

Assessing Self-Efficacy Levels of Future African American and White American
Female Leaders

Soyini A. Richards

A Dissertation Submitted to the Faculty of
The Chicago School of Professional Psychology
In Partial Fulfillment of the Requirements
For the Degree of Doctor of Philosophy

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Dedication

I dedicate this doctoral dissertation to my Father, God, Lord and Savior Jesus Christ, who carried me through this journey. God is my guide, protector, source and strength. I give Him all the glory and praise for who I am. I live to make Him proud.

I honor my dear sweet grandmother, Minna Teresa Brooks' memory, by dedicating this dissertation to her. She lived until the day I completed my comprehensive exams and went home to our Lord at 101 years old. Her love, prayers, support and encouragement lives with me forever. My Grandma Brooks taught me to pray and trust God. I hope to continue with courage as she did migrating from Jamaica to America as a single mother with 2 children to start a new life for her family. She inspired me to be the best child of God, woman, mother, grandmother, and person I can be. Minna Brooks taught me how to live by faith, utilize resilience in the face of adversity, and get what I want. God used her to bring me to where I am today.

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Abstract

American females face challenges such as the glass ceiling, gender pay gap, and other hindrances due to gender discrimination. African American females face both gender and racial discrimination. The study consisted of 262 female undergraduate and graduate business students. An equal number of African American (131) and White American (131) females participated in the study. The purpose of this quantitative study was to examine the females' leadership self-efficacy and leadership aspiration. In addition, the study focused on potential differences between the two groups of females. The findings revealed no significant differences between the two groups on leadership self-efficacy, nor for leadership aspiration, but the overall scores were high. Additional findings revealed ethnicity was found to moderate the relationship between leadership self-efficacy and leadership aspiration. At low levels of leadership self-efficacy, African American female business students have higher leadership aspirations than do White American female business students, while at high leadership self-efficacy, the White American female business students have slightly higher leadership aspirations than African Americans. Despite the possibility of the African American females in the study's history of double jeopardy challenges due to gender and ethnicity, they do not require higher leadership self-efficacy than their peers. This study highlights the unique challenges of females aspiring to leadership positions and the additional issues African American females potentially face. The future of female business students in America aspiring leadership is unique from their male counterparts. The findings are relevant to understand the converging of leadership, gender, and ethnicity in society.

Keywords: Leadership, Female Leadership, Women's Leadership, Leadership Aspiration, Leadership Self-Efficacy

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Chapter 1: Nature of the Study

Background

What inspires women to be leaders despite the glass ceiling, gender discrimination, and racial discrimination? Could self-efficacy affect whether aspiring female leaders desire to crack the glass ceiling? Perhaps African American women have higher levels of self-efficacy to take on the challenges associated with pursuing leadership roles in their field.

Women have served as leaders of countries, held powerful positions in companies, and successfully headed households without a partner. Not only do women serve their communities and lead powerful companies, they also make history like the following women. The longest reigning British monarch, Queen Elizabeth II, reigns over the United Kingdom of Great Britain along with other countries in the commonwealth while mothering three sons and a daughter. The executive president of Liberia, Ellen Johnson-Sirleaf, is not only recognized as the first head of state in Africa, but the world's first elected black female president. In the United States, Hillary Rodham Clinton and Shirley Chisolm have pursued the idea to make history as America's first president that is a woman.

The glass ceiling females face in corporate America today has not hindered them from entering the workforce. Likewise, the gender pay gap and gender discrimination in general is not holding back females who aspire to become leaders. Researchers recognized such hindrances exist for females in their pursuit of leadership positions (Boatwright & Egidio, 2003; Chugh & Sahgal, 2007). Despite the well-documented diversity problems of corporate America, in 2007, Ursula Burns was named the CEO of Xerox. Burns is recognized as the first female African American CEO of a Fortune 500 company. Reports of African American females facing both gender challenges and racial discrimination are present in scholarly research (Arbona & Novy, 199; Frevert, Culberston & Huffman, 2014; Harvey, 2007; Johnson & Thomas, 2012; King,

1988; Leskinen, Rabelo, & Cortina, 2015; Sanchez-Hucles & Davis, 2010; Swanson & Gore, 2000). Learning more about the relationship between how the psychological factor self-efficacy impacts female college students' leadership aspirations offer justification to support potential female leaders.

This chapter will introduce the study's problem statement, purpose, research questions, hypothesis, theoretical framework, and significance of the study. Also, the key terms unique to the study will be defined. The following brief history of the research on leadership aspiration presents a history of the interest on the topic.

Historic View of Topic

Research over the past 50 years explored an individual's ability, personality, and traits influencing leadership aspirations (Gordon & Medland, 1965; Pressell, 1986). The literature represents a vast number of studies on leadership styles (Appelbaum, Audet, & Miller, 2003). Previous research has also looked at media and role models' influence on the aspirations of women (Hoyt & Simon, 2011). The literature demonstrates evidence of the attributions contributing to human traits and development of leadership aspirations (Lynch, 2003; Montgomery & Newman, 2010; Wilson, 2004). Consistently, educational aspirations were found a prevalent area of research noted in the literature, but less prevalent is the specific exploration of general leadership aspirations (Baird, 2008; Gasser, Larson, & Borgen, 2004; Gray & O'Brien, 2007; Harvey, 2007). In addition, minimal focus is evident in the literature on the psychological factors influencing leadership aspirations of females before they become professionals and have negative experiences such as reaching the glass ceiling or wage gap issues (Boatwright & Egidio, 2003). Specific studies suggested barriers may be the result of the

individual creating them (internal) or the result of external factors from society (Drury, 2010). Past experiences were also recognized predictors of leadership potential (Connelly et al., 2000).

Reviewing current research revealed a look at the influence of media and role models on the leadership aspiration of women (Hoyt & Simon, 2011). Less evidence was found in recent literature surrounding the development of leadership aspirations compared to early research (Singer, 1991; Shim, 2013). The typical paths of the aspiring leaders may be inherited (e.g., appointments, election or emergence; Norton, Ueltschy Murfield, & Baucus, 2014). Also, growing evidence of leader emergence studies was noted in the literature (Norton et al., 2014; Turetgen, Unsal, & Erdem, 2008). Leader emergence is defined as the ascension into a team with no formal appointment, nor election process to the leadership position (Norton et al., 2014).

Also noted in the literature are reported limitations related to race and ethnicity variance in study samples (Davis, 2009; Boatwright & Egidio, 2003; Gasser, Larson, & Borgen, 2004; Turetgen et al., 2008). Moreover, the literature consistently referred to limited access to diverse populations and African Americans are one of the specific ethnicities mentioned as underrepresented in samples (Egidio & Boatwright, 2003; Subramaniam, Arumugam, Akeel, & Almintisir, 2014; Turetgen et al., 2008). The patterns and behavior of White American women are repeatedly generalized to African American females as well as other ethnicities.

The last observation noted in the leadership literature is the limited number of current research on how psychological factors contribute to leadership aspiration. An extensive search revealed such research on leadership aspiration in relation to self-esteem (Briones, 1995), personal satisfaction (Vanteenkiste et al., 2007), and stress (Constatine & Flores, 2006). The literature presented minimal studies within the last 10 years exploring psychological factors associated with leadership aspirations.

The current study intends to revisit the possibility of the relationship between the leadership aspiration of students and psychological factors. Specifically, self-efficacy of female business students is the area of interest. The business students are tomorrow's leaders.

Leadership literature suggests those aspiring to become leaders have high self-efficacy beliefs that will sustain their efforts when experiencing challenges of the role (Bandura, 1997; Boatwright & Egidio, 2003; Klassam & Lynch, 2007; Locke, 2003; Ng, Ang, & Chan, 2008; Yukl, 2006). Current research is lacking specific exploration of the self-efficacy of the females aspiring to pursue leadership roles despite gender and race discrimination, in conjunction with challenges related to the leader experience. Specifically, a study was found in the literature suggesting one's past experiences is an identified predictor of leadership potential (Connolly et al., 2000).

Ultimately, a historic overview of the examination of leadership revealed the trend began with recognizing leadership as a universal phenomenon created in the human psyche from childhood (Bass, 2008). However, early behaviorists suggest the environment and genes do not necessarily dictate our destiny (Edwards, 1972). This understanding helps propose thoughts have a greater influence on shaping actions (Locke, 1991). Confidence, as well as poise, were later reported as personal qualities desirable in leaders and are known to describe an executive presence (White & Shullman, 2010). New findings report beyond these ideas and suggest there is a general aptitude for leadership, but necessary skills are required (White & Shullman, 2010).

In addition, an anticipated variance in leadership aspiration and self-efficacy is expected from the sample based on ethnicity. Women who willingly face both gender and race discrimination while pursuing their leadership goals are suspected to have higher rates of self-efficacy than those not faced with both forms of discrimination. By utilizing a quantitative

approach, the researcher of this study explored the phenomena of females aspiring to become leaders. The following will clearly define the problem prompting the study.

Problem Statement

There is a general problem in the leadership literature. A lack of a theoretical foundation was identified surrounding the leadership aspirations of undergraduate and graduate female business majors. The interest in the college student's leadership development was found to increase over the past two decades (Komives, 2011). The researchers reporting these findings study the behaviors of college students and identified their career development as an exploration mode while matriculating through their college years and anticipated gathering fruitful information from their self-evaluation (Komives et al., 2009; Komives & Dugan, 2010; Komives, 2011). Psychological factors' influence on leadership aspirations has been examined, but with predominantly White American and homogeneous samples (Boatwright & Egidio, 2003). Historically, research has recognized how one's experience is influential on the perception of one's ability (Shelton, 1990; Sherer et al., 1982). Consequently, the female and African American female experiences may influence one's perception of her ability to lead and ultimately leadership aspiration. This suggests there is a need for current research on ethnicity differences of female college students' leadership aspirations.

Consideration of psychological factors uniquely influencing a specific race was also observed in this study addressing the gap in literature pertaining to this area. Specifically, African American and White American women were the population of interest. Throughout the careers of African American women, they reportedly face the potential of experiencing both sexism and racism simultaneously (Harvey, 2007; Johnson & Thomas, 2012; Leskinen et al., 2015). For example, a study highlighting career aspiration research proposes this scenario: an

African American female college student in her freshman year who aspires to become a cardiologist, may contemplate whether she would be faced with numerous barriers because of her ethnicity, as well as her gender, causing her to consider other pursuits ultimately limiting her socioeconomic potential (Metz et al., 2009). The authors share this scenario to bring attention to the potential hindrances African American female college students may encounter. This scenario was an example included in the introduction of the researchers' article to emphasize the importance of their study. The specific details surrounding these researchers' original study is outlined in chapter 2. The proposed scenario and the consideration that career aspiration may be influenced by factors such as gender, ethnicity, sexual orientation, socioeconomic status (SES), and disabilities (Swanson & Gore, 2000) serves as justification for this quantitative study, which explored differences in the leadership aspiration of females of different ethnicities.

Purpose of the Study

The purpose of this quantitative study was to contribute to the understanding of the leadership development of females and African American females, by identifying the psychological factor that influences their leadership aspirations. First, the findings may be used to design leadership development programs for women of various ethnicities to prepare them for leadership opportunities in corporate America. Second, this research may serve to increase understanding of contextual factors on the leadership development and aspirations of African American females. Third, the current research provided information regarding whether there are similarities among ethnicities on the psychological factor self-efficacy, and any influence on leadership aspirations. Finally, this research may provide important information to colleges and universities in developing leadership programs for female business majors.

Ultimately, the purpose of this study was to close the gap of research on psychology and the leadership aspirations of female undergraduate and graduate business majors. The relationship between a specific psychological factor and leadership aspirations among female business majors was investigated. The psychological factor observed in the study was self-efficacy. Also, this study examined how the factor differs among African American females versus White American females. The sample included American female undergraduate and graduate business majors.

In addition, Boatwright and Egidio's (2003) study on psychological predictors of college women's leadership aspirations was a primary study that was partially replicated. The participants in the 2003 study were from a predominantly White American Midwest liberal arts college. The researchers' homogeneous sample restricts the generalizability of the study's findings. The study found certain psychological variables to predict leadership aspirations among the college woman. This study expanded on the Boatwright and Egidio (2003) study in respect to the psychological factor, self-efficacy, and the sample included students from across the United States, as well as African American students. This study did not measure gender role orientation and fears of negative evaluations as the foundation study observed (Boatwright & Egidio, 2003). In addition, the sample in this study specifically included undergraduate and graduate business majors.

Research Questions

Through an exploratory study, this research fills a gap about gender, race, and leadership aspiration from a psychosocial perspective. Furthermore, this study contributes to the research on leadership development of African American females. The analysis observed the extent to which the psychological factor, self-efficacy, influences female leadership aspiration overall and

between groups. For example, the findings measured the differences in the African American undergraduate and graduate female's leadership aspiration from traditionally studied White American participants using a leadership self-efficacy scale and a career aspiration scale that has a leadership aspiration subscale. The researcher suspected high rates of self-efficacy are anticipated for females aspiring leadership due to the perceived potential challenges specific to female leaders. Also, higher rates of self-efficacy were anticipated for African American females aspiring leadership due to the perceived potential challenges specific to both their gender and race. Ultimately, the study sought to answer the following research questions:

Research question 1: Does ethnicity affect female undergraduate and graduate business students' leadership self-efficacy and leadership aspiration?

Research question 2: Does ethnicity moderate the relationship between leadership self-efficacy and leadership aspiration among female undergraduate and graduate business students?

Theoretical Framework

A theoretical framework was selected that is aligned with the topic. This framework assisted with understanding the research questions as well as helped analyze the results.

Although the theoretical framework is aligned with the methodology, it is separate from the methodology and was used to ground the study.

It was discovered in the literature that leadership research recognizes men and women have different realities in the workplace (Heilman & Caleo, 2015; Huttges & Fay, 2015). For

Combined Theoretical Framework

Albert Bandura's Social Cognitive Theory
(Self-Efficacy & Leadership Self-Efficacy)



Role Congruity Theory & Role Theory
(Gender & Leadership Beliefs)



Double Jeopardy Theory
(African American Females & Leadership Beliefs)



Formation of Leadership Aspiration of Female Business Majors

Figure 1. Combined theoretical framework.

example, the underrepresentation of females in managerial positions in their fields persists despite their levels of education, training, work experience, and political efforts (Huttges & Fay, 2015). A review of female leadership research also revealed men and women have different realities in the workplace (Hakim, 2004; Heilman & Caleo, 2015). Historically, men have dominated the leadership world in business, military, and other forums (Eagly & Karau, 2002). Sex discrimination, work-life mobility, labor turnover, occupational segregation, pay gap, and glass ceiling are issues women have described facing in the workplace (Hakim, 2004).

Additionally, race and ethnicity are found to impose different work life realities (King, 1988). Women and ethnic minorities are making some progress excelling in managerial careers, but they are far from achieving equality (Huffman, 2012). As the 19th century was coming to an end, former slave and educator, Dr. Anna Julia Cooper, reported on the double enslavement of African American females who are handicapped by their gender as well as taunted by their race (King, 1988).

Gender stereotypes and observed role demands may discourage women from aspiring to leadership roles (Bobbio & Manganelli, 2009). Historically, women and women of color face negative stereotypes resulting in complex circumstances (Sanchez-Hucles & Davis, 2010). Furthermore, race and ethnicity are found to impose different realities (King, 1988). Such research findings on the impact of race and gender roles in one's career suggests a direct link to aspects of one's career aspiration despite negative beliefs, treatment, practices, decisions, perceptions, and attitudes. These findings ultimately suggest one's self-efficacy offers insight on the direct impact and belief in one's ability to endure potential negative circumstances. There is evidence that self-efficacy is a motivator to several aspects of human functioning (Locke, 2003). Levels of self-efficacy form a foundation to formulate mastery and confidence in situations (Levy & Radomsky, 2015). Consequently, obstacles could somehow impact self-efficacy and one's career path (Lent, Brown, & Hackett, 2000). Given these and other observations highlighted in Chapter 2, how self-efficacy is engaged to support future and current leaders would serve to understand the leadership aspiration of females.

The model proposes a very comprehensive understanding of leadership aspiration, while taking into consideration various factors. Both self-efficacy and leadership self-efficacy as it relates to the context of one's beliefs, gender, and race are considered. How they may influence

the leadership aspiration of female business students was explored. The theoretical framework forms its foundation on social cognitive theory, role congruity theory, role theory, and double jeopardy theory. In relation to the students, the theories offer insight on how a female's opinion of her self-efficacy and gender roles shape her leadership aspiration (Bem, 1981; Eagly & Karau 2002). Further evaluating leadership aspiration, double jeopardy theory played a part in the theoretical framework to allow the researcher to understand the components of the African American female's circumstances and if leadership aspiration is impacted. The theory suggests the women facing a double minority are facing a double jeopardy. Social cognitive theory, role congruity theory, role theory, and double jeopardy theory are discussed below in detail to support the theoretical framework.

Social cognitive theory. Albert Bandura's (1997) social cognitive theory is a foundational model for the framework of the current study. The theory submits an individual's beliefs regarding personal ability engages action (Ng & Lucianetti, 2016). The social-cognitive approach aids in assessing perceived self-efficacy to predict behavior (Bandura, 1997). Bandura (1997) found self-efficacy beliefs aid in the self-regulatory and psychosocial influences of behavior. Researchers continued Bandura's work on social cognitive theory and studied self-efficacy in relation to how it serves as an internal belief system (Cervone et al, 2001). Figure 1 outlines the theoretical framework of the current study.

Bandura's (1977) theory was instrumental to the current study exploring female leadership aspiration. The theoretical framework forms its foundation on the social cognitive theory and develops a sound argument. Viewing the social-cognitive approach from a theory of personality allows the opportunity to observe the psychological process influencing both one's experiences and actions (Cervone et al., 2001). More specifically, this theory in relation to self-

efficacy serves as an internal belief system (Cervone et al., 2001). Social cognitive theory captures the uniqueness of an individual from a “general model of personality structure, process, and functioning” (Cervone et al., 2001, p. 47).

The theory was recognized for its capability to describe what constitutes as the personality structure and behavioral characteristics. The study seeks to identify if one’s gender and ethnicity may foster high levels of self-efficacy. Furthermore, the theory assesses social-cognitive principles as overt behavioral tendencies, personal determinations of actions, and unique qualities of individuals (Cervone, Shadel, & Jencius, 2001).

Role congruity theory. Eagly and Karau (2002) created the role congruity theory grounded on recognizing social roles and social expectations based on a social position, as well as a specific social category. The researchers also present the notion that role congruity theory identifies how other roles in the person’s life, particularly leadership roles, could result in negative outcomes. The theory is recognized for evaluating the extent to which incongruity exists between expectations about females and leaders (Eagly & Karau, 2002).

In relation to this study, role congruity theory facilitated an understanding of incongruity between the leadership role and the feminine gender role. The theory helped substantiate the necessity for high levels of self-efficacy among females aspiring to become leaders. Furthermore, the theory offered insight on those participants faced with both gender and ethnicity incongruity pertaining to a leadership role.

Role theory. The social psychology literature describes role theory in relation to constructs such as role enactment, role expectations, role location, role demands and role skills used to observe a person as if they were an actor portraying a role (Sarbin & Allen, 1968). Role theory submits that an individual’s characteristics are made up of specific roles influenced by an

individual's perception of the role (Nazemi et al., 2012). The theory argues the individual is influenced by the role expectations of others in their lives, learned role behaviors, role skills acquired, and role expectations of their community (Schulz, 2015). Ultimately, the theory supports the research that multiple roles of females in conjunction with perceived organizational barriers require balancing the demands of life.

This study used the premise of role theory to reference the future behavior of the participants. Role theory suggests understanding the individual based on how he or she socializes themselves in their community by observing them as though they were acting in a play (Sarbin & Allen, 1968). The theory was incorporated in the theoretical framework to observe the participants' evaluation of their role in relation to their leadership aspiration.

Double jeopardy theory. National labor force data suggests that the needs and resources of women of color and white women are different (Frevert et al., 2014). In 1969, Frances M. Beal published her work called "Double Jeopardy: To Be Black and Female" outlining the oppression of black women in the United States. Double jeopardy recognizes the experience African American women may face such as hostile work climates, isolation, and discrimination (Johnson & Thomas, 2012). The double jeopardy theory specifically describes the cumulative description of the impact on women as African Americans throughout their careers (Leskinen, Rabelo, & Cortina, 2015).

The present study hypothesizes that African American females who aspire future leadership positions have higher levels of self-efficacy than their White American female counterparts. Double jeopardy theory offered insight on the complexity of African American female students facing additional possible hindrances in pursuit of leadership positions.

Furthermore, the theory suggests African American females' history experiencing double jeopardy may offer the necessary self-efficacy to aspire leadership in their careers.

Definition of Key Terms

Leadership aspiration is “as the ambition for leader roles” (Kreuzer, 1992, p. 36) and the pursuit of promotion (O'Brien, 1996).

Self-efficacy is a person's personal belief about their ability moreover than their actual ability (Barclay, Mellor, Bulger, & Kath, 2007).

General self-efficacy (GSE) is a trait that signifies one's belief in his/her ability to succeed across situations (Menci, Tay, Schwoerer, & Drasgow, 2012).

Specific self-efficacy (SSE) was introduced by some researchers as a construct surrounding specific tasks to predict behaviors, unlike general self-efficacy (GSE) that predicts behaviors of various situations based on a person's perception of their ability in a variety of situations (Eden, 1988, 1996; Gardner & Pierce, 1998; Judge et al., 1998).

Leader efficacy is “a specific form of efficacy associated with the level of confidence in the knowledge, skills, and abilities associated with leading others” (Hannah et al., 2008, p. 1).

Leadership self-efficacy is a form of self-efficacy that considers both the leader and the leader's actions (Hannah et al., 2008).

Academic self-efficacy is referred to as how a person perceives their academic abilities for specific tasks (Schunk, 1991).

Glass ceiling was discovered in the leadership literature as a phenomenon that is in a hierarchical structure and the higher levels are not accessible to some people in categories, such as gender, despite their qualifications (Arshad, Waqas, Zia, & Ahmad, 2016).

Gender roles is defined in the literature in relation to the views an individual has about females and males in their society (Bem, 1993).

Ethnicity is defined as both based on country of birth and self-defined (Haasnoot et al., 2012).

Undergraduate business students in the study comprised of students enrolled in American colleges and universities majoring in business with the intention of earning a Bachelor's degree.

Graduate business students in the study comprised of students enrolled in American colleges and universities majoring in business with the intention of earning a Master's or PhD degree.

