomenological research study in a face-to-face interview. The responses of the face-to-face interview will provide identifiers of influence while gathering rich information from the lived experiences. The research study will consist of 10 individually scheduled interviews. You are invited to participate in this research study because you are an African American woman who currently or has previously held an esteemed leadership title within the information technology industry for more than two years.

Your participation will involve a sequence of questions to identify how African American Women in the Dallas/Fort Worth, Texas area can obtain their leadership position within information technology. You can decide to be a part of this study or not. If you agree to be a participant in this study, you will be asked to be interviewed to gather information for this research study. Your participation in this study will take no longer than 45 to 90 minutes. Your participation in this research study is entirely voluntary. Once you start, you can withdraw from the study at any time. The results of the research study may be published but your identity will remain confidential, and your name will not be made known to any outside party.

There will be no cost to you to participate. There are no foreseeable risks to you in this research or direct benefit to you for participating in this study. However, the anticipated benefit of this study is to gain a better understanding of career attainment for an African American woman in Dallas/Fort Worth, Texas within information technology.

If you have any questions about the research study, please call me at 469-834-7478 or email me at [tsargent1974@gmail.com](mailto:tsargent1974@gmail.com). For questions about your rights as a study participant, or any concerns or complaints, please contact the University of Phoenix Institutional Review Board via email at [IRB@phoenix.edu](mailto:IRB@phoenix.edu).

As a participant in this study, you should understand the following:

1. You may decide not to be part of this study, or you may want to withdraw from the study at any time. If you want to withdraw, you can do so without any problems by stating your decision verbally or in writing.
2. Your identity will be kept confidential by a Participant Code. This Participant Code is a pseudonym to keep your identity anonymous.

3. The interviews will be recorded and transcribed. The data will be coded to assure that your identity is protected.
4. Data will be kept secured and saved on a password protected flash drive. The data will be kept for three years, and then destroyed by unlocking and deleting the file.
5. The results of this study may be published.
6. Tawanna Sargent, the researcher, has fully explained the nature of the research study and has answered all of your questions and concerns.

By signing this form, you agree that you understand the nature of the study, the possible risks to you as a participant, and how your identity will be kept confidential. When you sign this form, this means that you are 18 years old or older and that you give your permission to volunteer as a participant in the study that is described here.

I accept the above terms.       I do not accept the above terms.

(CHECK ONE)

Signature of the research participant \_\_\_\_\_ Date \_\_\_\_\_

Signature of the researcher \_\_\_\_\_ Date \_\_\_\_\_

## APPENDIX D: DEMOGRAPHIC PROFILE QUESTIONNAIRE

Please provide the following information:

Participant Code: \_\_\_\_\_

1. Age Group:

21-29 years

30-39 years

40-49 years

50+ years

2. What is the highest level of education?

Associates in \_\_\_\_\_

Bachelors in \_\_\_\_\_

Masters in \_\_\_\_\_

Doctorate in \_\_\_\_\_

3. What information technology certification(s) you possess?

4. Do you have children? If so, how many?

Yes  No

1-3  4-7  8+

5. How many years have you been in the information technology industry?

1-3 years  4-7 years  8+ years

6. How many years have you been in your current role?

1-3 years  4-7 years  8+ years

7. What is your current title?

## APPENDIX E: INTERVIEW PROTOCOL QUESTIONNAIRE

Participant Code: \_\_\_\_\_

Date:

Time:

Duration:

Type of Interview: Face-to-Face  Telephone  Video Skype 

1. Tell me about your childhood?
2. What parental or family example did you see while growing up that helped to develop you as a leader?
3. Please describe the individual or individuals who mentored you as a leader?
4. What was unique about this person or persons?
5. What guidance or investment did he or she provide?
6. Do you mentor other women who aspire to be in a leadership role? If so, describe what that is like for you?
7. How did you get your start in information technology?
8. How many years have you been in the information technology industry?
9. Which method of preparation, formally or informally, did you receive?
10. What are your career plans for the future?
11. What is the definition of leadership
12. Tell me about an experience that shaped your leadership development?
13. What factors have influenced your persistence in your career field?
14. What is the career path for an African American woman who desire to be in a leadership position?
15. What life lessons have you learned as a woman in a leadership position?
16. What life lessons have you learned as an African American woman in a leadership position?
17. What sacrifices have you made to be in leadership?
18. How have race and sexual orientation impacted you as a senior manager or executive in the information technology industry?
19. How would you explain the under-representation of African American women in leadership positions of computer technology disciplines?
20. Why are more men promoted to leadership positions in information technology?
21. What are the key performance indicators used to measure your performance?
22. Is there anything else that you would like to add?

## APPENDIX F: FIELD TEST

1. Could you understand the questions and did the questions encourage conversation?
2. Do you believe the questions met the purpose of the study? If so how? If not, why?
3. Will the interview questions answer the central research question? If so, how? If not, why?
4. Are there any changes to the wording of any of the questions? If so, how?