Significance of the Study

Regardless of the hindrances women face pursuing leadership roles, they still aspire to become leaders in their fields. The study may have significance for future practice, research, and in higher education. Groups who may benefit from this study include college advisors, business programs, and corporate recruiters. The study provides insight into female leadership aspirations of African American and White American students.

Moreover, the results of this study also offer significance for future leadership and female leader research. Evaluating the role self-efficacy plays in female undergraduate and graduate business majors aspiration to become leaders in their field might add to improving shared leadership practices and processes.

From an organizational leadership standpoint, the findings may be used to design leadership development programs for women of various ethnicities to prepare them for

leadership opportunities in corporate America (Yukl, 2006). Previous leadership aspiration research offered general insight on the psychological predictors of college women's leadership aspirations (Boatwright & Egidio, 2003), the findings of this study contributes to the field of organizational behavior's understanding of specific college women aspiring leadership. The evidence from this research may be utilized to understand business majors and African American females who are aspiring leadership. In particular, the organizational culture and leaders may utilize the empirical evidence from the research to help promote change in organizations.

Summary

The current study is presented in five chapters. This initial chapter contained an introduction to the overall problem and describes why this is an important study to conduct. Research was conducted on a female's leadership aspiration, but two problems arise: there is limited research available regarding psychological variables influence on leadership aspiration and the available research is not specific to African American females. The need to investigate ethnic differences among female leadership aspiration was introduced in this chapter. This study presents details surrounding the self-efficacy of females pursuing leadership careers despite apparent challenges. Additionally, the proposal opened with a description of the study's background, problem statement, purpose, research questions, and definition of terms.

Specifically, chapter 2 provides a comprehensive review of literature related to self-efficacy, woman in leadership, leadership aspiration patterns, and African American females' leadership patterns. The review of literature also provides details on specific leadership, gender, and socialization theories. A detailed synopsis of effective studies found in literature investigating the topic is included.

The final chapters introduce the research strategy and methodology that carried out the study. An in-depth explanation of the basis for conducting the quantitative study supports the study. Overall, Chapter 3 presents the overall process, focus on research design, instruments, participants, methodology, ethical concerns, and the characteristics that limits the scope of the inquiry. Chapter 4 will present findings and Chapter 5 will interpret the findings. Chapter 5 will also include recommendations for future studies and note the significance of the findings.

Chapter 2: Review of the Literature

Introduction

As the number of women in leadership positions increases throughout the workplace, recognizing the factors evident in aspiring leaders become necessary to aid in their training, support, and predicting behavior becomes increasingly important (Elmuti, Jia, & Davis, 2009). Interest in college student leadership development research has grown over the past 20 years (Komives, 2011). Moreover, the national labor force data suggests the workforce needs as well as resources for women of color and white women are different (Frevort, Culberston, & Huffman, 2014). Coupling these topics and populations introduces the research area of the leadership aspiration of degree-seeking females while considering issues such as ethnicity and major of study.

This chapter summarizes and analyzes literature discovered while investigating how self-efficacy may influence the aspiration of females pursuing leadership roles despite potential barriers women face in the workplace. Considering the literature on leadership of females encompasses a variety of fields including education, business, politics, healthcare, and science, it is important to set the parameters of literature to be reviewed. The following areas of focus are discussed in this chapter in order to place the purpose of the study and research variables in context: 1) self-efficacy, 2) leadership aspiration, and 3) gender and race's implications relating to leadership.

Reviewing the literature on the issues in this chapter may result in contemplation of the following questions. What would make a woman aspire to become a leader in her field when faced with the possibility of internal and external obstacles? What would make a woman aspire to become a leader in her field with a wage war between her and her male colleagues? What

would make a woman aspire to become a leader if her race presents potential obstacles as she aspires to become a leader? Do high levels of self-efficacy make female business students aspire to become leaders in their field? Why has the question of leadership aspiration of female business students not studied from a psychological perspective before?

Chapter Overview

This review of literature includes three sections. Overall, the sections include 1) an introduction to the topic, trends in literature and the research strategy; 2) how self-efficacy and leadership aspiration are traditionally studied; and 3) the implications of gender and ethnicity on self-efficacy and leadership aspiration.

The research strategy is in the first section. The databases and key terms used are included in the strategy. How the articles were used are also mentioned in this area of the literature review and sufficient details are provided in order to replicate the search. Trends in gender and leadership research follows the research strategy. The key theories in the theoretical framework are reintroduced in the discussion along with the prevalent female leadership topics. The section continues with a comprehensive overview of the obstacles and challenges the literature reports women face in the workplace. An overview of how race and leadership relate wraps up the opening section.

The next section in the chapter examines specific studies presenting self-efficacy and leadership aspiration research. This section describes the history, the significance and the categories of the variables. The self-efficacy literature presented provides insight related to how the psychological concept is regarded in research. The section mentions the work of theorists such as Albert Bandura in his social cognitive theory and how his work supports a link to

leadership aspiration. Social cognitive theory recognizes self-efficacy as the prevailing self-regulatory mechanism influencing behaviors (Bobbio & Manganelli, 2009).

The discoveries made while reviewing the leadership aspiration research are presented in the next section in a similar fashion. Leadership aspiration is comprehensively introduced starting with instrumental studies on the topic. This section includes particulars of an instrumental study to the current research in detail along with other key studies substantiating the necessity of studying leadership aspiration of females. The complexity of the variables is outlined and the significance to the female experience is described in the literature reviewed.

The final major section in the review of literature presents the implications of gender, as well as ethnicity, on the female's self-efficacy and leadership aspiration. The decision to review this literature was based on the assertions that implied gender roles and gender stereotypes are observed as challenges for women aspiring to become leaders (Bobbio & Manganelli, 2009). A definition of gender roles in the literature defined it as the relation to the views an individual has about females and males in their society (Bem, 1993). In addition, this portion of the review introduces the prevailing research pertaining to the dynamics ethnicity introduces to self-efficacy and leadership aspiration.

This portion of the review also discusses Role Congruity Theory to provide insight on gender's influence on leadership aspiration. Double jeopardy theory is another theory introduced offering a foundation to evaluate African American female leadership aspiration and self-efficacy. This will conclude the section, to assist in making informed assertions and conclusions about the phenomenon of "the woman aspiring to be a leader".

A Contribution to Literature

Overall, the purpose of the theories presented in the literature reviewed is to observe the psychological concept of self-efficacy's influence on leadership aspiration of female business majors. The apparent need to study the leadership aspiration of female business majors and more specifically the factor of self-efficacy's influence on their aspiration, will be evident upon completion of the chapter through a synthesis of existing literature on the topic. Moreover, a need to investigate whether African American female business major's level of self-efficacy varies from White American female business owners will be evident.

The literature over the past 10 years and since the postindustrial paradigm awakening was noted to lack a variety of topics related to gender and race in leadership studies (Frevert et al., 2014; Ospina & Foldy, 2009). In exploring these areas, it was determined to focus on current student's leadership aspiration influenced by their self-efficacy.

Ultimately, this current study may contribute to the available ideas on these matters, and used to provide support services to a variety of women aspiring to become leaders, unlike the frequently noted number of studies observing current female leaders. The literature revealed studies that highlight the effects of self-efficacy on intrapersonal outcomes as job attitude, interpersonal outcomes and employee satisfaction.

The general nature of the research reviewed suggests that self-efficacy is a potentially important psychological factor in determining aspiration, but it also highlights the paucity of research on leadership aspiration. Self-efficacy studies reveal the potential of the psychological concept's strong connection with leadership aspiration. The findings of this study contributes to the literature predicting a student's behavior beyond their college and university experience. The database research strategy employed is introduced next used to discover the information.

Research Strategy

Various online searches were performed. The key terms used in the searches are shared in this section. Additionally, the details surrounding how the articles were utilized are provided. The information is more than sufficient in order to replicate the search.

The literature for this review was obtained through searching EBSCOhost, ProQuest, Sage, Illiad, JSTOR, and Google Scholar. In addition, psychology, woman studies, leadership, personality, counseling, career, human resources and management journals were helpful resources. Psychological Review, The Leadership Quarterly, Journal of Applied Psychology, Journal of Leadership and Organizational Studies, and Psychology of Women Quarterly are examples of the specific journals helpful in the search for articles. The key search terms included: self-efficacy, leadership self-efficacy, female leadership, women leadership aspiration, female leadership aspiration, male leadership aspiration, glass ceiling, aspiration, career aspiration, African American leadership, ethnicity leadership, post graduate students leadership aspiration, high school leadership aspiration, graduate leadership potential, business students, female business students, and various combinations of these words.

The searches resulted in identifying a variety of peer-reviewed articles, as well as academic and government related websites. Academic books are occasionally cited. Also, books regarding female leadership experience and overall leadership development are cited in this chapter occasionally. The results of a solid search are presented in the chapter.

The articles and books are used to develop the theoretical framework, present main topics surrounding female leadership aspiration, and identify gaps in the literature. It was necessary to examine the history of available leadership research in order to understand the process by which the psychological concept, self-efficacy, influences female leadership aspiration. This overview

provided an enhanced understanding of the existing literature related to current and potential female leaders. Due to the limited research on the leadership aspiration of females and particularly African American females, information related to issues faced by both groups are included in the literature review reiterating the need for additional research on the topic. In addition, the information suggesting African American females experience challenges due to both their race and gender is introduced to establish a basis for further discovery in relation to future leaders in this group. This information suggests there is a need to explore gender and leadership trends in the literature.

The next few sections will briefly present a general description of various articles found in the literature to provide an introduction to female leadership issues. The formation of Leadership Aspiration of female business majors is presented based on self-efficacy, leadership beliefs, gender and leadership beliefs, ethnicity and leadership beliefs, and finally leadership self-efficacy. See Figure 2. A more intense review of articles and studies are introduced later in the chapter. The articles briefly mentioned point out trends, topics, and assess circumstances of female leadership. Some of the articles are introduced in the early part of the chapter and reintroduced in depth later in the chapter.

Leadership and Gender Trends in Research

Women are progressively entering into management positions, but the numbers are reportedly not as high for upper management positions (Subramaniam et al., 2014). Also noted in the gender leadership research was management's preference for male supervisors over females and how this presented challenges for females in male-dominated leadership roles (Eagly, 2007). Research assessing the leadership attitudes of participants found self-reported and group assessments revealed female and male leadership is described differently (Kolb, 1997).

Furthermore, career development studies have concluded it would be helpful to determine why females are underrepresented in high level management positions (Subramaniam et al., 2014) and studies that explore attitudes towards leadership (Kolb, 1997) offer helpful insight on the topic.

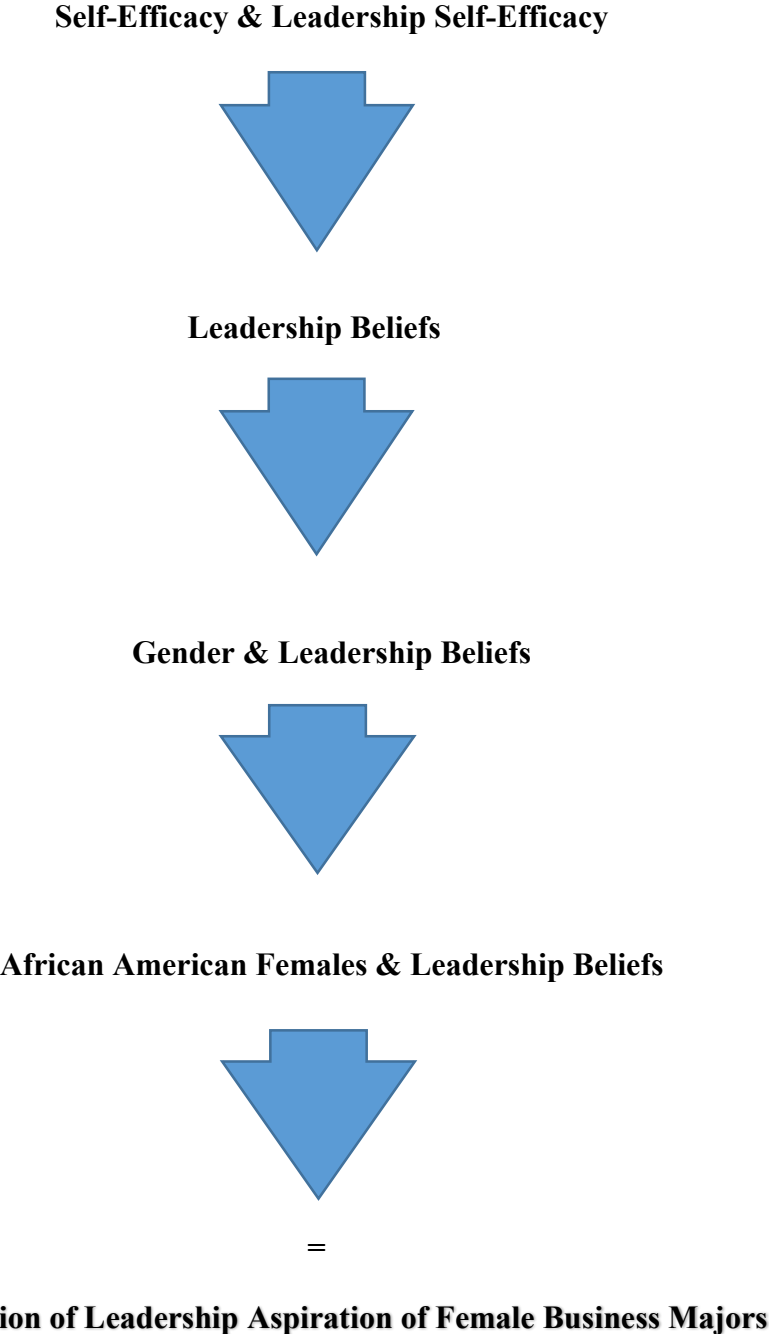


Figure 2. The formation of leadership aspiration of female business majors.

Reviewing legislation and history regarding women in the workforce revealed obstacles while on the road to leadership. Legislators, psychologists, economists, journalists, and feminists note the gender based earnings gap (Cloud, 2008) which is yet another obstacle women face. Despite the obstacles, the 2014 Warner reports on the Center for American Progress website state:

Women hold almost 52 percent of all professional-level jobs, American women lag substantially behind men when it comes to their representation in leadership positions: 1) They are only 14.6 percent of executive officers, 8.1 percent of top earners, and 4.6 percent of Fortune 500 CEOs. 2.) They hold just 16.9 percent of Fortune 500 board seats. (Warner, 2014, para. 1)

The literature supports the possible impact of these circumstances. When observing how societal gender roles impact females pursuing significant goals, self-esteem, and need for approval were found to negatively impact roles in their lives (Eagly et al., 2000). Specifically, the researchers measured the leadership and personal characteristics of both male and female pastors. The findings were reported limited, but the female pastors demonstrated higher scores on openness and charisma when compared to the male pastors. This suggests that the combination of gender and societal roles presents increased challenges. Achieving one's aspiration despite these challenges may increase self-esteem and satisfaction (Eagly et al., 2000). Various theories support the possible impact of these circumstances. An example of one theory is role congruity theory.

Researchers Eagly and Karau (2002) created the role congruity theory grounded on social roles and social expectations based on a social position, as well as a specific social category. The theory expanded beyond social role theory to role congruity

theory to present a link between gender roles and leadership roles. This stems from the understanding of gender roles' influence on identifying behaviors based on gender differences (Eagly et al., 2000). Eagly and Karau (2002) explained how role congruity theory takes the notion a step further to identify how other roles in the person's life, particularly leadership roles, could result in negative outcomes. The theory suggests perceptions could lead to prejudicial behaviors. Another assertion of the theory suggests gender's conceivable impact on the relationship between someone's values and outcomes (Huttges & Fay, 2015). The study supporting this foundation is fully introduced later in this chapter.

The perceived barriers women experience in the workplace were explored in the literature related to role expectations of men and women in society (Amanatullah & Morris, 2010; Bowles, Babcock, & Lai, 2007; Phelan, Moss-Racusin, & Rudman, 2008). Characteristics not commonly found in women, but found in stereotypical masculine behaviors are two forms of prejudiced behavior characterizing women during work evaluations (Brescoll, Dawson, & Uhlmann, 2010; Eagly & Karau, 2002; Heilman & Caleo, 2015). In summary, role congruity theory implies women are stereotypically portrayed in society in domestic settings playing "communal roles" as caring mother and housewife. Role congruity theory also indicates prejudiced behavior occurs when stereotypes develop based on a social perception of social groups to succeed in a specific role. Research on this theory supports the notion African American women experience "double jeopardy" for belonging to two groups resulting in possible disadvantages in the workplace (King, 1988). Ultimately, the dynamics involved in the role of female leaders is suspected to reveal insight helpful to future female leaders.

Assessing the Female Leadership Experience

Today's leaders are frequently referred to as alpha females and alpha males (Ward, Popson, & DiPaolo, 2010). The alpha female is described as a driven woman who believes she is a match to males, exercises dominance over other females, while declaring her leadership role (Ward et al., 2009; Ward et al., 2010). A particular study on female leadership assessed the personality of the alpha female to develop a measure to assess the alpha female personality (Ward et al., 2010). Six hundred and thirty-seven women from colleges and universities from both the Midwest and Northeast regions of the United States participated. The results indicated what the researchers predicted. The females with higher scores on the scale desired "to be leaders among their peers, to be dominant, and to be assertive" (Ward et al., 2010, p. 316). Ultimately, the researchers sought out to develop an inventory to measure the construct of the Alpha Female. They determined the inventory may be used to identify women who personify the qualities of the alpha leader, as well as assist in understanding women leaders.

Considering the possibility of the alpha female personality, why are women not frequently represented in leadership roles in the workplace? One leadership and theory text makes the claim women are recognized for earning the majority of bachelor degrees, but are underrepresented in both government and various professional sectors in society (Northhouse, 2016). Barriers may exist to reiterate the gender imbalance and maintain male dominated leadership roles all while women face the "glass ceiling". The glass ceiling notion may be prevalent due to consistent patterns of a nominal number of women in leadership positions irrespectively of the equity among senses in other areas of society (Eagly & Karau, 2002). Observing the experience is challenging considering it is invisible (Arshad et al., 2016). Although, a comprehensive definition for glass ceiling was discovered in the leadership literature

as a phenomenon that is in a hierarchical structure and the higher levels are not accessible to some people in categories, such as gender, despite their qualifications (Arshad et al., 2016).

The literature also refers to cultural barriers. This matter is explained as the expectation for women to exhibit masculine traits or stereotypes said to be necessary when in a leadership role (Applebaum et al., 2003). Stereotypes may impact both African American and White women in leadership positions based on perceptions, beliefs, and stereotype threats (Sanchez-Hucles & Davis, 2010). African American women face the possibility of multiple stereotypes due to their gender and ethnicity. The double-bind experience surfaces with the expectation to exhibit female gender role and male leadership role characteristics simultaneously (Eagly, 2007). These issues are discussed in more detail later in the chapter.

The stereotypes and attitudes imposed on women were found to affect their self-efficacy as well as self-perception (Hoyt, 2005). These predictors, past experiences, and internal motivators, suggest race in conjunction with gender also influences leadership aspiration. Despite these apparent conclusions, the literature on women leaders does not present research on these issues. Personal awareness and understanding of ambition suggests information about an individual's self-efficacy offers similar findings (Dent, 2013). The trends in female research offer additional insight on the female leadership experience.

Prevalent Female Research Trends and Topics

The Impact of Media Images

Early research on television media reports how the source of entertainment nurtures and alters gender roles for children (Calvert & Husto, 2006). A specific study observing female leadership behavior found media and role models influence the aspiration of women (Simone & Hoyt, 2013). The research design consisted of two experimental studies to explore if counter-

stereotypical and stereotypical roles depicted in media images of women influence gender role beliefs. The overall findings revealed media images and leadership aspirations was mediated by negative self-perceptions (Simone & Hoyt, 2013). In other words, negative self-perceptions facilitated media images' influence on leadership aspiration. The findings from both studies were as predicted. Media images that presented women in counter-stereotypical roles resulted in equal gender role beliefs about women versus women who viewed stereotypical roles. The female participants in the second study who viewed counter-stereotypical roles and then performed leadership tasks reported lower negative self-perceptions and greater leadership aspiration than those participants who viewed stereotypical images. Ultimately, the findings suggest counter-stereotypical media images can aide in destroying distinct stereotypes and gender role beliefs (Simone & Hoyt, 2013). Regarding leadership, the results indicate the new images will reduce negative situations surrounding women and leadership situations.

Another study used gender stereotypical images and discovered stereotypic commercials can negatively impact the leadership aspiration of females (Davies, Spencer, & Steele, 2005). The participant's exposure to stereotype-conforming television did not aspire to leadership roles in their future. Consequently, media is suspected to be an indicator influencing leadership aspiration, and the conclusions encourage the exploration of internal factors surrounding the topic.

Female Mentorship, Modeling, and bservation

The impact of mentorship on a female's aspiration was found in the literature. Empirical research on mentorship programs is found in leadership development literature (Blake-Beard, 2001). Research on the topic includes internal and external challenges, in addition to potential benefits surrounding the mentoring relationship. The same researcher suggests women acquire

support in addition to mentorship (Blake-Beard, 2001). Furthermore, what may be described as observational learning was found as a social source influencing efficacy beliefs (Barclay et al., 2007). Mentorship may be observed as a first-hand and personal form of observational learning. Furthermore, an opportunity to observe and engage with someone actively pursuing anticipated actions. Bandura's (1986) research also introduced the notion that mentorship contributes to the basis that observing others' successful performance strengthens efficacy beliefs. This and other research suggests mentorship is an example of success in a situation that will positively influence the opinion one holds of their own ability in the same situation (Barclay et al., 2007). Whereas the research on modeling suggests the notion offers conditions to reinforce efficacy beliefs particularly when personal attributes of social or contextual significance are shared as gender and race (Barclay et al., 2007).

Also found in the literature was a study conducted on 71 leaders in a Council for Christian Colleges and Universities (CCCU) leadership development program for women (Lafreniere & Longman, 2008). The program involved the participation in informal conversations, networking, and shadowing/mentoring experiences. Fifty-three of the participants found the program significant in two areas: encouraging and preparation for higher level leadership. The researchers reported the participants found shadowing/mentoring had the greatest influence on their confidence and thinking (Lafreniere & Longman, 2008). More than half of the participants become involved in additional leadership responsibilities within a year of participating in the program. These conclusions suggest the possibility of influencing the leadership aspiration of females.

Female College Students and Leadership

Over a decade ago, the rising costs in education and a concern for declining persistence among students was observed (Schnell & Doetkott, 2003). This is a concern when considering the college and university experience is recognized as instrumental to the shaping of tomorrow's leaders, and moreover the leadership aspiration of students (Astin & Astin, 2000; Pascarella & Terenzini, 2005). Institutions are influential in developing leaders through the formation of leadership programs on both undergraduate and graduate levels. The higher education community is responsible for the development and grooming of future leaders (Carry, 2003).

One specific study justifies studying college students to explore female leadership aspiration. The study reports that a woman's education level was found to be an indicator of her chances to secure high-level managerial positions (Wentling, 2003). Interviews of 30 women in middle management found 4 actors related to their success were educational credentials, hard work, mentors, and interpersonal skills. The women interviewed for the study reported barriers to career development as: supervisors/directors, sex discrimination, lack of political savviness, and a lack of career strategy.

Also noted is that college students' leadership development has received an increase of attention in research over the past 20 years (Komives, 2011). Student leadership programs are growing on campuses (Owen, 2012). Despite this increase, the literature is lacking in research predicting the behaviors of present students based on their reported self-efficacy. Exploring the self-efficacy of a student unveils layers of the student's aspiration. How challenges affect female students who are actively performing the career they are pursuing warrants exploration based on the above literature reviewed. The literature provides insight into the obstacles and challenges women face in the workplace.

Specific Obstacles and Challenges Women Face in the Workplace

Men and women have different realities in the workplace (Heilman & Caleo, 2015). Historically, men have dominated the leadership world in corporations, military, and other industries (Eagly & Karau, 2002). Also, prominent high-level leadership positions are consistently dominated by White American men (Berk, 2014). The 2012 U.S. Census reported the chief executive officer positions of major corporations and Fortune 500 companies are White American men (U.S. Census Bureau, 2012). More recent finding reported in a Leadership text report 18.7% of the U.S. Congress is female, and 4% of Fortune 500 companies CEOs are women (Northouse, 2016).

A specific study that was introduced earlier in the chapter in the mentoring section, pointed out females specifically seeking high-level administrative leadership positions in higher education report facing an array of barriers (Lafreniere & Longman, 2008). This is consistent with the female leadership literature reporting barriers and obstacles.

Studies from around the world were discovered supporting the possible negative impact females endure due to barriers they may face in society and particularly the workplace (Choa & Tain, 2010; Metz, 2005; Nazemi et al., 2012; Subramaniam, Arumugam, & Akee, 2014). Some of the barriers noted were sex discrimination, work-life mobility, labor turnover, occupational segregation, pay gap, and glass ceiling are issues women describe facing in the workplace. This section will report the unique experience of females on their path to achieving their goals as their career options are increasing.

Women may have family responsibilities, may face work inconvenient meeting times, and may have other barriers they perceive would interfere with their leadership experience

(Barclay et al., 2007). Research has specifically discovered a female's career leadership development was negatively impacted by work-family conflict more than males (Javeri & Dariapour, 2008). A study observed 290 female faculty members and discovered two specific prevailing problems. Inconsistency between family-job role expectations and discrimination against women were the two workplace problems. Age, ethnicity, and position were found statistically related to the two problems. The researchers also concluded the problems resulted in negative results pertaining to job satisfaction and sense of professional fulfillment (Javeri & Dariapour, 2008). Such studies observing women and leadership reported those in leadership positions may be faced with the question of choosing to start a family or pursue their career (Subramaniam et al., 2014).

The researchers of a particular female leadership study found when seeking an explanation of the underrepresentation of women in leadership positions, the focus was placed on a possible disparity of available competent women for the positions (Eagly & Karau, 2002). A 2005 study found that a female's pursuit of education could be the answer to addressing the glass ceilings faced in the workplace (Metz, 2005). Female participants who were and were not mothers had similar workplace challenges (Metz, 2005). The study concluded internal networks were negatively impacting the female's advancement.

The literature surrounding women in the workplace also reported marital status influenced the woman's experience (Budworth, Enns, & Rowbotham, 2008; Marvin, 2001; Lirio et al., 2007). The consensus is family and career present possible career and leadership aspiration concerns. Moreover, when women are the primary care giver and the head of their households, incidents were reported that employers did not consider their circumstances positively (Kelly & Marin, 1998).

In general, literature on obstacles females face in the workplace suggest the dynamic of race in relation to leadership warrants exploration. Race and ethnicity was found to impose unique realities (King, 1988). Females from ethnic minority groups are making some progress excelling in managerial careers, but they are far from achieving equality according to a researcher on the topic (Huffman, 2012). As the 19th century was coming to an end, the theorist, former slave, and educator, Dr. Anna Julia Cooper, reported on the double enslavement of African American women who are handicapped by their gender, as well as taunted by their race (King, 1988). To understand the double enslavement perception, the article attesting to this experience reports how “dual and systematic discriminations of racism and sexism remain pervasive, and, for many, class inequality compounds those oppressions” (King, 1988, p. 43). The research reported in the article presented the argument that despite the discrimination, African American females resist the oppression. The researcher concluded that African American female’s survival relies on the ability to utilize economic, social and cultural means available to her in society in general, as well as her community (King, 1988). The current research takes it a step further and suggests psychological means are also employed as high levels of self-efficacy.

Despite these findings, the lack of investigation pertaining to this population remains evident. For example, this current study’s foundational research introduced in chapter 1 by Boatwright and Egidio (2003) investigated the leadership aspiration of female college students from a co-educational liberal arts college in America’s Midwest region. Of all the participants, 94% were White American. The other 6% of the students were African American and Asian American. How race interrelates with leadership is suspected to demonstrate unique realities.

The discussion will continue in the following section in detail. The following evaluation of research will demonstrate the need for research in this area.

Race and Leadership Interrelating

Social groups such as race and gender are recognized as reference groups in which an individual may have membership to more than one group (Vandiver, Cross, Worrell, & Fhagen-Smith, 2002). How an individual describes themselves refers to one's identity (Burke & Stets, 2000; Gecas, 1982; Gergen, 1971; Howard, 2000). The perception of self in any context relies on understanding how racial identity is central to a person's life because race is a constant factor in their lives (Evans-Winters & Esposito, 2010). Psychosocial theories have served as a foundation for racial identity theories that observe the role of race on the identity or self-concept (Evans-Winter & Esposito, 2010). The connection racial identity has with psychosocial issues emphasizes the sensitive nature of race in someone's life.

Self-awareness and adaptability were two core leadership capacities discovered in the literature (Day & Lance, 2004). A study found when a leader understands their own strengths and weaknesses, this serves as a key aspect of the capacity of self-awareness that influences others as well as the leader (Day & Lance, 2004). The findings suggest a leader's complex ability to form a comprehensive understanding of themselves and serves as an indication of their ability to best understand their dynamics.

It may be concluded that gender and race impose different realities on one's life. Historically, White men have held positions of leadership in America (Dugan & Komives, 2011; Komives & Dugan, 2010). Additionally, males and females have different leadership experiences. Consequently, the leadership experiences of African Americans also have recognizable differences (Triana, Jayasinghe, & Pieper 2015). The dominant gender and

minority races are suspected to impose additional differences. Theories such as double jeopardy theory support the notion that the African American woman's experience has unique factors associated with their female and minority identity (Beal, 1970; Johnson & Thomas, 2012; King, 1988). This viewpoint stems from the identified unique factors impacting the female experience. Useful information may be gathered from African American females aspiring to become a leader who considers the obstacles she may face in the future as both a female and African American making the decision to pursue her desire to lead anyway. Identifying the level of self-efficacy presents a distinction among the female leadership experience.

Specific Obstacles and Challenges African American Women Face

This section covers African American female leadership experience and theories to provide additional context for the study in relation to this specific group. Gender's influence on leadership patterns is increasing its prevalence in research, while ethnicity is rarely a variable, and there is even less evidence of both variables observed together in studies (Boatwright & Egidio, 2003; Waring, 2003). This is despite reports that African American women often face the challenge strategizing how "to achieve power, identity, and voice" (Johnson & Thomas, 2012, p. 156). Noted conditions as anxiety, depression, and anger are also recognized to influence initial development of ethnic identity development among African American females (Hackett & Byars, 1996). The research identifying these discoveries also observed possible eroding or prevention in the ability to develop effective efficacy beliefs (Hackett & Byars, 1996).

Women of color have reported facing negative stereotypes resulting in complex circumstances (Sanchez-Hucles & Davis, 2010). Female leadership research in the 1990s suggested females select low-paid and low-status careers to maintain family life and professional life (Farmer, Wardrop, Anderson, & Risinger, 1995; Savage & Fouad, 1994). Considering such

findings, the race and gender roles in one's career experience suggests a direct link to aspects of one's leadership aspiration despite negative beliefs, treatment, practices, decisions, perceptions, and attitudes. African American women possess memberships to their gender and American minority group. This results in possibilities for both racism and sexism challenges in the workplace.

As mentioned earlier in this chapter, the leadership and career literature on women was observed to inconsistently reference African Americans. Reviewing the literature revealed incidents when researchers observed their research lacked a diverse population and more specifically lacked African American participants (Gray & O'Brien, 2007). Additional research related to variables influencing African American female aspirations is necessary. Both women and women of color aspiring to become leaders and holding leadership roles face an array of challenges (Sanchez-Hucles & Davis, 2010). It would be beneficial to study the self-efficacy of female business majors aspiring to become leaders to contribute to the available leadership research.

In conclusion, the above information discussed how, the media, mentorship, ethnicity, and obstacles may impact the female aspiring a leadership role. The literature reviewed shares the conveyed experiences of various female populations including current leaders and students aspiring leadership. The literature reviewed shared helps to introduce the topic of how self-efficacy may influence leadership aspiration of women. The implications of beliefs and psychological influences of perceived challenges women face while aspiring leadership could offer broader conclusions on the matter. Ethnicity is another factor that may present implications to such research. The exploration of these possibilities warrants attention and investigation.

The next two sections will offer an extensive overview of self-efficacy and leadership. An overview of the research history, styles, and dynamics of the variables are presented in detail. The literature included in this section will include relevant studies and sources to highlight the implications of the two variables pertaining to the female experience.

Self-Efficacy

Self-efficacy is a central concept of Albert Bandura's social cognitive theory (Bandura, 1977). Bandura (1982) defined self-efficacy as a personal judgment of one's thoughts on how effective they can execute action in specific situations. The psychological factor is also recognized as a person's personal belief about their ability more than their actual ability (Barclay et al., 2007). Self-efficacy is also defined as one's thoughts about their competencies (Cassidy, 2015). In addition, one study that will be discussed in more detail later in this chapter noted levels of self-efficacy form a foundation to formulate mastery and confidence in situations (Levy & Radomsky, 2015). These findings suggest insight on one's self-efficacy offers assertions surrounding the leadership aspiration of an individual.

Social Cognitive Theory

Initially, social cognitive theory hypothesized self-efficacy as a coping behavior regulating how a person expends efforts while facing obstacles (Bandura, 1977). The theory expanded from merely observing self-efficacy and cognitive processing (Bandura, 1989) to encompass levels of motivation, determining aspiration, and academic accomplishment.

In addition, performance mastery was discovered as an area frequently investigated in self-efficacy research (Barclay et al., 2007). The findings related to this topic suggest performance success in particular areas is equivalent to stronger self-efficacy beliefs. The

literature also reports how Bandura's self-efficacy theory is associated with career development in general (Luzzo, 1996). The study reporting this association is discussed later in this section.

This section will begin with a review of the history and significance of self-efficacy. Next, the various forms of self-efficacy will be outlined. Also an extensive introduction to leadership self-efficacy is presented. The section will have an overview of self-efficacy and leadership aspiration to provide a context to support the exploration of self-efficacy in relation to leadership aspiration.

History and Significance of Self-efficacy

Self-efficacy is recognized as a leading research topic in both psychology and education (Celik, 2015). Gender, ethnicity, age, education, and socioeconomic status are attributes that reportedly influence an individual's efficacy beliefs (Bussey & Bandura, 1999). Researchers have used self-efficacy and self-concept interchangeably when actually the two psychological factors reveal different ideas about one's self (Lin, Lawrenz, & Hong, 2013).

Self-concept does not offer insight about one's future interest like self-efficacy (Lin et al., 2013). Self-concept is defined as a person's feeling about themselves and personal beliefs about their abilities (Wernersback, 2011). Additionally, when study participants faced adversity, Bandura's research found high levels of self-efficacy increased perseverance and motivation (Bandura, 1997; Bandura et al., 2001).

A self-efficacy study observing undergraduate students noted the individual's resilience (Cassidy, 2015). The researcher investigated academic self-efficacy (ASE) and academic resilience found ASE to be an effective predictor of academic resilience when students faced personal or assumed adversity. The ASE of 435 undergraduate students were observed to

correlate with and a significant predictor of academic resilience. Also noted, was this was particularly evident when the participants faced adversity.

Bandura's (1977, 1982, 1986) research on perceived self-efficacy suggested the psychological concept influences one's performance, passion, and persistence. Moreover, self-efficacy also indicates the level a person believes they are capable to perform specific actions as leading (Bandura, 1982). Bandura's model outlined the relationship between efficacy expectation and outcome expectation of one's behavior.

One study with undergraduate students suggested obstacles could somehow impact self-efficacy and one's career path (Lent et al, 2000). The researchers found indications that self-efficacy was important to overcome anxiety and pursue goals. Subsequently, the study suggests one's self-efficacy offers insight on the direct impact and belief in one's ability to endure potential negative circumstances (Lent et al., 2000). Observing how self-efficacy is employed with capabilities is valuable information to support future, as well as current leaders in the workplace.

A meta-analysis examined the relationship between self-efficacy and work-related performance (Stajkovic & Luthans, 1998). The work-related performance and study setting was both simulated and in the actual field. The researchers found what they called a downward movement regarding the relationship between the two variables. The downward movement observed among the participants had both pronounced levels of low task complexity and high task complexity in various settings (Stajkovic & Luthans, 1998). In the study, the levels of complexity included low, medium, and high. The researchers account for the variance because of the varying levels of task complexity. Ultimately, the findings indicate (Stajkovic & Luthans, 1998):

that task complexity is a strong moderator of the relationship between self-efficacy and performance also when meta-analyzed across the body of relevant literature (e.g., $N = 16,441$). Although the relationship between self-efficacy and performance was significant for each level of task complexity, the magnitude of the relationship was the greatest for simple for simple tasks, decreasing for moderate and high levels of task complexity. (p. 253)

The results indicated self-efficacy was both positively and strongly related to work-related performance. However, the correlation found between self-efficacy and work-related performance was described as quite conservative (Stajkovic & Luthans, 1998). The literature also suggests high self-efficacy may lead to noteworthy performance not necessarily contingent on one's ability (Barclay et al., 2007; Shortridge-Baggett, 2001). Various theories presented in the study support self-efficacy patterns offering support to the notion those aspiring leadership require higher levels of self-efficacy. It may also be inferred from the literature, those with potential hinderences such as gender and race may require higher levels of self-efficacy.

Research examining self-efficacy specifically discovered its influence on achievement, academic performance, and academic motivation (Schunk & Meece, 2006; Zimmerman, 2005). Early research on self-efficacy explored its relationship to organizational behavior also observing an influence on achievement, performance, and motivation (Gist, 1987). Examples of organization behavior related to self-efficacy found in the literature were restructuring of corporations, mergers, divestitures, rapid expansions, reduction in force, internal realignment of functions, and strategic changes in mission or company offerings (Gist, 1987). The examples serve as a guide to the components and dynamics of organizational behavior.

This particular research outlining these organizational behaviors reviewed self-efficacy in relation to a theoretical and a practical application for organizational behavior and human resource management. The author also noted little attention was evident in the literature pertaining to the implications self-efficacy has on these areas (Gist, 1987).

The literature introduced in the study presented a case supporting self-efficacy's value in organizational settings (Gist, 1987). The theoretical framework presented in the article outlined the components to the benefits of measuring self-efficacy in management development. Based on the literature gathered in the review, the author makes the conclusion that a history of successes increases confidence in new situations, leads to the setting of higher goals, increases persistence overcoming difficulty, and increases the likelihood to perform at one's best (Gist, 1987). Lastly, the author recommends customizing self-efficacy measurements for various organization types, such as medical, academic, and sports organizations to assess employees accurately.

Investigating the literature on self-efficacy also resulted in the discovery of various forms of self-efficacy. The various forms of the psychological factor offer a basis for its predictive potential of leadership aspiration. Not all the modes of self-efficacy found in the literature was necessary to include in this review. Only the concepts relevant to female leadership observation are presented. Self-efficacy's vast impact is indicated in each mode of the variable introduced below.

General and Specific Self-Efficacy

General self-efficacy (GSE) is a trait that signifies one's belief in his/her ability to succeed across situations (Menci, Tay, Schwoerer & Drasgow, 2012). GSE is considered helpful when predicting behavior where people lack prior knowledge and experience (Sherer, Maddux,

Mercandante, Rentice-Dunn, Jacobs, & Rogers, 1982). Specific self-efficacy (SSE) was introduced by some researchers as a construct surrounding specific tasks to predict behaviors, unlike general self-efficacy (GSE) which predicts behavior of various situations based on a person's perception of their ability in a variety of situations (Eden, 1988, 1996; Gardner & Pierce, 1998; Judge et al., 1998). The literature on the SSE appears to agree it is an important topic in relation to how it develops and influences performance (Menci et al., 2012).

One study found both GSE and SSE are reportedly positively influenced by training (Menci et al., 2012). This is consistent with early literature reporting a theoretical foundation regarding information processing occurring during training (Gist & Mitchell, 1992) and studies who report GSE's malleability after training (Schwoerer, May, Hollensbe & Menci, 2005). This study concluded the findings may be due to individual's likelihood to adjust their self-efficacy pertaining to work-related tasks when provided training (Menci et al., 2012).

Female Self-Efficacy

The literature surrounding female self-efficacy described how a woman's opinion and expectations about her abilities may lead to avoiding specific behaviors (Luzzo, 1996). Self-limiting behavior of women is explored in research suggesting a hesitation in aspiring to leadership positions because of a lack of confidence in their ability (Dickerson & Taylor, 2000). The number of women in the study choosing each task as a function of self-efficacy 31 had high levels and 13 had low levels of task specific self-efficacy. According to the view that self-efficacy is one's belief that they are capable of specific performances (Bandura, 1986), women who demonstrate a lack of confidence in their ability, or avoid actions because of negative thoughts, present a unique experience from males.

Student Self-Efficacy

Students with high self-efficacy outperform their predictions and expectations unlike those with low self-efficacy who fall short of obtaining their true potentials (Klassam & Lynch, 2007). Historical studies on the topic have found college student's perceived belief about their educational and occupational capabilities were related to their career options (Betz & Hackett, 1981; Betz & Klein, 1986). The researchers of these historical studies have operationalized career self-efficacy in relation to intentions and behavior (Betz & Klein, 1996).

Academic Self-efficacy

Academic self-efficacy is referred to as how a person perceives their academic abilities for specific tasks (Schunk, 1991). High levels of academic self-efficacy reportedly fosters successful and persistent students (Celik, 2015). Another related self-efficacy was found among this literature. College self-efficacy was introduced and observed as an indicator of a student's academic success (Wright, Jenkins-Guarnier, & Murdock, 2013).

Leadership Self-Efficacy

Another type of self-efficacy specifically describing the leader is leadership self-efficacy (Leithwood & Jantzi, 2008). This form of self-efficacy resulted in the most comprehensive discoveries of all the forms discussed in this section. Leadership self-efficacy is a form of self-efficacy that considers both the leader and the leader's actions (Hannah et al., 2008). Leadership self-efficacy research describes the concept as a personal characteristic (Bobbi & Manganelli, 2009). Leadership self-efficacy was also described in the literature as identifying a person's thoughts about how they can successfully exercise leadership and more specifically "setting a direction for the work group, building relationships with followers in order to gain commitment to change goals, and working with them to overcome obstacles" (Paglis & Green, 2002, p. 217).

Leadership self-efficacy is said to portray the capabilities a leader believes they will perform in their role (Ng et al., 2008). Leadership capacity has been described as a person's leadership beliefs, style, as well as approach based on their experiences (Dugan, 2011). This is unlike leadership self-efficacy which research has identified to influence capacity and is viewed as one's internal belief in ensuring the success of their leadership (Hannah et al., 2008).

A particular study reported how significant leadership efficacy is to areas such as the motivation to lead, effective leadership and overall leadership performance (Chemers, Watson, & May, 2000). The particular study approached the topic clarifying complex processes that underlie effective leadership. The researchers of this particular study found efficacy and optimism contribute not only to a leader's image of competency but also to actual performance capability in the role (Chemers, Watson, & May, 2000).

The number of studies on leadership self-efficacy is increasing (Anderson, 2008; (Baker, Larson & Surapaneni, 2016; Hannah et al., 2008; Ng et al., 2008; Paglis & Green, 2002). The benefits of leadership self-efficacy were evident in the literature. Research on leadership self-efficacy merely focusing on behavior patterns or outcomes does not fully address the development of leadership self-efficacy nor the presence of this factor on the leader's dynamics (Hannah et al., 2008). For example, leadership self-efficacy was also found to aide extraverts with positive and negative job autonomy (Ng et al., 2008). Leadership self-efficacy was also found to aide extraverts with positive and negative job autonomy, meaning extraverts (high or low) on leadership self-efficacy experienced both positive and negative job control in the following four areas: 1) how work expectations are handled 2) establishing rules and procedures 3) determining how work exceptions are handled and 4) setting workload quotas (Jong, 2016; Ng et al., 2008).

A study was found in the literature reporting despite perceived barriers, strong personality traits of 124 female college students were found to predict their leadership interest through leadership self-efficacy (Baker et.al., 2016). The researchers also utilized social cognitive career theory as the foundation in their conceptual framework as the current study. Social potency is the personality trait tested in the study to predict leadership interest. The study utilized a boot- strap procedure and discovered significant indirect effects of social potency on leadership self-efficacy.

Another study concluded demanding careers hinder leadership self-efficacy, personality, and effectiveness (Ng et al., 2008). A moderating role for job demands was found among military leaders and subordinates when job demands were high. The results demonstrated low job demands yielded no effect. The discoveries were made while examining whether leadership self-efficacy mediates personality and leader effectiveness for three personality traits. The personality traits observed in the study were neuroticism, extraversion, and conscientiousness. Reportedly, the results demonstrated demanding jobs weakens the effectiveness of the motivational impact of self-efficacy (Ng et al., 2008).

A study found leadership self-efficacy to facilitate the effects of personality characteristics such as extraversion, neuroticism, and conscientiousness on the participants with high or low job autonomy (Ng et al., 2008). The results suggest leadership self-efficacy serves as a motivational construct accounting for the overall impact of the personality of leaders, and their effectiveness. Job autonomy was measured by determining the level of authority the participants had in 1) how work expectations were handled, 2) in establishing rules and procedures about how their work is performed, 3) in establishing how work expectations are handled, and 4) setting quotas on completing tasks (Ng et al., 2008). The “results do not support

moderated mediation of job autonomy on the link between extraversion, leadership self-efficacy, and effectiveness. Instead, results show that leadership self-efficacy mediated the effects of extraversion under both high and low levels of job autonomy” (Ng et al., 2008, p. 740).

Other leadership self-efficacy research found external coping resources serve as an aide in the leadership experience (Brown, Jones, & Leigh, 2005). The longitudinal study reporting these findings examined role overload on self-efficacy and personal goals. The findings suggested self-efficacy beliefs were negatively impacted by the origin of role overload on perceived organizational resources. The researchers also concluded from the findings that low role overload positively influenced self-efficacy beliefs and performance goals (Brown et al., 2005). High role overload indicated the participant’s goal levels did not significantly affect self-efficacy’s impact on performance. Earlier research on leadership self-efficacy found demanding careers negatively impact motivation and ultimately performance (Brown et al., 2005; Chen, Casper, & Cortina, 2001; Stajkovic & Luthans, 1998).

Gender differences in leadership self-efficacy was also examined in the literature. The researchers of another study intended to present a new scale measuring leadership self-efficacy in a multidimensional manner (Bobbi & Manganelli, 2009). The study consisted of both university students and non-student adults. While conducting the research, discoveries were made pertaining to gender and leadership experience. Overall, the gender differences in leadership experiences impact on leadership self-efficacy were reported in the non-student group (Bobbi & Manganelli, 2009). The researchers determined the results are consistent with such research as Bandura (1997) who reported how influential one’s experience is on self-efficacy (Bobbi & Manganelli, 2009). Various influences of self-efficacy are reported in the literature such as verbal persuasion, psychological states, as well as life experiences (Bandura, 1997).

Other influences of leadership self-efficacy found in the literature are verbal persuasion and psychological states (Bandura, 1997). Also, early research discovered that experience is most influential on one's perception of their ability to lead (Shelton, 1990; Sherer et al., 1982). This suggests the female experience and minority female experience can influence one's perception of their ability to lead.

Future sections in this chapter will describe how gender and race interrelate with leadership aspiration. The perceived barriers influenced by gender may be closely explained by both role congruity theory (Eagley & Karau, 2002) and gender role schema model (Bem, 1981), which identifies patterns associated with female experiences. Moreover, the two theories offer details surrounding female leadership behavior. How self-efficacy works in conjunction with leadership offers insight on leadership behavior patterns.

Self-Efficacy and Leadership Aspiration

Considering the impact of the concept, examining self-efficacy as a predictor of female leadership aspiration offers a greater understanding to how the psychological variables are linked and produce individual experiences for women aspiring to become leaders. Leadership literature suggests those aspiring to become leaders have high self-efficacy beliefs that will sustain their efforts when experiencing challenges of the role (Bandura, 1997; Locke, 2003; Ng, Ang, & Chan, 2008; Yukl, 2006). Scholarly literature omits research specifically on leadership aspiration based upon gender, and business majors preparing to pursue future leadership roles in America's business world. The available research is all the more limited on African American female college students' leadership aspirations. Specifically, a relationship between aspirations for leadership roles within careers and self-efficacy among these population was not found in the literature.

If Albert Bandura suggests that self-efficacy is one's belief that they are capable of specific performances (Bandura, 1986), someone possessing high levels of self-efficacy would believe they can perform specific tasks despite other circumstances. The Career Decision-Making Self-Efficacy Scale (CDMSE) used in a study suggested high levels of self-efficacy increased the likelihood of engagement in specific career decisions (Luzzo, 1996). The researcher proposed a woman's opinion and expectations about her abilities may lead to avoiding specific behaviors (Luzzo, 1996). The researcher concludes Bandura's hypothesis in relation to self-efficacy serves to promote change in behavior when confronted by challenges (Luzzo, 1996). A multiple regression analysis revealed the CDMSES accounted for 29% of the variance in career indecision, however career salience, locus of control, and occupational self-efficacy was not in the regression equation. Ultimately, this evaluation suggests high levels of self-efficacy could result in "effective career decisions making, such as career decisiveness, career maturity, and vocational identity" (Luzzo, 1996, p. 276). The article concludes that the information will be helpful to career counseling and career development research.

Other self-efficacy research suggests the concept determines anxiety and hesitation to approach specific behaviors (Levy & Radomsky, 2015). This particular study was designed to develop a measure of self-efficacy for specific phobias. The results of such studies indicate low self-efficacy has the potential to result in avoidance behaviors.

Ultimately, Bandura's model frames the relationship between efficacy expectation and outcome expectation on one's behavior. Historical studies have found college students' perceived beliefs about their educational and occupational goals were related to their career options (Betz & Hackett, 1981; Betz & Klein, 1986). Betz and Hackett's (1981) study was reportedly the first to operationalize career self-efficacy in relation to intentions and behavior

(Betz & Klein, 1996). Self-limiting behaviors of women have been explored in research suggesting a hesitation to aspire to leadership positions because of a lack of confidence in one's ability (Dickerson & Taylor, 2000).

This section of the literature review continues with an extensive introduction to the literature on leadership aspiration. The information will continue the discussion of the female experience offering insight on the perceived ideals female students may have about aspiring to become a leader.

Leadership Aspiration

The significance of leadership aspiration may be explained observing how “Young adults, college-bound or not, face a major life decision: the choice of a suitable work role” (Berk, 2014, p. 455). Specifically, both the academic and the nonacademic exploration of college students' results in acquiring knowledge, ability to reason, enhanced self-esteem, and more over secure a sense of identity (Berk, 2014). Exploring a path to leadership is suspected to have dynamics specific to this journey. Leadership literature suggests the prediction of leadership requires a multivariate approach (Lord & Hall, 1992). The literature reviewed also identifies social environmental and external factors inhibiting women to explore leadership options, but research on the factors that positively influence women to explore this option is limited (Boatwright & Egidio, 2003). Moreover, the literature reports African American females are suspected to contemplate their career goals due to anxiety surrounding negative situations (Harvey, 2007; Swanson & Gore, 2000). This section defines leadership aspiration, presents key factors surrounding leadership aspiration and gender, as well as outlines how both a female's gender and ethnicity may influence her leadership aspiration.

Identifying a definition for leadership aspiration presented several challenges. An early

study defined leadership aspiration “as the ambition for leader roles” (Kreuzer, 1992, p. 36). For the most part, research studies, and dissertations defined the term using definitions for aspiration in general and career aspiration. After an extensive search to identify a definition for leadership aspiration, this study uses these terms to define and explore leadership aspiration to remain consistent with the literature on the topic. Leadership aspiration was also found to measure one’s intentions to pursue promotional opportunities, manage a staff, and obtain a position of leadership in their field (Boatwright & Egidio, 2003).

An operational definition of aspiration was discovered describing the term as the goals individuals invest their time, effort, or money to fulfill (Sherwood, 1989). The definition submits the importance of personal choice and how essential it is to aspiration. On the other hand, career aspiration is described as the ideal work option, and possibilities sought after by an individual (Metz, Fouad, & Ihle-Helledy, 2009).

Also found in the literature was the description of career aspiration as an individual’s desire for future employment (Powell & Butterfield, 2003) and a representation of the dreams an individual has regarding his/her ideal career (Farmer & Chung, 1995). Pertaining to a women’s career aspiration, unique options are observed when compared to men. Such options are working in the home or outside the home, traditional versus non-traditional careers, or having a career versus a family (Fassinger, 1990). This suggests women contemplating leadership roles share unique options and consideration.

While making these discoveries and reviewing the literature on leadership aspiration, the search resulted in slim results. Over about the past 10 years, a few dissertation students investigated the concept in specific areas such as education (Sperandio & Kagoda, 2010), sexism (Rollero & Fedi, 2014) and healthcare (Rocio & Alice, 2009). The topic is often found to be

used interchangeably with career aspiration (Gregor & O'Brien, 2015). Also noted in the leadership aspiration research is a limitation to utilizing participants who are current leaders. Few studies observe the world of future leaders. Some of the rare studies that explored college students or younger populations are reported in this section.

An early study discovered a relationship existed between an individual's aspiration to become a leader and one's leadership ability (Gordon & Medland, 1965). All the participants were men in two different groups of a US Army basic training program. The researchers used the Leadership Scale of the Survey of Interpersonal Values (SIV; Gordon & Medland, 1965) to measure the leadership aspiration of their participants. The SIV offers insight on needs and values. More specifically, the SIV measured the importance the individual placed on the aspiration to become a leader. To assess leadership ability, the participants were rated by peers two different times during the training. The results clearly indicated a positive relationship between leadership aspiration and peer rated leadership ability indicating those with higher leadership aspiration were rated higher by their peers on leadership ability (Gordon & Medland, 1965). The degree of the relationship was not large, but the findings suggest particular aspects of the participants as their needs or values may predict leadership behavior.

The findings of the 1965 study could imply similar or more complex experiences for females when considering active female leaders that may be exposed to organizational barriers (Nazemi, Mortazavi, & Borjalilou, 2012). Moreover, African American female leaders are also at risk of exposure to racial discrimination during their careers adding complexity to the leadership experience (Coleman & Campbell-Stephens, 2010). These factors are explored below.

Instrumental Study

The instrumental study to the current research is by Boatwright and Egidio (2003), which points out how psychological and social factors of females are linked to predicting their leadership aspiration. The researchers proposed that researching psychological factors associated with leadership aspiration of female students who have not experienced workplace negativity is important. The factors observed in the study were femininity, connectedness needs, self-esteem, and fear of negative evaluations. Reportedly, these conclusions were made when considering how a woman's social environment impacts their social and psychological factors.

Of the 213 female college students in the Midwest liberal arts college who participated in the study, three of the four factors were found to be significantly related to leadership aspirations (Boatwright & Egidio, 2003). Femininity, connectedness needs, and self-esteem were found significantly related, but fear of negative evaluations was not significantly correlated to the studies dependent variable. The results indicate higher scores on these three variables are related to higher levels of leadership aspiration. The regression analysis pointed out when predicting women's leadership aspiration, self-esteem accounted for a significant amount of the variance ($p = .05$). This is beyond what was accounted for by the other variables. Participants reporting an emphasis on femininity, connectedness needs, and self-esteem reinforces the need to support these areas in the lives of future female leaders (Boatwright & Egidio, 2003). When all the variables were concurrently entered simultaneously into a regression equation, the variables maintained a significant contribution, as well as accounted for 16% of the variance.

Femininity. The researchers discovered in the literature that femininity predicted female leadership aspiration (Boatwright & Egidio, 2003). The operational definition of femininity presented in the study is the level of gender role characteristics. Self-reported feminine and

masculine characteristics were measured to determine whether the participants possessed stereotypical traits of either gender. Higher femininity scores indicated stronger self-perceived feminine gender role identity. Lower scores indicated stronger masculine gender role identity. Consequently, the women who reported high leadership aspiration were found to see themselves possessing a traditional feminine gender role. Femininity accounted for a strong indicator of the participants' leadership aspiration.

Connectedness Needs. The study also assessed the female participants' connectedness needs by observing their value and need for meaningful relationships with others (Boatwright & Egidio, 2003). According to the researchers, higher scores predicted stronger interest in meaningful connections with others. Moreover, Boatwright and Egidio (2003) discovered in the literature that theorists found noteworthy connectedness needs differences among males and females. Reportedly, females were found in the literature to have higher reports of connectedness needs. The results indicate "the greater a woman's interest in healthy and meaningful connections with others, the greater the likelihood that she would express an interest in future leadership positions" (Boatwright and Egidio, 2003, p.9).

Fear of negative evaluation. Fear of negative evaluation measures one's apprehension about evaluations by others, distress over negative evaluations, and expectations of negative evaluations (Boatwright & Egidio, 2003). The researchers measured greater reports of worrying about negative evaluations to suggest a desire to receive approval of others and increased efforts to avoid disapproval. Also, higher scores in this area reportedly indicate distorted views about the magnitude of the impressions one makes on others. The study found low scores of fear of negative evaluations to indicate minimal social anxiety, interest in new experiences, and dominant characteristics. Fear of negative evaluations was not found as a significant variable.

Participants reporting higher scores of fear of negative evaluations decreased the leadership aspiration scores.

Self-Esteem. The operational definition presented in the study for self-esteem is one's level of self-acceptance. According to Boatwright and Egidio (2003), high levels of self-acceptance indicates stronger acceptance of self. The participants' higher self-esteem scores resulted in predicting higher leadership aspiration scores.

Participants reporting an emphasis on femininity, connectedness needs and self-esteem reinforces the need to support these areas in the lives of future female leaders (Boatwright & Egidio, 2003). The researchers suggest offering college and university programs to facilitate support in these areas. More specifically, the researchers recommend providing leadership skills development to address the influential psychological variables in the study and support females pursuing leadership aspiration.

Reports of the positive influence of femininity, connectedness needs and self-esteem on leadership aspiration indicates the implications of these variables on the female experience. Connectedness needs was found to most influence the leadership aspiration of the college females in the study. This variable stands out as substantial area of influence on females aspiring leadership. Furthermore, the researchers concluded the findings recognize that the social environment may undermine professional opportunities for women to achieve leadership roles. The basis presented for the argument is the literature describing how gender role myths may be formed in childhood by subtle, pervasive, and false perceptions (Kreuzer, 1992).

In addition, the results did not find age or educational level significant (Boatwright & Egidio, 2003). Ethnicity was not included in the design due to the homogeneity of the sample. Furthermore, such findings could encourage aspiring leaders' paths while preparing them for

anticipated obstacles. The authors suspected the findings of researching the internal (psychological) and external (social) world of females could increase female representation in leadership positions (Boatwright & Egidio, 2003). Such studies findings support the intention of the current research to study female college students.

The study by Boatwright and Egidio (2003) is one of the few studies found in the literature that specifically looked at leadership aspiration of female college students. The researchers reported finding only two previous studies observing psychological variables influence on predicating leadership aspiration of females. One study specifically operationalized leadership aspiration as the career plans the study's respondents had for themselves along with the personality characteristics associated with leadership and past leadership experience reported (Kreuzer, 1992).

Boatwright and Egidio (2003) used the CAS to measure leadership aspiration of their respondents. The researchers reported the internal consistency reliability estimates were: "CAS, 0.77; Leadership and Achievement Aspirations, 0.82; and Educational Aspirations, 0.76" (Gray & O'Brien, 2007, p, 317). The tool was found to be an appropriate measure of leadership aspiration. It is important to note, the population used to evaluate the scale was not diverse. Traditionally, career aspiration was measured using a single item asking participants what career are they aspiring (Cranston & Leonard, 1990; Thomas, 1986).

This instrumental study is an early report of how leadership aspiration of females has been overlooked in research supporting the notion to use career aspiration and leadership aspiration interchangeably. In addition, the Boatwright and Egidio (2003) study is referenced in various dissertations and particularly gender leadership studies. This and other leadership

studies suggest gender adds unique components to a female with leadership aspiration. Women and men were found to see their future careers differently (Kreuzer, 1992). The study reporting such findings used 310 business, education, and public administration students from the age of 20 to over 40. The sample consisted of 63% women and the education students who comprised of 85% females, reported less aspiration for administrative responsibility than respondents from business and public administration students. Only 13.8% of the women in the study reported desired administrative responsibility for at least 11 employees, while 35.6% of the male participants saw themselves in these roles (Kreuzer, 1992). Leadership aspiration research is an opportunity to seek factors contributing to a belief system. Findings from the current study and others may encourage higher education institutions to provide programs to aide female college students aspiring to become leaders.

Leadership Aspiration and Gender

A study discovered in the literature reported young females have increased their interest in occupations dominated by males over the last four decades (Gottfredson, 2005). As early as 1991, researchers studying how gender influences aspiration discovered differences among men and women (Arbona & Novy, 1991). The career aspiration of college females may be impacted as they question their capacity and options to succeed in male-dominated professions while experiencing apprehensions surrounding family responsibilities (Chhun, Bleeker, & Jacobs, 2008; Wigfield, Eccles, Schiefele, Roeser, & Davis-Kean, 2006).

One study about college students' career aspiration found more women than men aspired to select social and conservative work environments (Arbona & Novy, 1991). This early study observed both gender and ethnic differences in the career aspirations, as well as expectations of a diverse sample of freshman. The study observed Mexican American, White American, and

African American students. The African American student's results varied from the other students.

Overall, the researchers reported that the gender differences in career aspiration of both the Mexican American and White American students fell into what the researchers identified as traditional gender patterns. The findings revealed a large number of male participants were found to aspire to work in what was referred to as realistic and investigative occupations, while the women primarily aspired to work in social and conventional occupations. The researchers concluded the results are consistent with the literature describing the conflict women report pertaining to home and career, as well as low levels of self-efficacy in pursuing traditional male occupations (Arbona & Novy, 1991). Leadership could fall into this traditional male occupation category. Also, the researchers observed unique patterns among the African American students and suggested further research. Specifically, ethnicity differences in career aspiration were only noted among African American students. African American students did not demonstrate similar gender patterns surrounding career aspiration as the other students in the study.

Another study mentioned earlier as one of the few found on the topic, found gender roles measured by the Bem Sex Role Inventory (BSRI) was a predictor of the leadership aspiration of business, public administration and education university seniors (Kreuzer, 1992). Leader aspiration was measured through three elements in this study. The elements were career goals (ambitions), leadership experiences, and possession of specific leader qualities. A difference was noted in how women and men reported how they viewed their future. Specifically, the results were consistent with the limited research on leadership aspiration. The assumptions made were females pursued leader positions less than men and females reported lower career expectations than the male participants. The researchers concluded the female experience in conjunction

with various leadership qualities, understood realities or socialization might result in less hope for a career in leadership than their male counterparts (Kreuzer, 1992).

Overall, the business and public administration students indicated the highest levels of aspiration (Kreuzer, 1992). Regarding the education students and leadership aspiration, the researchers determined they might have reported lower ambition because their aspiration is in relation to their future teacher colleagues rather than other positions in academia (Kreuzer, 1992). The research findings indicate the female participants in general aspire for fewer opportunities in their career than the males despite reported similar experiences and qualities (Kreuzer, 1992). When answering the research question whether there are gender differences among university seniors' aspiration to leader positions, the researcher concluded attitudes learned in the early years of life may instill a low sense of worth among females, while putting aside experience and ability to uphold societal values (Kreuzer, 1992). An example mentioned in the study was "attitudes may be rooted in a reality where men generally make more money than women" (Kreuzer, 1992, p. 130).

A more recent study collected data from 202 female counseling and clinical doctoral students pointed out that leader identity, career salience, and willingness to compromise career for children were predictors of leadership aspiration (Gregor & O'Brien, 2014). The study also discovered achievement motivation, leader identity, and career salience predicted the students' intention to pursue American Psychological Association (APA) leadership opportunities as well as leadership opportunities in general.

Achievement motivation was measured in a particular study by The Work and Family Orientation Questionnaire (WOFO), which identifies work-mastery and competitiveness by (Spence & Helmreich, 1983). To observe the perception of the leader identity of the participants,

the researchers used the Motivation to Lead (MLT) subscale called Affective-Identity (Chan & Drasgow, 2001). The Work Role Salience (WRS) assessed career salience (Greenhaus, 1973). The researchers described work role salience as a person's value of both work and career. The Planning for Career and Family Scale demonstrated a willingness to compromise career for family among the participants (Ganginis Del Pino, O'Brien, Mereish, & Miller, 2013).

The results indicated achievement motivation, described as the desire to work hard, was the most notable predictor of career and leadership aspiration within the APA (Gregor & O'Brien, 2014). The researchers also discovered female students in the early part of their program reported higher levels of work role salience when compared to the females at the end of their doctoral program who prioritized their family. Overall, the association between the various variables hypothesized to influence leadership aspiration and the participant's perception of their leadership characteristics indicate how influential leadership aspiration is on the female's future.

The study was designed to identify specific leadership aspiration in the field of psychology (Gregor & O'Brien, 2014) unlike this current study intending on offering insight on the leadership aspiration of undergraduate and graduate business majors. Researchers pointed out an underrepresentation of females among the American Psychological Association (APA) leadership. They concluded this presented a cause for concern considering it is not consistent with the increasing number of females entering into the field of psychology.

Overall, the studies related to leadership aspiration found the female aspiring to leadership positions has a unique experience from males aspiring to become leaders. One specific study reports that a student's career aspiration is the most important variable influencing their future work experience (Wang & Staver, 2001). Despite this identified influence, more studies were found observing the leadership aspiration of current leaders.

For example, the objective of another study was to investigate multiple roles, leadership aspiration and organizational barriers' impact on women's inclination in adopting managerial positions while in higher education (Nazemi, Mortazavi, & Borjalilou, 2012). The researchers supported the need to study female leadership aspiration because of the tendency for women's leadership development research to focus on skills rather than factors influencing career aspiration to leadership roles. The participants in the study were Iranian. The researchers determined their findings were consistent with the literature discovering female leaders describe a wide range of organizational barriers while aspiring leadership in the organization (Shannon, 2007; Vanhook, 2003). Some of the barriers described were obligations to over-prepare to address stereotypes and observed double standards to outperform male colleagues.

The studies presented in this section reiterate the need for additional specific research surrounding leadership aspiration and gender. The research on career aspiration overlooks the opportunity to explore factors resulting in an individual putting aside their aspirations. Leadership aspiration research could propose intervention strategies that may support women during their decision making process regarding their future careers (Gregor & O'Brien, 2015).

Furthermore, the current leadership aspiration and gender research explores various topics and numerous conclusions. The studies presented in this section suggest a general gender difference in aspiration (Chhun, Bleeker, & Jacobs, 2008; Wigfield, Eccles, Schiefele, Roeser, & Davis-Kean, 2006). Also observed was research previously introduced related to females and leadership aspiration reported on such topics as achievement motivation, leader identity, work role salience (WRS), willingness to compromise career for children all to indicate some level of predication whether a female would pursue leadership opportunities (Gregor & O'Brien, 2014). The variables served as predictors of future career and leadership aspiration. These findings are

timely as women are reportedly increasing their pursuit of male dominated occupations (Gottfredson, 2005).

Also, the complexity of the factors of potential females and females of various ethnicities entering into leadership face warrants further exploration when considering the vast topics of research surrounding leadership. Specific research continuing such work observed gender and ethnic differences in aspiration will contribute to understanding the female, and the underrepresented in literature African American female experience (Arbona and Novy, 1991). This is particularly evident when studies found self-efficacy influences leadership aspiration among African American females (Harvey, 2007).

Leadership Aspiration, Gender and Ethnicity

There is an opportunity to contribute to the information suggesting factors such as self-efficacy and perceived barriers in society have the potential to impede the leadership aspiration of females, and more specifically, African American females. Studies on this topic were found to look at variables other than psychological variables, and have racially polarized participants. Various studies found on leadership aspiration and in general report their results are based on primarily White American participants, or one specific ethnicity. For example, the majority of the female students in the 2014 leadership aspiration study mentioned earlier in the previous section were White American (Gregor & O'Brien, 2014). Specifically, the participants in the study were reportedly 74% non-Latina White Americans.

Research has found that American ethnic minorities are afforded less career options, along with more career barriers than nonminorities (Metz et al., 2009). The minority student participants were found to have more congruence between their aspirations and expectations than the nonminority participants. The research also discovered significant differences between

gender and career aspiration of college students (Metz et al., 2009). A chi square analysis was conducted to evaluate the career aspiration of gender and ethnic differences. A significant association between gender and career aspirations was found at $\chi^2(5) = 26.73, p < .001$. Ethnicity and career aspirations were found statistically significant at $\chi^2(5) = 12.02, p < .05$. The researchers reported a comprehensive range of scores to measure the variables in relation to congruency and complexity. They suspect these results may be due to the minority student's entering college who "may have clearly defined career goals [more] than their nonminority counterparts" (Metz et al., 2009, p. 167).

Regarding gender differences, the researchers reported similar results to what they found in the literature (Metz et al., 2009). However, the results demonstrated different patterns than the literature pertaining to gender differences among college students' career aspirations. The example the researchers shared was both genders in the study were found to have higher rates of aspiration for social occupations, and reported low aspiration for what they referred to as realistic, or conventional occupations (Metz et al., 2009). The results also indicated the male participants were found to have higher aspiration for realistic and conventional occupations.

The authors also concluded from the results that the college students who participated in the study reported career expectations inconsistent to the current labor market (Metz et al., 2009). Additional research in this area of minority students' aspirations would be helpful considering the participants were 70% White American, 17% African Americans, 6% Hispanic/Latinos, 5% Asian Americans, and 1% Native Americans. Consequently, the sample was divided into minority and nonminority categories due to the small representation of ethnic categories.

A meta-analysis examining how various ethnic groups address career choices reported a difference in expectation among the groups (Fouad & Byars-Winston, 2005). The study reported ethnic minorities anticipated such circumstances as scarcity of career opportunities and limited career opportunities when compared to the career experiences of nonminorities. The researchers emphasized the disparities in career choices among ethnic minorities (Fouad & Byars-Winston, 2005). These findings are similar to the study described earlier in this section that observed Mexican American, African American, and White American college students to reveal gender differences pertaining to aspiration among Mexican and White American students, but not African American students (Arbona & Novy, 1991). The noted gender differences in the career aspirations and expectations of Mexican American and White American students fell in line with traditional gender patterns. The results indicated the majority of men than women aspired to and expected to work in what the researcher referred to realistic and investigative occupations, unlike the majority of women aspired to work in social and conventional occupations. The study's findings are limited considering the population was first year students. Also, reportedly, the mean age of students was 17.8 and 633 of the participants were White students.

Another study discovered participants' education level, presence of a mentor, and connectedness needs were found both positively as well as significantly related to the African American female participant's leadership aspirations (Harvey, 2007). The population of the participants consisted of females from 21 to 65 years of age with various education levels from a high school diploma to professional degrees. The results of the study indicated the higher the education level, the more likelihood of aspiring to become a leader increased. The researcher made these discoveries while investigating the role of self-efficacy, race and gender in relation to leadership aspiration. This suggests self-efficacy serves as a positive indicator of career goals

among the population. More specifically, a positive relationship was observed between the self-efficacy of African American women who participated in the study and their levels of leadership aspiration (Harvey, 2007).

Ethnic identity, trait anxiety, and career decision-making self-efficacy on race, as well as major was measured in a study (Gloria & Hird, 1999). The researcher discovered White American students had higher scores on the Career Decision-Making Self-Efficacy scale (CDSE), but lower trait anxiety and ethnic identity than American ethnic minorities. CDSE measures self-efficacy expectations in relation to career decision-making (Gloria & Hird, 1999). The findings suggested ethnic identity and group orientation were significant predictors of CDSE for racial minorities than White Americans who participated in the study. Of the 687 undergraduate students examined, 98 were classified as racial and ethnic minorities. The students who declared a major indicated high rates of career decision-making self-efficacy and trait anxiety. This was presumed due to the students with reported self-efficacy pertaining to career decision-making may be due to low anxiety because they have declared their major, as well as have clear career goals.

Regarding ethnicity, the researchers concluded some White Americans may not comprehend how one's ethnic identity could impact their decisions and perceptions (Gloria & Hird, 1999). Also, the interactional effects of gender in addition to ethnicity was not identified, but recommended for future studies. The dynamics in this study suggest leadership aspiration research in relation to self-efficacy, gender, and ethnicity could offer fruitful findings.

Another study exploring ethnic identity development and career development among first year college students found among four different ethnic groups, African American and Asian American students were found to have significant levels of career development compared to

White American and Latino American students (Duffy & Klingaman, 2009). The researchers cited Phinney and Ong's (2007) research to define ethnic identity development as contrary to personal identity development where individuals cannot choose their cultural background where individuals personal meaning of their ethnicities, and the extent to which they engage in certain behavior and attitudes of their ethnic group (Duffy & Klingaman, 2009). The study offered insight on how the ethnicity of 2,432 first-year college students influenced their vocational identity.

The African American and Asian American students who demonstrated higher levels of ethnic identity achievement also demonstrated higher levels of career decidedness (Duffy & Klingaman, 2009). Ethnic identity was not found to have a significant relationship to career decidedness among the White American students. The researchers found in general, the White American students were observed to have lower levels of ethnic identity than the students of color who participated in the study (Duffy & Klingaman, 2009).

This information is enlightening in relation to career aspiration, but yet another study not specifically exploring leadership aspiration. The significant findings surrounding ethnicity and career identity justifies the need for such research. The researchers suggest the finding may be due to the students of color having more of a sense of self in general which impacts their career decisions (Duffy & Klingaman, 2009). In addition, the researchers conclude African American and Asian American students' observed high levels of ethnic identity may also encourage an importance in career selection in general. Gender was not a variable in this study, but could be a factor suggesting another dynamic to identity and career development.

Additionally, a study was discovered in the literature reiterating the international spotlight of the issue of ethnicity and career aspiration. The authors found Black and minority

school leaders in England reported structural barriers, as racism, and the implications of discrimination on the populations career threshold (Coleman & Campbell-Stephens, 2010). Thirteen professionals were interviewed for the study. Nine women and four men made up the thirteen participants. Reportedly, seven were of Caribbean origin. Five were of Asian origin and one was of what the researchers called Black African origin (Coleman & Campbell-Stephens, 2010). Both race and gender were reported obstacles by seven of the women who reported experiencing challenges determining which one was the basis for the discrimination. The researchers noted the relevance of confidence and career expectation on the participant's ability to face the discrimination. Also necessary to point out is the low number of Black participants is consistent with the limitations found in the research on gender and leadership issues. This disparity among study participants supports the need for such studies as the current study intending on observing the behavior of African American female business majors.

In general, the information in the literature suggests the conclusion may be made that factors exacerbating a woman's decision to aspire a leadership role in her future increases when ethnicity or minority status was considered. Supporting the notion that society's stereotypes regarding compelled women to be over-prepared for their positions (Nazemi et al., 2012; Shannon, 2007; Vanhook, 2003). African American women contend with the dilemma of stereotypes as both an African American and a woman. Leadership aspiration research specific to the female experience observed such findings as limited career options and career barriers (Metz et al., 2009; Fouad & Byars-Winston, 2005).

The studies presented reiterate the need for specific research surrounding leadership aspiration. This area of research on career aspiration overlooks the opportunity to explore factors resulting in an individual putting aside their aspirations due to both gender and ethnicity.

Leadership aspiration research could propose intervention strategies that may support females during their decision making process regarding their future careers (Gregor & O'Brien, 2015).

Contributing to research on the aspiration of college students may serve to offer knowledge about the trends in the labor market. Also, exploring gender and leadership in relation to leadership aspiration is suspected to offer insight on self-efficacy's ability to aid in the pursuit of a career. The literature available in these two areas is lacking projections of the future behavior of female college students, business majors, and more specifically African American females. The following section will continue observing leadership aspiration beyond how self-efficacy impacts the behavior and present a closer look of how gender and ethnicity add to the experience.

Gender, Ethnicity, Self-Efficacy, and Leadership Aspiration

Historically, men are said to emerge as leaders in larger numbers than females, but females are observed to emerge as social leaders more than men (Eagly & Karau, 1991). In addition, masculine cultures and sex roles in societies are identified to dominate leadership behaviors (Turetgen, Unsal, & Erdem, 2008). These are examples of elements in social environments and are recognized as the basis for discouraging a female's leadership aspiration (Boatwright & Egidio, 2003). The available literature concerning the unique circumstances of how self-efficacy influences leadership aspiration when considering gender, as well ethnicity was reviewed. An array of female topics was unveiled as the glass ceiling, the gender pay gap, and the work and family life decision. The following literature will tie gender, ethnicity, self-efficacy, and leadership aspiration together to present the circumstances resulting in the joining of all the dynamics from a worldview.

A closer look at female leadership research revealed global differences. The World Economic Forum's Global Gender Gap Report (2010; 2015) continually reports Iceland, Norway, Finland, and Sweden to have the lowest gender gap rankings. The four highest-ranking gender gap countries in 2015 was Yemen (biggest gap), Pakistan, Syria, and Chad out of 145 countries. The countries were listed in the order of their ranking. According to the World Economic Forum 2015, the United States ranked 28 out of 145 countries. Geographic differences in relation to this topic suggest ethnicity differences warrants investigation.

A study pointed out research carried out in Western cultures found self-efficacy, gender, and gender roles to predict leadership aspiration more than other cultures (Turetgen, Unsal, & Erdem, 2008). These findings prompt more questions regarding gender and ethnicity differences in leadership aspiration when considering the Western culture has different findings than other cultures. This is particularly sparking questions surrounding the experience and self-efficacy of minority populations in countries like the US, which have a long history of underrepresentation in management (Eagly & Chin, 2010).

Additionally, the literature presented in this section will specifically look at females and racial/ethnicity minorities aspiring to become a leader. The literature review will also include a comprehensive analysis of the potential self-efficacy has on the leadership aspiration of the two groups. One feminist leadership study discussed earlier in the chapter makes claims the reality for women in power is influenced by circumstances beyond her control and females are faced with negotiating her realities (Johnson & Thomas, 2012). This research supports the evidence in the literature discussed earlier in the chapter that describes the female experience coupled with racial inequality complicates leadership aspiration. The theorists on the topic have found African American females find it necessary to utilize strategies to negotiate achieving power, identity,

and a voice (Johnson & Thomas, 2012). Self-efficacy could offer insight on a person's projected confidence in their success or accomplishment in specific tasks (Bong & Skaalvik, 2003). Observing the self-efficacy of females and racial/ethnic minorities may offer a greater understanding of future leaders and provide them support.

Gender Implications

One particular leadership study reports expectation differences throughout organizations of male and female leaders (Avolio, Mhatre, Norman, & Lester, 2009). This study discovered the largest gender differences studied in the literature are surrounding this topic of widespread beliefs in society about male versus female leaders (Avolio et al., 2009). The beliefs stem from social and role norms. Consequently, females are reporting a need to put forth serious effort to reclaim and assert power over their own realities (Johnson & Thomas, 2012). The literature on the topic refers to these differences as "gender divide" in the workplace (Davies et al., 2005) and is seen in such arenas as business, politics, sports, and technology. Gender divide may be described as the division between males and females in these areas. Ultimately, a researcher made the claim these gender issues present a standard that female leadership is at times considered problematic because it represents leadership of conceivable risk (Nanton, 2015) suggesting potential challenges and obstacles. It is also important to highlight females are not considered merely leaders, but are labeled as women leaders (Fletcher, 2010).

The literature on female leadership is concentrated with research topics such as the influence of media images (Yoder, Christopher, & Holmes, 2008), role models (Elprana, Felfe, Stiehl, & Gatzka, 2015), social environment (Boatwright & Egidio, 2003), and stereotype threats (Davies, Spencer, & Steele, 2005). Studies continually discuss obstacles females face surrounding these topics and other realities. A comprehensive overview of findings on the topic

presented reasons for the issue. The researchers concluded a pattern of minimal observed differences in capability and motivational factors between men and women (Huttges & Fay, 2015). However, the researcher concluded gender differences were prevalent in regards to the impact of motivation and applied action on career experiences. The findings suggest females could have challenges establishing and maintaining leadership positions. Consequently, the author concludes the literature is indicating leadership opportunities may not appear appealing to females. This may be a primary cause of the underrepresentation of females in leadership. Also, the recommendation was made “to understand barriers of female career development in research and academic contexts in order to leverage the full potential of a society’s human capital” (Huttges & Fay, 2015, p. 524). This may be another primary cause of the underrepresentation of females in leadership.

A common theme noted in the research is females are underrepresented in higher education leadership positions (Nazemi et al., 2012), and in leadership positions in general (Huttges & Fay, 2015). A particular study concluded the Iranian female faculty members’ career role salience was positively related to their leadership aspiration (Nazemi et al., 2012). The study identified career role salience as career’s prominence for a person in comparison to their other roles. Ultimately, the researchers suggested career role salience was an effective predictor of leadership aspiration and produced higher rates of aspiration (Nazemi et al., 2012). The study also found work-family conflict a negative predictor of leadership aspiration producing lower rates of aspiration. This study did account for cultural tendencies, but also recognized cultural relevance (Nazemi et al., 2012). As other studies found on leadership aspiration in the literature, psychological factors such as self-efficacy was over looked despite the indications the female participants observed inner conflicts during career selection.

An individual's perceived self-efficacy is reportedly an effective predictor of performance more so than previous achievement or ability (Cassidy, 2015). Also, early gender studies found a female's vicarious experience with someone possessing similar personal attributes served as a source of self-efficacy (Bussey & Bandura, 1984; Bussey & Perry, 1982). This suggests gender disparity in leadership positions may reduce self-efficacy beliefs of aspiring leaders (Barclay et al., 2007).

Role theory submits that an individual's characteristics are made up of roles influenced by salience particular to that individual (Nazemi et al., 2012). Role theory supports the research that multiple roles of females in conjunction with perceived organizational barriers require balancing the demands of life. Furthermore, the study suggests discrimination complicates the matter eliminating potential leaders and hindering their visions or goals in their organizations (Nazemi et al., 2012). The theory is similar to Eagly's (1997) Gender-Role Theory, which describes how people develop gender-role expectations based on beliefs related to socially acceptable behavior for men and women in their society. Moreover, the experience of racial/ethnic minorities as African American females may be described as frequently facing the need to exercise the "ability to succeed in work environments in which they are underrepresented" and may determine "a strategy that reinforces the identities of other groups while marginalizing their own" (Johnson & Thomas, 2012, p.157). It may be determined a female's roles and ethnicity require additional consideration when aspiring leadership.

Ethnicity Implications

This portion of the literature review will point out the literature highlighting ethnicities implications on leadership. More specifically, the research specific to African Americans and African American females was reviewed. This is for the most part because the world and

America has a history of mistreatment of black females. The following is a historic overview of the treatment of these women (Beal, 2008).

Her physical image has been maliciously maligned; she has been sexually molested and abused by the white colonizer; she has suffered the worst kind of economic exploitation, having been forced to serve as the white woman's maid and wet nurse for white offspring while her own children were, more often than not, starving and neglected (p.168).

In the American workforce, African American females make up a high percentage of the African American workforce in various socioeconomic groups (Beal, 2008). Over 30 years ago, women of color were hypothesized to experience double jeopardy due to race-based discrimination (RBD) and gender-based discrimination (GBD) for their dual membership (Beal, 1970).

Double jeopardy theory. Double jeopardy is recognized for its cumulative impact on females as African Americans throughout their careers (Leskinen et al., 2015). These findings suggest the impact may begin as early as the hiring stage, as well as during evaluations when considering promotions. African American females facing double jeopardy may experience such consequences as hostile work climates, isolation, and discrimination (Johnson & Thomas, 2012). This and the studies introduced next present how vocational choices and culture impact one's experiences.

A meta-analysis investigated the relationship between vocational choices and culture (Fouad & Byars-Winston, 2005). The study found varying perceptions of career opportunities and barriers among racial/ethnic groups. The researchers suggest the findings may be due to circumstances as when minorities enter the work place with high rates of their fellow minorities

in low-level positions and consequently this is suspected to influence their perception in relation to available opportunities (Fouad & Byars-Winston, 2005). The study collected articles from 1991 to 2004. The key finding of the study is race/ethnicity did not impact career aspiration or career interest, but greatly influenced perception of career barriers. The researchers recognized this perception and environmental reality of low rates of these groups in leadership roles are complicating career decisions. Evaluating qualities indicating reliance such as self-efficacy may offer insight on predicting leadership aspiration despite these perceptions (Cassidy, 2015).

Females in racial/ethnic minority groups who aspire leadership roles face 1) limited perceptions of others like themselves in these roles, 2) gender obstacles and 3) multiple role salience (Fouad & Byars-Winston, 2005). A broader understanding of the female aspiring to leadership roles and the racial/ethnic minority female aspiring to leadership roles would benefit from psychological assessments of self-efficacy.

A study previously mentioned earlier in this chapter examined college students' career aspiration and expectations based on both gender and ethnicity. The researchers found three factors that may be the cause of aspiration–expectation discrepancy (Metz et al., 2009). These factors suspected to be the cause of this dilemma are career barriers, career decision self-efficacy, and differential status identity.

The findings revealed significant gender and ethnic differences in the occupations the college students pursued (Metz et al., 2009). No significant differences were observed in relation to gender or socio-economic status, but the minority student's aspiration and expectations were closely related to one another in comparison to the other participants, but the researchers pointed out a difference. Potentially, the difference may have presented more pronounced results if ethnicity played a more central role in the study. This reiterates female

ethnic/racial minorities have a different leadership aspiration experience. Self-efficacy is a construct closely related to one's personal functioning and is anticipated to work with resilience to overcome adversity (Cassidy, 2015). The psychological factor self-efficacy may serve as fruitful research to determine outcomes in these populations.

A recent phenomenological study focused on the unique career experiences of African American women. The population observed in the study were college educated females from the age of 30 to 65 years of age employed at various Fortune 500 companies. The researcher presented a new perspective of how preconceived notions of the population impacts career mobility (Queen, 2016). More specifically, the participant's perception of the feedback they receive about their workplace performance was evaluated to determine the participants' career goals.

While evaluating African American females' career experience, the data collected suggested the performance feedback questioned the authenticity of the participants and was deemed an ineffective non-applicable tool (Queen, 2016). The African American women in the study reported they found themselves exploring other means to obtain sufficient feedback related to their performance. Ultimately, the data indicated career progression was heavily influenced by feedback from other African American females they confided in and they reported spending a considerable amount of time battling preconceived notions from their colleagues and the leadership (Queen, 2016). The majority of the participants also reported they found themselves defending their value and credibility in their workplace.

African American females could be classified in a double minority status. These studies reiterate the need to explore how such a psychological variable as self-efficacy may contribute to the leadership aspiration of African American females who are facing a possible future with

these conditions discussed in this section. Stereotypes have the potential to stigmatize individuals with accusations that devalue their group's social identity (Davies et al., 2005). Occupations have gender stereotypes as people do (Leskinen et al., 2015). It is not feasible to discuss all the possible links between gender and ethnicity stereotypes and leadership aspiration. This is well beyond the scope of this study. Therefore, it is necessary to acknowledge the complexity of the issue, and determine focusing on the role self-efficacy plays on leadership aspiration.

Current Study

A female career aspiration study identified a deep complexity in a woman's desire for career advancement (Gray & O'Brien, 2007). In fact, researchers discovered "a complex and dynamic process is revealed when considering educational and leadership aspirations" (Gray & O'Brien, 2007, p.333). Leadership literature presents a paradigm identifying a distinction between beliefs about what a leader looks like and what a *woman* leader looks like while confounding a woman's decision to emerge as a leader (Huttges & Fay, 2015). These are examples of how studies appear to defend females in leadership. Why this is necessary is not answered in this study, but observing if higher rates of self-efficacy increase the likelihood for females to aspire to leadership roles despite perceived barriers was explored.

To investigate this matter, the study explores the ways in which self-efficacy affects the leadership aspiration of White and African American females. The study also identifies potential differences in their levels of self-efficacy used to aspire leadership. The implications of one's ethnicity on their self-efficacy is deemed as relevant when considering it was found in the literature that both White and Black females face social implications because they are a female

(Haslanger, 2000). This suggests sexism in conjunction with race and class oppression exists as a possibility in racial/ethnic minorities' reality.

Research utilizing participants in the STEM majors are increasing in popularity (Dugan, Fath, Howes, Lavelle, & Polanin, 2013). No studies were found studying female business major's leadership aspiration. A rather recent leadership study reported finding the motivation to lead as a relevant factor for leadership emergence (Elprana et al., 2015). The study adds to the limited literature evaluating the self-efficacy and leadership aspiration of African American females. In addition, the study will contribute to our understanding of African American and White American female undergraduate and graduate business majors aspiring leadership roles in their future careers.

Research Questions and Hypotheses

As discussed in the previous chapters, this quantitative study has two research questions and four hypotheses. Quantitative researchers design research questions and hypotheses to emphasize the study's purpose and goals (Creswell, 2009). In this section, the research questions are stated along with a brief rationale for each question. Both questions obtain an in depth understanding of how the leadership self-efficacy of female business students affects their leadership aspirations. The number of females entering leadership roles in their field is consistently increasing despite perceived gender barriers (Gregor & O'Brien, 2015). Despite barriers specific to race and ethnicity, females of various ethnicities are also aspiring to become leaders.

The second question goes beyond the prevailing leadership research on White American participants to compare and contrast African American females aspiring to become leaders in their field. This question also guides the study and narrows the focus of the study to recognize

the influencing factors impacting the participants. These conclusions are the basis for the two research questions listed.

1: Does ethnicity affect female business students' leadership self-efficacy and leadership aspiration?

2: Does ethnicity moderate the relationship between leadership self-efficacy and leadership aspiration among female undergraduate and graduate business students?

Next are the four hypotheses that tested the relationship between self-efficacy and leadership aspiration among participants.

H1a: There is a statistically significant difference between African American and White American female business students' leadership self-efficacy.

H1b: There is a statistically significant difference between African American and White American female business students' leadership aspiration.

H2a: There is a significant difference between female business students' leadership self-efficacy and leadership aspiration.

H2b: There is a significant difference between African Americans and White American female business students' leadership self-efficacy and leadership aspiration.

Summary and Conclusion

The literature review in this chapter has succinctly pointed out the central role of leadership aspiration and self-efficacy, particularly the gender as well as racial/ethnicity implications among females. The unique psychological dynamics surrounding the career

selection process was found in the literature to be confounded by perceived obstacles and barriers due to one's gender and ethnicity.

Obstacles appear to be a consistent future for females in general aspiring leadership. Self-efficacy may serve as a tool to assist in their pursuit. Dominant gender norms exist and adhering to those norms while facing potential challenges specific to a females' ethnicity who are not members of the dominant race in their society may require higher levels of self-efficacy (Leskin, Rabelo, & Cortina, 2015).

This study demonstrates that central to the leadership aspiration process is the self-efficacy of female undergraduate and graduate business majors who face perceived obstacles and barriers. Furthermore, African American females in this population who may be faced with perceived obstacles and barriers specific to their race may exhibit different levels of self-efficacy to aspire leadership roles than White Americans.

The few empirical studies related to the current topic had limited diversity among their participants, or did not factor in the possibilities of the future leaders' ethnicity as components in their study. Also, a limited number of studies observed business students and no studies were found to specifically observe female leadership aspiration among this population. This study explore the possibility of self-efficacy and may offer assistance to colleges and universities educating female business majors with leadership aspiration.

Women are increasingly entering leadership positions despite wage gaps, stereotypes, and family obligations. Moreover, a woman is running for the highest political office in American in the 2016 National Presidential election. Female leadership studies as this study, will generally

contribute to the body of existing literature. Chapter 3 contains a discussion about the methodology chosen to conduct the study.

Chapter 3: Research Design and Method

Chapter Overview

The chapter presents the methodology used for the current study. The purpose of this study was to determine whether leadership self-efficacy, influences female undergraduate and graduate business students' leadership aspirations. The study results are presented according to the following two research questions:

1: Does ethnicity affect female business students' leadership self-efficacy and leadership aspiration?

2: Does ethnicity moderate the relationship between leadership self-efficacy and leadership aspiration among female undergraduate and graduate business students?

This chapter presents the procedures for conducting the study and major steps that guided the researcher. Specifics regarding the research design, including the sampling method and participant characteristics chosen are described. A description of the data collection procedures and instruments will follow. Next is a discussion of how the data was collected and analyzed. Finally, the chapter will report the assumptions and limitations in the methods as well as ethical assurances for the participants.

Research Design

A quantitative design was selected in an effort to document the precise score differences between the subjects to establish a detailed explanation of the methodology intended to observe the participant's self-efficacy and leadership aspiration. Moreover, the selection of a quantitative research method was intended to maximize the "objectivity, replicability, and generalizability" of the study (Harwell, 2011, p. 149). The validity of the results was strengthened because

instruments with established reliability suitable for applied research were selected to collect the data.

To test the presented hypotheses, a quantitative study with a battery of measures was determined the best option for this study. The instrumental study on self-efficacy and leadership successfully utilized the quantitative method to conduct their studies (Boatwright & Egidio, 2003). A quantitative approach allows the researcher to perform the study without biases, previous assumptions and the influence of previous experiences (Harwell, 2011). The hypotheses were tested based on the instruments and inferences were made about the population. As recommended, the researcher's specific training experience influenced the decision to employ the quantitative method (Creswell, 2009). The most appropriate approach to test the first three hypotheses were to perform an independent samples t-test and a 2x2 ANOVA tested the fourth hypothesis.

Lastly, the private survey technology solution company, Qualtrics, was utilized to enable the researcher to collect suitable participants for the current study with what the company describes on their website as simplicity, flexibility, security, and sophistication. The participants are of different geographical regions, various socioeconomic statuses, both private as well as public institutions, and an array of backgrounds. This diversity increases the external validity of the research study by expanding the applicability of the results to a vast population.

Procedures, Population, and Sample

This section introduces the population, inclusion criteria, and the sampling method. The population of interest in this study are African American and White American female undergraduate and graduate business majors. The research is quantitative in nature and the calculating tools used to determine the sample size is reported in this section.

Data was obtained from African American and White American female undergraduate and graduate business majors. The sample size included 262 students to assure sufficient power based on a statistical power analysis. The following combination of sources determined the sample size. First, the G*Power tool was one source used to help compute the statistical power analyses to avoid type II errors. The tool is commonly used in different t-test research (Faul, Erdfelder, Buchner, & Lang, 2009). Given the current study's design and the population effects, the information was plugged into G*Power software to calculate the sample size. The type of power analysis performed was an a priori, 0.80 power, .05 effect size (medium), and .05 error probability. Ultimately, the G*Power program determined a 252 total sample size. The Free Statistics calculator retrieved from the following website:

<http://www.danielsoper.com/statcalc/calculator.aspx?id=47> was used to compute the statistical power analyses and avoid type II errors. The rule of thumb is to calculate 30 subjects per cell for t-test/ANOVA resulting in 120 for the a 2x2 ANOVA considering this approach would be robust analysis with a medium-to-large effect size as previous researchers reported.

This projected sample size is consistent with the literature reviewed who studied similar effects and this information was used to reiterate the effect size. The instrumental study to this study by Boatwright and Egidio (2003) utilized 213 participants appropriate to conduct their study. A dissertation that observed the mediating role of self-efficacy on African American female's leadership aspirations used 203 participants (Harvey, 2007). A meaningful comparison was extracted to calculate the study's number of participants.

One particular issue was monitored when recruiting participants. It was a goal to gather equal participation of both ethnic groups. Hence, doubling the recommended number of participants based on power calculations was expected to address equal representation concerns.

Ultimately, the sample size was 262. An equal number of African American (131) and White American (131) students participated.

Undergraduate and Graduate Differences

The final sample consisted of 218 undergraduates (83%) and 44 graduate students (17%). The leadership aspiration subscale of the CAS-R was analyzed using an independent samples *t*-test to determine if there were any differences by enrollment level (undergraduate vs. graduate). This was performed in order to determine if the groups could be combined before running the analyses on the four hypotheses. No significant differences existed between the two groups on leadership aspiration, $t(206) = -0.799, p = .425$.

Inclusion/Exclusion Criteria

To assure a diverse audience of subjects, the participants were currently enrolled in public or private institutions of higher education throughout the United States. This increased the external validity of the research study by extending the applicability of the results to a broad population. However, international and community college students were excluded from the population to avoid potential external factors that could have impacted results. Freshmen, sophomores, juniors, and seniors who declared themselves business majors were included in the study in an effort to assure subjects were exposed to a business education environment. In addition, graduate students enrolled in business programs participated in the study. No one under 18 years of age were allowed to participate in the study.

Participants identified as in good academic standing with grade point averages over a 2.0 and who have no prior full-time work experience in leadership participated in the study. Community college students were excluded from the group of perspective participants in order to avoid dynamics specific to their population as nontraditional student. The American Association

of Community Colleges (2016, November 16) describes the institution as a gateway to post-secondary education for minorities, low income, and first generation postsecondary education students. In addition, the website described the nontraditional student community college student as adults above the average college student age and may be working while enrolled part-time. These dynamics may have interfered with successfully drawing conclusions from the data collected. Additionally, to have effectively analyzed leadership aspiration, the researcher recruited students with no previous paid leadership experience in their field. These recruitment efforts were an attempt to maintain focus on the research goals of the study. The Recruiting Statement may be found in Appendix A.

With this method, participation selection is not random and the students were selected using a purposeful approach to ensure ideal participants who meet the criteria for the study. The selection process is consistent with the literature and the controls are in line with the research questions. The study sought to look at the specific scores of two ethnic groups. Specifically, the participants were from African American (Non-Latino) and White American (Non-Latino) female business majors. The eligibility questionnaire asked the participant to report their ethnicity (See Appendix C).

Survey Technology

The survey technology company, Qualtrics, facilitated the data collection process via the Internet. After the survey was built on the Qualtrics website, a link to the survey was created. Qualtrics provided the link to their partner companies who offer recruitment services. Qualtrics utilizes their panel provider partners who identify and recruit appropriate students to participant in the study. “Qualtrics partners with over 20 online panel providers to supply a network of diverse, quality respondents to our worldwide client base” (Qualtrics, 2014, p. 3). Recruitment

efforts were based on the specified eligibility requirements. See Recruiting Letter in Appendix A. Qualtrics, an online market research sample aggregator, facilitated the survey process and distribute the recruiting statement upon uploading the contact list. The following is an explanation of how Qualtrics assures their customers the highest quality service (Qualtrics, 2014, p.3).

Qualtrics maintains the highest quality by using Grand Mean certified sample partners. To exclude duplication and ensure validity, Qualtrics checks every IP address and uses a sophisticated digital fingerprinting technology. In addition, every strategic panel partner uses deduplication technology to provide the most reliable results and retain the integrity of the survey data.

The survey link was directly sent via email to prospective participants. Below is a description of how Qualtrics invites people to participate in the survey process.

Potential respondents are sent an email invitation informing them that the survey is for research purposes only, how long the survey is expected to take and what incentives are available. Members may unsubscribe at any time. To avoid self-selection bias, the survey invitation does not include specific details about the contents of the survey (Qualtrics, 2014, p. 5).

Participants completed the leadership aspiration and career aspiration measures in a counterbalanced order using the online survey system. Ultimately, the questionnaire was built on Qualtrics website, store the data, and the data was exported to SPSS after downloaded from the website. A trial account was created to practice the data collection process for study.

Prospective participants received an introductory survey page explaining the purpose and significance of the research study. Each participant selected to agree or disagree to give their

consent to participate and they read all confidential information was kept separate from the data. A copy of the consent form is in Appendix B. The participants were clearly asked for their help in the phase of data collection of the researchers' study. The request emphasized that participation was voluntary and anonymous. The consent page also explained that participants may withdraw from the survey at any time. Additionally, the participants were provided the approximate time to complete the survey and a description of the type of questions they may anticipate if they agree to participate. The contact information of the researcher was provided should the participant have questions or concerns.

All participants completed an eligibility form and completion statements outlining the eligibility criteria. Whether the student is eligible or not, the potential participants received a thank you message for their willingness to participate in the research study.

The survey consisted of the tools in the following order: two leadership self-efficacy measures and a career aspiration scale. The career aspiration scale and leadership self-efficacy measures were counterbalanced to avoid potential pitfalls. The tools are discussed in detail in this chapter. Each eligible participant completed the online survey. Lastly, the participants were asked if they wished to enter the drawing for a chance to win a \$50 Amazon gift card.

Completed and valid surveys collected by Qualtrics were turned over to researcher. The researcher uploaded the surveys and organized the survey data. All respondent numbers were deleted after survey responses collected and filed with no identifiers. The winner of the gift card was randomly selected by Qualtrics in a drawing.

Instrumentation

All threats to the validity of the study is described in this chapter. This section also describes the collection of instruments used in the current study. Also, this section of the chapter

will also include the validity and reliability of the tools used to collect the data. The business students were asked to complete the *MSL Leadership Self-Efficacy Scale* (LSE), an additional *Leadership Self-Efficacy Scale* (MSL) and the *Career Aspiration Scale- Revised* (CAS-R) which includes a *Leadership Aspiration Subscale*. The instruments are explained in detail in the next sections. Table 7 in Chapter 4 provides the reliability of the measures and the Cronbach's alpha coefficients for the sample. See Appendix D for a copy of the 3 scales.

Multi-Institutional Study of Leadership / Leadership Self-Efficacy Scale. The independent variable is leadership self-efficacy. One of the scales that measured leadership self-efficacy was the Multi-Institutional Study of Leadership (MSL). The Leadership Efficacy Scale is a core scale of the MSL. The instrument was designed to examine the college student's leadership development (Dungan & Komives, 2007). The MSL utilizes student self-report leadership behavior data (Turrentine, 2001). The scale was developed based on Bandura's social cognitive theory and self-efficacy is a crucial element of the theory (Dungan & Komives, 2007). Reliability for the MSL scale maintained consistency with studies found in leadership literature (Dugan, 2006; Rubin, 2000).

Instrumentation. The scale has 4 items, each rated on a scale of 1 to 4. Four items are presented on the scale to assess confidence in one's ability to engage in select leadership behaviors. For example, behaviors are assessed as "working with a team or group project" or "leading others". The response options are presented on a Likert scale ranging from (1) not at all confident to (4) very confident.

Validity. A 2007 report on the MSL instrument was conducted with over 50,000 students from 52 campuses. The data in the report was collected from full-time students with a mean age of 21,

62% females, and 28% of the students were of color (Dungan & Komives, 2007). The MSL's LSE subscale and the entire MSL survey instrument has undergone extensive psychometric work according to the developers (Dungan & Komives, 2007). Studies discovered that used the MSL data as a Leadership Self-Efficacy scale found reliability estimates ranged from .86 to .88 (Dungan & Yuran, 2011; Harber et al., 2009).

The current study found the reliability of the measure was extremely low. Four items are presented on the MSL scale to assess confidence in one's ability to engage in select leadership behaviors. For example, behaviors are assessed as "working with a team or group project" or "leading others". The response options are presented on a Likert scale ranging from (1) not at all confident to (4) very confident. The present study found the MSL had a Cronbach's alpha coefficient of .779. The MSL was not used to formally test the hypotheses because of its low reliability (African Americans $\alpha = .775$ and White Americans $\alpha = .783$). The decision was made to use the MSL informally to analyze the hypothesis to observe if the scale would produce similar results as the LSE. When the MSL was found to have low reliability, it was determined to use the results only to observe if the findings were similar to the other leadership self-efficacy scale. The current researcher ran the tests of hypotheses with the MSL as a supplement to the results presented in Chapter 4. The MSL results are not part of the formal study. See Appendix D for the full MSL instrument and Appendix E summarizes the MSL results.

Leadership Self-Efficacy (LSE). Leadership self-efficacy was measured by the LSE. Due to the lack of validity evidence for the first leadership self-efficacy scale, the MSL, a second scale was identified to assess leadership self-efficacy (Paglis & Green, 2002). The LSE was selected because it measures how a person identifies their thoughts about how they can successfully exercise leadership (Paglis & Green, 2002) and how they believe they perform in

their role (Ng et al., 2008). The scale observes judgment of participants' capabilities for leading change and measures the following three dimensions: (1) setting a direction for where the work group should be headed, (2) gaining followers' commitment to change goals, and (3) overcoming obstacles standing in the way of meeting change objectives.

Instrumentation. The 12-item scale has a 10-point increment and 100-point probability response scale to rate their degree of confidence in their ability to perform leadership tasks. Not at all confident is reflected by zero, 50 percent reflects intermediate level of confidence, and 100 percent reflects completely confident (Paglis & Green, 2002). In this study, the Cronbach's alpha coefficient was .954. in the present study.

The following are four sample items from the three subscales making up the LSE: (1) I can figure out the best direction for where my unit needs to go in the future; (2) I can develop trusting relationships with my employees such that they will embrace change goals with me; (3) I can figure out ways for overcoming resistance to change from others whose cooperation we need to improve things; (4) I can find the needed supporters in management to back our change efforts (Paglis & Green, 2002). See Appendix D for the full instrument.

Validity. The developers performed a pilot-test on university department heads and MBA students before the data was collected on current managers in order to assure clarity, validity, and reliability (Paglis & Green, 2002). Significance was found between leadership attempts and LSE/direction-setting ($r = 0.21$), as well as LSE/gaining commitment ($r = 0.20$) both at $p < 0.05$ level (Paglis & Green, 2002). Another criterion-related validity test was performed and none of the LSE variables were significantly correlated with motivating/inspiring measure, but LSE/gaining commitment and LSE/overcoming obstacles was found significantly related to

problem solving at $p < 0.05$ level.

Career Aspiration Scale-Revised (CAS-R). Leadership aspiration is the dependent variable in the study. The CAS-R measures internal measures of career drive, and not the construct of career choice (Gray & O' Brien, 2007). Studies with various populations of females including college undergraduates, high school seniors, high school graduates, and female high school students of Latino decent reported the psychometric properties of the CAS (Gray & O'Brien, 2007; Gregor & O'Brien, 2016). The tool was continually used in the literature (Fisher, Gushue, & Cerrone, 2011; Laschinger et al., 2013; Rainey & Borders, 1997; Strauss, Griffin, & Parker, 2012) until the development of the revised scale.

Instrumentation. The CAS-R consists of three subscales. The subscales measure leadership, educational, and achievement aspirations (Gregor & O'Brien, 2015). The leadership aspiration subscale measures the degree a female aspires to become a leader in their field. Next is the educational achievement subscale designed to assess a female's degree of aspiration to continue their education or training in their career. The last subscale, the achievement aspiration subscale, determines the degree to which females aspire to be one of the very best in their field, or recognition for professional accomplishments. The Career Aspiration Scale-Revised (CAS-R) measures the domains of leadership aspirations, ambition to train, and manage others in their field (Gray & O' Brien, 2007).

Eight items are included in the leadership aspiration subscale. Sample items include “I hope to become a leader in my career field”, “I do not plan to devote my energy to getting promoted to a leadership position in the organization or business in which I am working”, and “Becoming a leader in my job is not at all important to me”. Participants indicated their degree of agreement with the 8 items on the leadership subscale from 0 (not at all true of me) to 4 (very

true of me). High scores indicate strong leadership aspirations. See Appendix D for the full instrument.

Validity. The validity of the subscales supported positive correlations with work role salience and achievement motivation. Over a two week period, all three subscales were reported to demonstrate test-retest reliability estimates above .70 and adequate internal consistency reliability (Gregor & O'Brien, 2016). The CAS-R subscales were found to indicate levels of achievement, leadership, and educational aspirations consistently (Gregor & O'Brien, 2016). The psychometric properties of the CAS-R were noted in the literature when used on both undergraduate and graduate students (Gregor & O'Brien, 2016). Adequate reliability levels were found in the achievement subscale (range $\alpha = .68 - .80$), leadership subscale (range $\alpha = .79 - .82$), and education (range $\alpha = .81 - .87$) when the CAS-R was designed to improve the original instrument (Gregor & O'Brien, 2016). Also, previous studies reported Cronbach's α coefficients ranged from .71 to .88 with United States female graduate students (Kim, O'Brien, & Kim, 2016). Ultimately, the revised instrument was determined to be a "psychometrically sound instrument to assess three components of career aspiration for young women" (Gregor & O'Brien, 2016, p. 567). The CAS-R Cronbach alpha coefficient was .912 in the current study.

Data Analysis

Statistical analysis of the data collected through the surveys were analyzed using the Statistical Package for the Social Sciences (SPSS) software program. All possible descriptive statistics including means, standard deviations, and correlations of the variables were calculated. An independent samples t-test was used to test H1a, H1b, and H2a. The type 1 error rate was low as suspected. A 2x2 ANOVA was the best method to test H2b. Consequently, it was not necessary to perform a MANOVA.

Assumptions

The results from the quantitative study are assumed to provide insight of the inner belief system of future female business leaders. The most appropriate methodology for the investigation was selected. Also, the study assumed the variables are normally distributed. A counterbalanced design was employed because it was one of the best ways to avoid the pitfalls of standard repeated measures designs. The subjects were exposed to all of the measures. It is assumed that the study findings will also provide insight to differences that might exist between African American and White American participants.

Ethical Considerations

Ethical considerations, issues of privacy and confidentiality, risk to participants, and benefits to participants are described in this section. The study ensured the ethical protection of the study's participants. The research was compiled utilizing the APA standards of ethical practices to safeguard the welfare and privacy of those willing to participate in the study (APA, 2010). Steps were taken to assure ethical practices during recruitment efforts, requesting acceptance of consent, obtaining Institutional Review Board (IRB) permission, assuring participant's confidentiality, maintain anonymous participation, and establishing a plan to protect the data collected.

No confidential information obtained by the researcher. Specific emphasis was made on the consent form that participation in the study was voluntary and the participants were able to withdraw from study at any time without penalty. The consent form was created to advise the students of their rights as participants, and information regarding the Institutional Review Board. The consent form is available in Appendix B.

All information was combined and all individual responses were not identifiable. Participants remained anonymous and the researcher only had each participant's respondent number. Qualtrics performed the gift card drawing in order to contact the winner of the raffle drawing.

The researcher will take appropriate steps to store the data securely for five years as instructed by APA guidelines. The laptop and information was not accessible to anyone other than the researcher. In the unlikely event of a breach of confidentiality, the identification of the participants will not be reasonably detrimental or damaging to the reputation of the participants considering the survey questions are not sensitive in nature.

Risks to participants. The nature of the study and content of the surveys posed no greater than minimal risk to the participants. The survey questions were pertaining to leadership and no potential harm is suspected, but uncomfortable feelings may have surfaced. Self-consciousness and frustration may have been induced by the survey questions. These feelings are not greater than daily experiences surrounding these issues. The informed consent form helped to prevent possible uncomfortable feelings during the process.

Benefits to participation. The participants did not directly benefit from the current study, but the researcher anticipated some degree of self-awareness of their potential abilities. The research was intended to serve as information to encourage and support future female leaders. The informed consent form reiterated participation in the study was voluntary and there were no penalties to discontinue participation at any time during the process with no penalty.

The inclusion and exclusion criteria for participants falls in line with proper equitable selection practices of research participants. The purpose and nature of the current research requires, as well as, justifies a particular population. No intentional pressure, coercive tactics or

undue influence was imposed on the participants. In addition, the population was not suspected to be vulnerable to coercion or undue influence. Inconveniences including time required and potential embarrassment, or discomfort is not suspected, but was minimized. The intention of the participation criteria benefited the research project.

Chapter Summary

The unique aspects to the study was outlined in this chapter while describing methodology, instrumentation, data collection, analysis plan, and other facets. The entire chapter summarized the quantitative study examining leadership self-efficacy and leadership aspiration of African American and White American female business majors. As discussed in the procedure section, the sample was recruited through the survey technology company, Qualtrics.

The methodology carried out to observe the population and sample was described in detail before introducing the procedure to carry out the study. Next, the assurance of validity and instrumentation continued the discussion surrounding the methodology. A step by step approach to the data processing and analysis plan providing the goal to test the hypotheses was outlined.

Finally, the chapter wraps up with assumptions, limitations, and ethical assurances to cover necessary aspects of the study to draw future conclusions. Ethical issues were carefully considered all throughout the research study. Confidentiality was maintained all throughout the process and data was stored in a secured laptop computer. Ultimately, the study posed no greater than minimal risk to the participants. The results of the study were intended to contribute to the existing literature on leadership and career aspiration for females considering careers in leadership.

Chapter 4: Results & Findings

Chapter Overview

The study was a quantitative design examining the effect of female business students' leadership self-efficacy on their leadership aspiration. The students were asked to answer the Multi-Institutional Study of Leadership questionnaire (MSL), the Leadership Self-Efficacy questionnaire (LSE), and the Career Aspiration Scale-Revised (CAS-R) questionnaire (See Appendix D). This chapter includes the analysis of data collected through an online survey.

Data was collected and then processed in response to the problems posed in chapter 1 of this dissertation. The fundamental goals drove the collection of the data and the subsequent data analysis. These goals were to develop a base of knowledge about future African American and White American female business students. Specifically, there were two research questions in the study:

- 1: Does ethnicity affect female business students' leadership self-efficacy and leadership aspiration?
- 2: Does ethnicity moderate the relationship between leadership self-efficacy and leadership aspiration among female undergraduate and graduate business students?

The objectives were accomplished. The findings presented in this chapter demonstrate the potential for merging theory and practice. This chapter presents the results of the quantitative study examining the leadership aspiration of female business students and leadership self-efficacy. This chapter also presents the demographic data of the sample and the results of inferential statistics.

Results

Demographics

The study included 262 participants. They were all students enrolled in a college or university majoring in business. One hundred and thirty-one of the participants were African American females. The other 131 participants were White American females. No participant was under the age of 18. Also, no participants ever held a paid professional leadership role. Lastly, none of the participants were enrolled in a community college. Demographic content that might compromise a participant's identity was not requested.

Groups. Of the 262 female business students, 218 were undergraduates (83%) and 44 were graduate students (17%). The dependent variable, leadership aspiration subscale of the CAS-R, was analyzed using an independent samples *t*-test to determine if there were any differences by enrollment level (undergraduate vs. graduate). This was performed in order to determine if the groups could be combined before running the analyses on the four hypotheses. It was determined that no significant differences existed between the two groups on leadership aspiration, $t(206) = -0.799, p = .425$.

Descriptive statistics. Table 1 provides the means and standard deviations for all the scales measured. The CAS-R (the dependent variable) has 24 items measured on a 0 to 4 scale. After reverse coding 5 items, the results were summed to give a total possible score of 0 to 96, with higher scores indicating higher aspirations. In this sample, the mean CAS-R score was 74.4 ($SD = 15.61$). The CAS-R has 3 subscales: achievement aspiration ($M = 26.1, SD = 5.0$), educational aspiration ($M = 24.6, SD = 6.6$), and leadership aspiration ($M = 23.7, SD = 6.6$), each

of which has 8 items resulting in total scores possible of 0 to 32. The leadership aspiration subscale was used as the dependent variable in this study.

The MSL (independent variable) has 4 items each rated on a scale of 1 to 4. Item ratings are averaged to provide an overall leadership self-efficacy score between 1 and 4, with higher scores indicative of higher levels of leadership self-efficacy. For this sample, the mean MSL score was 3.1 ($SD = 0.6$). The LSE (independent variable) has 12 items each measured on a scale of 0 to 100%, with higher scores indicating higher levels of leadership self-efficacy. A total LSE score was calculated by taking a mean of the scores on the 12 items. For this sample, the mean LSE was 77.5% ($SD = 16.5$).

Table 1

Descriptive Statistics for Scales

	Total		African American		White	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Career Aspiration Scale-R Total	74.41	15.61	75.44	26.05	74.73	16.16
Achievement Aspiration	26.05	4.95	26.05	4.84	23.26	7.09
Educational Aspiration	24.63	6.64	25.20	6.52	24.07	6.73
Leadership Aspiration	23.73	6.60	24.19	6.05	23.36	7.09
Multi-Institutional Study of Leadership	3.10	0.61	3.15	0.60	3.05	0.61
Leadership Self-Efficacy Scale	77.51	16.46	77.53	17.57	77.48	15.35

The correlations for the scales are reported in Table 2. Correlations indicate how the scores on one scale change with changes in another scale. Correlation values near -1 or 1 indicate a strong relationship between changes in two variables while correlations near 0 indicate little or no relationship between two variables. Leadership aspiration is positively significantly correlated with both measures of leadership self-efficacy, MSL and LSE. That is, as scores on

self-efficacy increase, so do scores on leadership aspiration. Correlations were similar for both African Americans and Whites. For African Americans, the correlation between leadership aspiration and MSL, $r = .415, p < .001$, was slightly lower than for White Americans, $r = .460, p < .001$. A similar pattern existed for the correlation between leadership aspiration and LSE: for African Americans, $r = .426, p < .001$, and for Whites, $r = .584, p < .001$. A change in leadership self-efficacy, particularly when measured by LSE, was associated with a somewhat greater increase in leadership aspiration for White American female students than for African American female students.

Table 2

Correlations for Scales Measured

	CAS	Achieve Ed	Lead	MSL	LSE	
Career Aspiration Scale	-	.869*	.846*	.863*	.484*	.566*
Achievement Aspiration		-	.622*	.681*	.384*	.468*
Educational Aspiration			-	.528*	.415*	.486*
Leadership Aspiration				-	.441*	.499*
Multi-Institutional Study of Leadership					-	.589*
Leadership Self-Efficacy Scale						-

* $p < .001$.

Scales with alphas of .80 or greater are considered reliable, that is all the items measure a common construct. As can be seen in Table 3, all scales have acceptable levels of reliability except for MSL and the achievement subscale of CAS-R. Because the LSE has much higher reliability than MSL, only the LSE was used to analyze the hypotheses. Despite the observed low reliability of the MSL, the measure yielded similar leadership aspiration findings when tested the hypotheses and the results can be found in Appendix E. Leadership aspiration was the primary concern of this study, but the entire CAS-R measure was utilized in the current study. Although the overall CAS-R had a somewhat higher alpha than the leadership aspiration subscale, the subscale has acceptable reliability and was used for the remaining analyses.

Table 3

Reliability of Scales

	Cronbach's alpha
Career Aspiration Scale	.912
Achievement Aspiration	.711
Educational Aspiration	.901
Leadership Aspiration	.824
Multi-Institutional Study of Leadership	.779
Leadership Self-Efficacy Scale	.954

The data were analyzed in regards to the four hypotheses. The overall results confirmed two hypotheses. The following reports how the four hypotheses were analyzed and the results.

Hypothesis 1A

The first hypothesis was analyzed using an independent samples *t*-test to determine whether there was a statistically significant difference between African American and White American female business students' leadership self-efficacy score (measured by LSE). This hypothesis is associated with the research question: Does ethnicity affect female business students' leadership self-efficacy and leadership aspiration? Results indicated that African American students ($M = 77.53, SD = 17.57$) and White American students ($M = 77.48, SD = 15.35$) did not differ significantly in leadership self-efficacy, $t(260) = .025, p = .98$. (See Figure 3). Therefore, H1A was not supported.

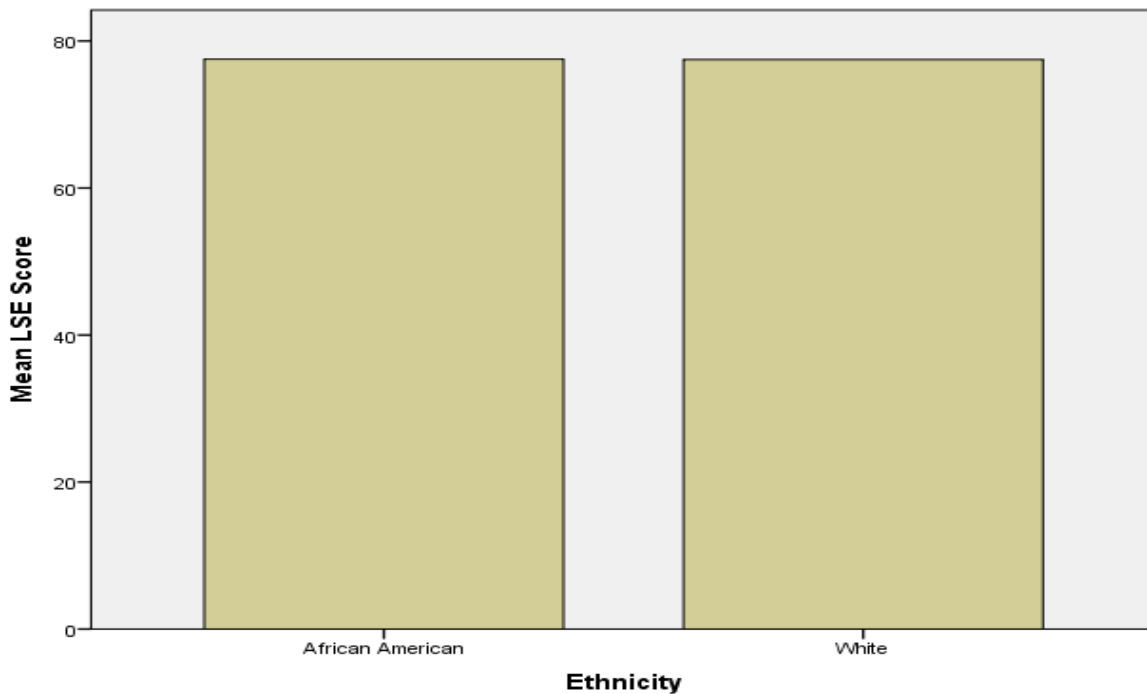


Figure 3. Mean levels of leadership self-efficacy.

Hypothesis 1B

The next hypothesis, which stated there is a statistically significant difference between African American and White American female business students' leadership aspiration, was not confirmed. An independent samples *t*-test was again used to determine whether there was a statistically significant difference between the two groups. Results indicated that African American students ($M = 24.19$, $SD = 6.05$) and White American students ($M = 23.26$, $SD = 7.09$) do not differ significantly on leadership aspiration, $t(260) = 1.143$, $p = .254$ (See Figure 4). African American female business students had slightly higher leadership aspiration scores than did White American female business students, but not significantly so. Therefore, H1B was not supported. This hypothesis is associated with the research question: Does ethnicity affect female business students' leadership self-efficacy and leadership aspiration?

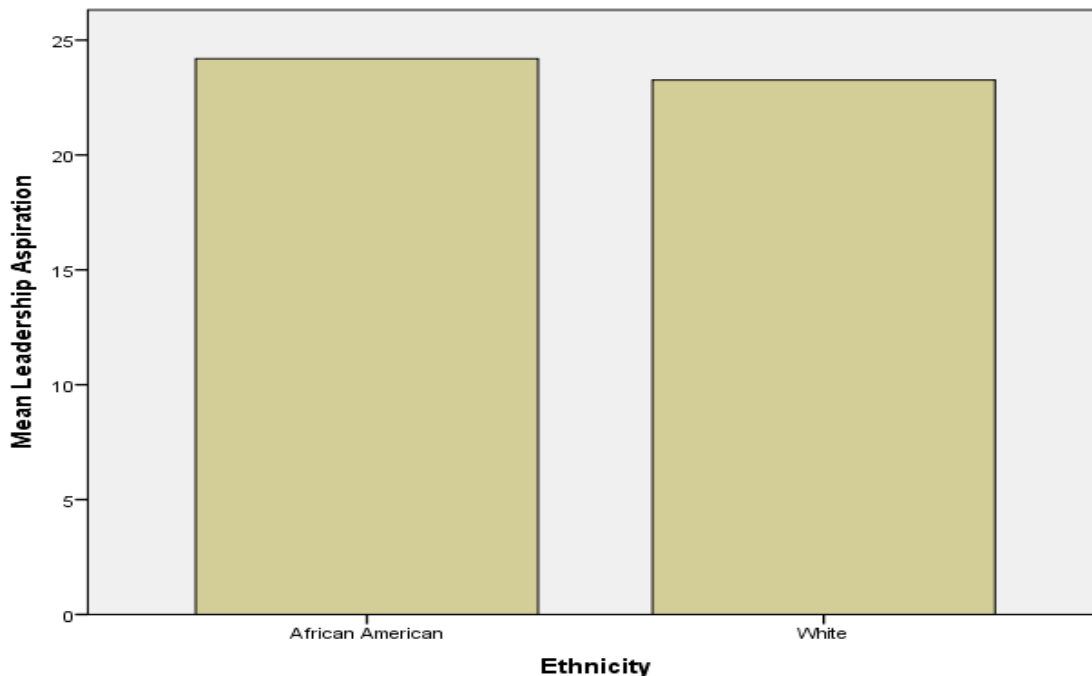


Figure 4. Mean levels of leadership aspiration.

Hypothesis 2A

The next hypothesis, there is a significant difference between female business students' leadership self-efficacy and leadership aspiration, was confirmed. Leadership self-efficacy was dichotomized using a median split into high and low leadership self-efficacy levels. An independent samples *t*-test was also appropriate to analyze differences in mean leadership aspiration by self-efficacy level. Results indicated that the leadership aspiration of students with low leadership self-efficacy ($M = 20.99$, $SD = 6.67$) differed significantly from the leadership aspiration of students with high leadership self-efficacy ($M = 26.34$, $SD = 5.37$), $t(260) = 7.16$, $p < .001$. Students with high levels of leadership self-efficacy had higher mean leadership aspiration scores than students with low leadership self-efficacy. This hypothesis is a preliminary analysis for Hypothesis 2B which determines if there are any differences between the African American and White American participants. Both research questions observe ethnicity, although H2A did not address ethnicity it prepares for the preliminary analysis for the research question: Does ethnicity moderate the relationship between leadership self-efficacy and leadership aspiration among female undergraduate and graduate business students?

Hypothesis 2B

The final hypothesis, there is a significant difference between African American and White American female business students' leadership self-efficacy and leadership aspiration, was confirmed. This time the hypothesis was analyzed using a 2 x 2 ANOVA to examine the interaction between the dichotomous variables of leadership self-efficacy and ethnicity on leadership aspiration. The overall ANOVA was significant, $F(3, 258) = 25.179$, $p < .001$. Since the overall model was significant, an examination of the interaction between ethnicity and leadership self-efficacy was conducted. The interaction between ethnicity and leadership self-

efficacy was statistically significant, $F(1, 258) = 5.58, p = .019$. Mean leadership aspiration for African Americans was 24.2 (SD = 6.1) and for Whites was 23.4 (SD = 7.1). Regarding leadership self-efficacy, the mean for African American was 77.5 (SD = 17.6) and for Whites was 77.5 (SD = 15.4). See Table 1. This indicates that ethnicity does moderate the relationship between leadership self-efficacy and leadership aspiration. This hypothesis is associated with the research question: Does ethnicity affect female business students' leadership self-efficacy and leadership aspiration among female undergraduate and graduate business students?

A graphical depiction of the relationship between leadership aspiration and leadership self-efficacy by ethnicity is presented in Figure 5. At low levels of leadership self-efficacy (0 on the x-axis in Figure 5), African American female business students have higher leadership aspirations than do White American female business students, while at high leadership self-efficacy (1 on the x-axis in Figure 5), the White American female business students have slightly higher leadership aspirations than African Americans. The analysis suggests a moderation effect of ethnicity on the relationship between leadership self-efficacy and leadership aspiration.



Figure 5. Levels (Individual Scores) of leadership self-efficacy and leadership aspiration.

Chapter Summary

In this research study, there were two research questions and four hypotheses. The research data were obtained from an equal number of African American and White American female business students. A sequence of *t*-tests and an ANOVA were conducted to ascertain significant differences in the leadership self-efficacy and leadership aspiration scores of the population. In addition, ethnicity differences among these variables were analyzed. The results of this research study indicated that there was a significant difference in leadership aspiration by ethnicity and by leadership self-efficacy. The findings supported H2A and H2B. The moderating effect of ethnicity on the relationship between leadership self-efficacy and leadership aspiration was significant. At low levels of self-efficacy, African American females had higher leadership aspiration than White American females. The levels of leadership aspiration were similar for both African American and White American females at high levels of self-efficacy, although Whites had slightly higher levels.

This chapter provided an in-depth review of the findings of this study. Finally, the researcher offers details surrounding the unique aspects of the leadership aspiration of African American and White American female business students. Studies have historically observed the complexity of female leadership in relation to gender and life experience (Murphy, Moss, Hannah, & Weiner, 2005), but this study explored if ethnicity contributes to the complexity of female leadership aspiration. Chapter 5 will consist of a discussion of the findings, limitations of the study, and implications for practice, as well as future research.

Chapter 5: Discussion and Conclusion

The general objective of this quantitative study was to examine the effects of leadership self-efficacy and ethnicity on the leadership aspirations of American female business students. A 2003 study on psychological predictors of college female's leadership aspirations was an influential study that was partially replicated in this study (Boatwright & Egidio, 2003). This study and a host of other studies utilized predominantly White American and homogeneous samples reiterating the need for studies that utilize heterogeneous samples.

The current study builds on the existing leadership, gender, business student, and ethnicity research with a statistical analysis of the differences between leadership self-efficacy and leadership aspirations of African American and White American female students. The researcher opted to study female leadership aspirations with an emphasis on ethnicity to expand on previous research that did not recognize the need to identify possible differences. This is despite recognized differences that exist between such groups as African Americans and White Americans (Beal, 1969; Johnson & Thomas, 2012; King, 1988; Triana et al., 2015).

This final chapter frames the findings of this study within the context of existing literature. First, a section consists of a review of the statement of problem, the two research questions, and methodology. Finally, the discussion turns to implications of the findings, limitations of the study, recommendations for future research, and final conclusions.

Statement of the Problem Reviewed

Previous research has not captured data from America's female business majors regarding leadership self-efficacy and leadership aspirations. Furthermore, gaps exist in the knowledge base that informs theory and practice in preparing tomorrow's female leaders. Although the interest in the college student's leadership development was found to increase over

the past two decades (Komives, 2011), there remains fundamental questions about psychological factors', such as leadership self-efficacy, influence on leadership aspirations. The literature also lacks attention on American minority female business students, and studies are repeatedly found observing the behavior of White Americans in homogeneous samples.

Traditionally, research has recognized how one's experience has heavily impacted the perception of one's ability (Shelton, 1990; Sherer et al., 1982). This understanding suggests females and minority females' experiences may influence one's perception of their leadership aspirations and ultimately their ability to lead. This suggests there is a need for research such as this study, focusing on ethnicity differences of female business student's leadership aspirations. Specifically, a need for research observing the behavior of business students is necessary to equip them with the tools they need as they prepare for their future careers.

African American and White American females were the population of interest in the current study. African American females was selected because they are recognized for reportedly facing the potential of experiencing both sexism and racism simultaneously throughout their careers (Harvey, 2007) and they are underrepresented in the literature. Regarding White American females, this population was selected because they are heavily represented in the research literature overall and the current researcher sought to compare the behaviors of the two groups. Research aimed specifically at understanding the leadership development of both groups of female students can inform and provide the higher education field with empirical evidence of effective practices in working with diverse groups of students. This form of inquiry would benefit career counselors, business programs, and female business students, giving insight into what practices or environmental features most strongly affect leadership development.

Though some aspects of the study may not be replicable, helpful practices can be particularly effective if they are evidence-based. With the aid of well-conceived research such as this current study, the experiences of females and African American business students can be better understood leading to purposeful focus on development for future generations of a diverse group of female leaders. This current investigation was designed with this research gap in consideration and explored the following two questions as its guide:

Research question 1: Does ethnicity affect female undergraduate and graduate business students' leadership self-efficacy and leadership aspirations?

Research question 2: Does ethnicity moderate the relationship between leadership self-efficacy and leadership aspirations among female undergraduate and graduate business students?

Review of Methods

This quantitative study performed an independent samples *t*-test to test the first three hypotheses and a 2x2 ANOVA was used to test the fourth hypothesis. The overall sample of this study consisted of data collected from 262 undergraduate and graduate business majors with no prior paid leadership experience. The researcher elected to include an even number of African American (131) and White American (131) female business students unlike studies with homogeneous samples.

The first set of hypotheses (H1A and H1B) tested Research Question #1 and analyzed the between-group differences for the female African American and White American students' leadership self-efficacy and leadership aspirations. The research question related to the first set of hypotheses explored if ethnicity affects female business students' leadership self-efficacy and leadership aspiration? In other words, does ethnicity contribute to the complexity of female

leadership self-efficacy and leadership aspiration. The differences were not significant, but as the current researcher expected, African American females had an overall higher leadership self-efficacy mean (H1A) and higher leadership aspirations mean (H1B) than the White American females. The mean scores on both measures were slightly higher as the researcher suspected, but they were not significantly different.

The second set of hypotheses tested Research Question #2 and found significant results. Both H2A and H2B were confirmed. Leadership self-efficacy was split into high and low levels to observe differences between the business students' leadership self-efficacy and leadership aspiration (H2A). Students with high levels of self-efficacy had higher mean leadership aspiration scores than students with low leadership self-efficacy. The final hypothesis found significant differences between the two ethnicities' leadership self-efficacy and leadership aspirations (H2B). The significant findings of H2B indicates ethnicity does moderate the relationship between leadership self-efficacy and leadership aspirations. At low levels of leadership self-efficacy, African American females had higher leadership aspirations than White American females. The mean leadership aspiration scores were similar for both African Americans at 24.2 (SD = 6.1) and White Americans at 23.4 (SD = 7.1). African American students' mean scores were slightly higher despite the inherit challenges as a result of their ethnicity. In addition, both group of females had the same high leadership self-efficacy means of 77.5 (SD = 17.6). Previous research also found African Americans to have high leadership aspirations (Harvey, 2007). The participants high education levels was determined to increase aspiration in addition to self-efficacy, which served as a positive indicator of career goals. Another study suggested high levels of self-efficacy could result in "effective career decisions making" (Luzzo, 1996, p. 276). The African American females in the present study were found

not to demonstrate higher leadership self-efficacy than their White American peers; the mean scores were the same. Moreover, African American females did not appear to require higher leadership self-efficacy levels to demonstrate higher leadership aspiration than their peers (See Figure 5).

The results appear to indicate that contrary to the author's prediction, leadership self-efficacy was not found significantly different between African American and White American female business students. The prediction that leadership aspirations levels significantly differs among the two groups of students was also not discovered in the current study. The literature consistently emphasizes differences in the African American and White American female experience. Interestingly, despite the possibility of the African American females in the study's history of double jeopardy challenges due to gender and ethnicity, they do not require higher leadership self-efficacy than their peers. The literature consistently emphasizes differences in African American and White American female experience.

Students of both ethnicities with high levels of leadership self-efficacy yielded high leadership aspiration scores. No study was found in the literature specifically looking at differences between leadership self-efficacy and leadership aspiration, but studies were found observing aspiration. The high leadership aspiration scores were consistent with those Boatwright and Egidio (2003) reported. In their study, they found psychological factors such as "self-esteem, accounted for a significant amount of variance ($p = .05$) in predicting female's leadership aspirations" (Boatwright & Egidio, 2003, p. 19). Other self-efficacy research also suggests the concept determines anxiety and hesitation to approach specific behaviors (Levy & Radomsky, 2015). Specifically, one study found low self-efficacy has the potential to result in avoidance behaviors (Levy & Radomsky, 2015). However, the current study found the African

American participants to not avoid leadership despite leadership self-efficacy scores lower than the other ethnicities in the study.

Previous research found self-efficacy influenced the leadership aspiration of African American females (Harvey, 2007). Specifically, the researcher investigated the role of self-efficacy, race, and gender in relation to leadership aspiration. A positive relationship was observed between the self-efficacy of African American women who participated in the study and their levels of leadership aspiration (Harvey, 2007).

Another early study described gender differences pertaining to career aspiration among Mexican American, African American and White American college students (Arbona & Novy, 1991). The results indicated that gender was associated with career choice more than ethnicity. Although, African American students in the study had unique differences from the other ethnicities as different gender patterns and ethnicity differences were only noted among this group of students. Unlike the current study, no association was found between ethnicity and career aspirations among all the students. Furthermore, leadership aspiration was not specifically observed in this study (Arbona & Novy, 1991). The results of the present research found African American students with observed low leadership self-efficacy had significantly higher leadership aspiration scores than the other students.

No other studies in the literature were found to specifically look at leadership self-efficacy and leadership aspiration of females. The findings of the current research indicate further research is needed on female leadership self-efficacy to understand their leadership aspiration.

The overall high leadership self-efficacy scores found in this current study could be due to the fact that the samples were composed of business students who may aspire to management

and leadership positions. There also appears to be a moderating effect of ethnicity on the relationship between leadership self-efficacy and leadership aspirations. At low levels of leader self-efficacy, the levels of leadership aspirations were the same level, but African American females had higher leadership aspirations than White American females.

Social cognitive theory, role congruity theory, role theory, and double jeopardy theory made up the Combined Theoretical Framework for the current study (See Figure 1). The four theories help build the study's premise that female business student's leadership self-efficacy aides leadership aspiration. The following elaborates on the theoretical framework.

Female Business Students' Leadership Differences

A compelling question of this researcher was could self-efficacy affect whether aspiring female leaders desire to crack the glass ceiling? Statistically significant differences were found between female business students' leadership self-efficacy and leadership aspirations. The leadership aspirations of students with low leadership self-efficacy differed significantly from the leadership aspirations of students with high leadership self-efficacy. This is consistent with the literature reporting an individual's perceived leadership self-efficacy is reportedly an effective predictor of performance more so than previous achievement or ability (Cassidy, 2015).

Females are underrepresented in leadership positions in general (Baker, Larson & Surapaneni, 2016; Huttges & Fay, 2015). Research explaining how gender disparity in leadership positions may reduce leadership self-efficacy beliefs of aspiring leaders (Barclay et al., 2007) called for further explanation to understand the causes for the underrepresentation of females in leadership. The psychological phenomenon of leadership self-efficacy offers an explanation for the low number of female leaders. -The results of this study support the strong influence of leadership self-efficacy beliefs on aspiring leaders. Leadership self-efficacy is

expected to equip those females with leadership aspiration with the belief they can face challenges and different realities from their male colleagues in the workplace presented in research (Eagly & Karau, 2002; Heilman & Caleo, 2015; Lafreniere & Longman, 2008).

Female business students were identified as the ideal candidate for the current study considering they are potential business owners, managers, and CEOs. This population will face uncertainty. This is even more the case for African American females. For example, as the number of female CEOs of *Fortune* 500 companies has increased from 21 to 32 in 2017 according to a *Fortune Magazine* article, the number of African American female CEOs decreased (Zarya, 2017). The magazine reports the increase of female CEOs is record breaking. Apparently this year's number of female CEOs is the highest ever in the 63 years history of *Fortune* 500 companies. While the increase is record breaking according to the magazine, the increase presents the prevailing concern for the lack of progress and challenges American females experience climbing the corporate ladder. *Fortune Magazine* points out how low 32 is in relation to the number of CEOs in general (Zarya, 2017). Thirty-two is equivalent to 6.4% of the list of CEOs of *Fortune* 500 companies (Zarya, 2017).

Despite the progress females are making in corporate America, African American females are continuing to face setbacks and uncertainty. This could impact their belief system which makes up their leadership self-efficacy. Such conclusions would explain the findings in this current study that the leadership self-efficacy of African American females who participated in the study was lower than the White American's, but their leadership aspiration was higher (H2A). African American women may be accustomed to the setbacks and the other hindrances they face. They may maintain the same level leadership self-efficacy to their White American peers. The justification for the high leadership aspiration of African American participants of the

current study appears to be due to the belief in their ability to overcome challenges presented due to their ethnicity. Experience after experience this population of college students overcome offers memories of success apparently strengthening their ability to believe in their aspiration.

Combined theoretical framework. Albert Bandura's (1997) social cognitive theory is a foundational model for the framework of the current study because it describes an individual's beliefs regarding personal ability engages action (Ng & Lucianetti, 2016). The present study explored a group of female business students' belief in their leadership ability and their anticipated action. The social-cognitive approach aids in assessing perceived self-efficacy to predict behavior utilizing self-efficacy beliefs as self-regulatory and psychosocial influences of behavior (Bandura, 1997). One study explained how social cognitive theory captures the uniqueness of an individual from a "general model of personality structure, process, and functioning" (Cervone et al., 2001, p. 47). The current researcher continues Bandura and other work on social cognitive theory by studying how self-efficacy serves as an internal belief system (Cervone et al., 2001).

This study's theoretical framework also presents such theories as role congruity theory, which recognizes the extent to which incongruity exists between expectations about females and leaders (Eagly & Karau, 2002). The theory expanded beyond social role theory to role congruity theory to present a link between gender roles and leadership roles (Eagly & Karau, 2002). Social role theory proposed that women and men pursue different career and social roles due to societal expectations (Eagly, 1987). Role Congruity Theory's premise helps substantiate the high levels of leadership self-efficacy found among the female business students aspiring leadership in this current study.

Historically, men have dominated the leadership world in such environments as business and military (Eagly & Karau, 2002). Sex discrimination, work-life mobility, labor turnover, occupational segregation, pay gap, and glass ceiling are issues women have described facing in the workplace (Hakim, 2004). Additionally, race and ethnicity are found to impose different work life realities (King, 1988). To combat the negative perception of one's role, it is suspected high levels of self-efficacy or a strong belief in one's ability is necessary. The results of this study found the female participants had overall high leadership self-efficacy and leadership aspiration scores. Despite the compounded challenges African American females have over White American females, their scores were the same or African American females consistently had higher scores on the measurements in the study.

The findings indicate role theory research suggests that multiple roles of females in conjunction with perceived organizational barriers require balancing the demands of life and suggests discrimination complicates the matter posing the possible elimination of potential leaders (Nazemi et al., 2012). This theory reiterates the need for the high levels of leadership self-efficacy found among the female business students aspiring leadership in this study. This population of females require a strong belief system in their ability to lead in order to contend with the roles expected of them in society. A female aspiring leadership upholds the responsibility of gender and familial roles in conjunction with her leadership role. The current researcher suspects multiple roles complicate the female leader experience.

The findings in this study support the necessity for females to uphold strong leadership self-efficacy to aspire leadership, while balancing the dynamics presented in Social Cognitive Theory, Role Congruity Theory and Role Theory. The present study's literature review included a study, which reported a student's career aspiration is the most important variable influencing

their future work experience (Wang & Staver, 2001). Societal role expectations are presumed to weigh heavily on the career selection of a woman. It is suspected the complexity of balancing role expectancy and potential gender discrimination requires great belief in one's ability to perform specific tasks. A specific finding presented in this study's literature review suggests the combination of gender and societal roles presents increased challenges (Eagly et al., 2000). Another study included in the literature review concluded attitudes learned in the early years of life may instill a low sense of worth among females, while putting aside experience and ability to uphold societal values (Kreuzer, 1992). These studies suggest the gender role and identity directly influences a woman's views on career aspiration.

Research included in the literature review suggested the experiences of American minorities and African American females may require the need to exercise additional belief in their ability to acquire leadership when faced with additional marginalization than White American females (Frevert et al., 2014; Johnson & Thomas, 2012). Interestingly, the results of this study found African American students' leadership self-efficacy was not as high as the White American students despite the need for an inflated belief in their ability to face the complexities of both their gender roles and ethnicity.

The belief system suggested in the Social Cognitive Theory is suspected to be different for the two groups of females in this study. Considering the various aspects of the above theories, the females who participated in this study appeared to have utilized high levels of leadership self-efficacy while referencing their gender role when asked about leadership aspiration. Apparently, the African American students in this present study did not appear to require high levels of leadership self-efficacy as the other students to negotiate their beliefs in their abilities. This behavior may be due to the way of life they are accustomed to managing as

they face negative experiences as a result of being both a woman and a minority in their society. The next section will elaborate on the available research pertaining to ethnicity and African Americans. The theory supporting this aspect of the theoretical framework, Double Jeopardy theory, is discussed in the next section.

Leadership Self-Efficacy and Leadership Aspirations Differences Among Ethnicity

As mentioned in the present study's literature review, research over the past 10 years and since the postindustrial paradigm awakening lacks a variety of topics related to gender and race in leadership studies (Frevert, Culberston & Huffman, 2014; Ospina & Foldy, 2009). White American females were the primary population found in the female leadership aspiration research. Study after study pointed out a limitation to their study was surrounding this issue. African American females were also continually mentioned in the research as a population underrepresented in studies. This was a particular point that influenced the determination to study African American females in comparison to White American females.

The annually Fortune Magazine 50 Most Powerful Women list only active corporate executives. The 2017 list reinforces the concern of this study's researcher for African American females aspiring leadership. Females may make the list of female CEOs repeatedly. Some females drop off and return to the list due to changing companies or positions. The CEOs may also remain on the list for several years. The 2017 list made history because a Latin American female made the list for the first time (Zarya, 2017). There is an Indian American on the 2017 list, but no African American females made the list. The list is comprised of predominantly White American females. Despite the record breaking year, again no African American's made the list in 2017. In 2016, there were two African Americans on the list (Zarya, 2017). The

female CEOs of *Fortune* 500 companies list offers support to the need for more studies as the current study exploring female leadership aspirations. African American's omission from the list supports the attention this current study offers regarding the population's challenges.

The inequality found among Fortune 500 companies' CEOs demonstrates the substantial differences in the experiences of African American and White American females. The CEO statistics also supports the study's findings particularly in relation to ethnicity. Ethnicity was found to moderate the relationship between leadership self-efficacy and leadership aspiration of the participants in the study (H2B). Given no differences were found between the female business students' in the study leadership self-efficacy score (H1A) and their leadership aspiration score (H1B), such realities as the underrepresentation of African American CEOs appear to not negatively influence African American female business student's belief in their ability to obtain a leadership position.

The current researcher questioned if perhaps African American women have higher levels of leadership self-efficacy to take on the challenges associated with pursuing leadership roles in their field. There were no significant mean differences between African American and White American females on either leadership self-efficacy or leadership aspirations, but the African American participant's mean scores were slightly higher in both cases (See Figures 4 and 5). The analysis demonstrates why the current researcher believed the population would require strong beliefs about their leadership ability to aspire leadership. This belief may be translated into leadership self-efficacy.

African American females face the dilemmas described in the double jeopardy theory. The theory suggests as a result of the consequences of hostile work climates, isolation, and

discrimination, African American women experience a cumulative impact of embodying womanhood and American minority classification (Johnson & Thomas, 2012; Leskinen, Rabelo, & Cortina, 2015). The present study discovered African American females had high levels of leadership self-efficacy, but not as high as White American females. It is concluded this is due to hindrances in the African American females' experience mentioned all throughout this study. These hindrances may reduce the capacity to believe in their leadership ability to the extent other ethnicities are free to believe in their leadership ability. This further supports the current findings that ethnicity affects both the leadership self-efficacy and leadership aspiration levels of the female business students. African American female business students' pursuit of leadership with risk of gender discrimination, racial discrimination, and lower self-efficacy than their peers, attests to a noteworthy ability to believe in themselves.

The implications of ethnicity, and specifically African American female's specific implications on leadership aspirations, is limited in the literature. There exists a history of assaults on African American men, women, and children who reside in the United States (Beal, 2008). As mentioned earlier in this chapter, the 2017 Fortune Magazine 50 Most Powerful Women listed only active corporate executives and reinforces the concerns for African Americans aspiring leadership presented in this current study. No African American females made the 2017 list. Only two African American females made the 2016 list. This could impact the population's belief system which makes up their leadership self-efficacy. Such conclusions would explain the findings in this current study. The leadership self-efficacy of both African American White Americans female students who participated in the study were the same, but the leadership aspiration of African American students were higher (H2B). A rationale for the findings could be African American female's belief in their leadership ability (leadership self-

efficacy) may not require higher levels than their peers while aspiring leadership despite the added challenges due to their ethnicity.

The current researcher suspected the leadership self-efficacy of African American female participants would be higher than their peers to contend with added challenges due to their ethnicity. The findings in the present study demonstrated the two groups had the same levels of leadership self-efficacy. These findings may also be a result of the African American female population growing accustomed to withstanding what the literature described as America's history of being "manipulated by the System, economically exploited and physically assaulted" (Beal, 2008, p. 166). Despite the historic race-based discrimination and gender-based discrimination African American females face, this population makes up a high percentage of the African American workforce (Beal, 2008). These high rates may be the result of ability, drive, perseverance, career aspiration, or a number of factors.

African American female business students who demonstrated low levels of leadership self-efficacy were found to have higher leadership aspirations than White Americans with low levels of leadership self-efficacy (See Figure 5). These results suggest despite perceived low leadership self-efficacy, African American female business students do have aspirations for careers in leadership. Moreover, they aspire to hold leadership positions at rates higher than their White American female business student counterparts. The two groups have the same level leadership self-efficacy, but White American females do not face the additional inherited challenges due to their ethnicity as African American females. Research reports confidence and career expectation is important to support the ability to face discrimination (Coleman & Campbell-Stephens, 2010). Such findings could be due to the African American participants

embodying both confidence and career expectation when selecting a career in leadership where they suspect they will have to experience discrimination.

These findings contribute to the research that the development of career choice is likely impacted by race and culture (Gray, 2001; Huffman, 2012; King, 1988). Self-efficacy could offer insight on a person's projected confidence in their success or accomplishments in specific tasks (Bong & Skaalvik, 2003). Observing the self-efficacy of females and racial/ethnic minorities may offer a greater understanding of future leaders and provide them support. More specific to the current study, leadership self-efficacy offered a greater understanding of the population's aspirations. Leadership self-efficacy is defined in Chapter 1 as a form of self-efficacy that considers both the leader and the leader's actions (Hannah et al., 2008). A particular study was found in the literature reporting despite perceived barriers, strong personality traits of female college students were found to predict their leadership interest through their leadership self-efficacy (Baker et al., 2016). Another study on leadership self-efficacy found external coping resources serve as an aide in one's leadership experience (Brown, Jones, & Leigh, 2005). These and other studies on leadership self-efficacy were included in this current study's literature review. Observing leadership self-efficacy offered an opportunity to understand the leadership aspirations of female business student's in the present study.

Although the present study found no statistically significant difference on the students' leadership self-efficacy levels (H1A), nor on their leadership aspiration levels (H1B), the literature does report differences. When the current researcher tested the difference between their leadership self-efficacy and leadership aspiration levels (H2A & H2B) significance was found. Both groups of women who participated in the study demonstrated high levels of

leadership self-efficacy and high levels of leadership aspiration. The literature review (Chapter 2) mentioned other studies that found differences in career aspiration and behavior based on ethnicity (Arbona & Novy, 1991; Coleman & Campbell-Stephens, 2010; Duffy & Klingaman, 2009; Fouad & Byars-Winston, 2005; Gloria & Hird, 1999; Metz et al., 2009). The current researcher asserts experiences and awareness of challenges specific to one's ethnicity is certain to influence beliefs about one's abilities.

No previous research was found specifically exploring leadership self-efficacy and leadership aspiration of female business students to further attest to these findings. Studies were found exploring leadership aspiration of students (Kreuzer, 1992). Research evaluating the leadership aspiration of females was found in the literature (Gregor & O'Brien, 2014; Harvey, 2007; Nazemi, Mortazavi, & Borjalilou, 2012). A particular study researched the self-efficacy and the leadership aspirations of females, but included African American females only (Harvey, 2007). The researcher did not observe leadership self-efficacy, but general self-efficacy. The foundational study to the present research observed both students' and female's leadership aspiration as the present study (Boatwright & Egidio, 2003). A limitation of the foundational study was the researchers utilized a homogeneous sample. This reiterates the need for such study's like the current study that intentionally avoided a homegenious sample.

Implications of the Findings

The current study was conducted using an internet-based survey, which likely ensured even distribution of individual differences across the sample. Both ethnicities were equally represented. Pertaining to age, the respondents were all asked if they were over 18 years old. All participants were female undergraduate and graduate business students. The following implications are important for anyone working with the population of women in the study.

Career Counseling

Female business students' leadership self-efficacy level was found to be significantly related to leadership aspiration. This study defined leadership self-efficacy as a form of self-efficacy that considers both the leader and the leader's actions (Hannah et al., 2008). Career counselors can help female business students build their leadership self-efficacy in pursuit of career goals through the following:

1. Discussion of a students' experience in achieving her educational goals. Experiences with personal mastery, such as educational achievements, provide a female business student with a source of leadership self-efficacy information. Reflection and emphasis on the educational achievement of the student can provide the client with the belief that she can successfully perform the behaviors required in leadership. For example, the business students' educational experiences may have offered them opportunities to recognize behaviors that can generalize to leadership ability. Career counselors can also assist African American female clients to recognize coping behaviors utilized in her educational experiences that can generalize in her career in leadership. Consequently, obstacles could somehow impact self-efficacy and one's career path (Lent et al., 2000). Potential obstacles career counselors may address with female clients are work adjustment concerns, coping with job dissatisfaction, and work socialization difficulties (Lent, Brown, & Hackett, 2000). All throughout the current study, obstacles, challenges, and hindrances were mentioned. Social cognitive theory suggests self-efficacy may be used as a coping behavior regulating how a person utilizes efforts while facing obstacles (Bandura, 1977). This theory serves as a foundation to support leadership self-efficacy's influence.

2. Administration of the Career Aspiration Scale – Revised (CAS-R) with a Leadership Aspiration Subscale when appropriate and permitted to use without permission for counseling purposes. The Career Aspiration Scale-Revised (CAS-R) measures the domains of leadership aspirations, ambition to train, and manage others in their field (Gray & O’ Brien, 2007). The CAS-R consists of three subscales. The subscales measure leadership, educational, and achievement aspirations (Gregor & O’Brien, 2015). Clients’ results on the CAS-R Leadership Aspiration Subscale will help the counselor identify the aspirations of the client’s leadership self-efficacy level. The CAS-R was found reliable and valid when used with undergraduate and graduate women (Gregor & O’Brien, 2015).

3. Career counselors may assist African American females and other minorities in their community to recognize coping strategies in face of obstacles and negative incidents. The development of strong leadership self-efficacy beliefs can aid the client in effectively utilizing her abilities to develop talents and prepare for a career in leadership (Betz & Hackett, 1981). Stereotypes may impact both African American and White women in leadership positions based on perceptions, beliefs, and stereotype threats (Sanchez-Hucles & Davis, 2010). African American women face the possibility of multiple stereotypes due to their gender and ethnicity. The leadership experiences of African Americans also have recognizable differences (Triana, Jayasinghe, & Pieper 2015).

A purpose of the study was to gather findings that may offer leadership development programs for undergraduate and graduate female business students to prepare for leadership opportunities in corporate America. Researchers encourage such programs to increase female representation in leadership roles by encouraging, supporting, and equipping females who

believe they are capable of leadership (Boatwright & Egidio, 2003). The findings may also serve the college students identified in the research who face challenges beyond gender discrimination as African American female students. The results help to understand the leadership development and aspirations of African American females. The need for such exploration is embedded in research on self-efficacy and leadership aspiration. A study that investigated African American females' leadership aspirations suggests past self-efficacy experiences mediate one's intentions to pursuit promotions, manage others, and characterize themselves as a leader in their field (Harvey, 2007).

Leadership self-efficacy was also found in the literature to focus on the following development and behavior patterns. Leadership self-efficacy was found to specifically aide job autonomy (Ng et al., 2008). Social potency was also found to increase leadership self-efficacy (Baker et al., 2016). Other influences of leadership self-efficacy included in the current study's literature review are verbal persuasion and psychological states (Bandura, 1997). Such development and behavior patterns are suspected to equip the participants who demonstrated high levels of leadership self-efficacy in the current study.

Regarding business programs, the research highlights the importance of supporting female business students who face the possible leadership experiences of uncertainty, wage gap issues, discrimination, gender stereotypes and role demands. Such challenges may discourage women from aspiring leadership roles (Bobbio & Manganelli, 2009). The present research found both African American and White American female business students have high rates of leadership aspiration. Business programs have an opportunity to help sustain their aspirations. It was discovered that business schools are not recognizing both male and female leadership needs, nor valuing their different roles (Mavin, Bryans, & Waring, 2004).

A key theme in the present study is the female has a unique experience from males (Bem, 1993; Bobbio & Manganelli, 2009; Fletcher, 2010). Moreover, African American females have a complex experience (Frevert, Culberston, & Huffman, 2014; King, 1988; Sanchez-Hucles & Davis, 2010). Both females would benefit from a business program that would utilize their high levels of leadership self-efficacy to prepare them for their uncertain career in leadership. Yes, leadership may be uncertain or volatile in corporate America for both genders, but the literature identifies challenges specific to females aspiring leadership (Bobbio & Manganelli, 2009).

Additionally, the current study recommends colleges and universities implement female specific leadership development programs. Implementing additional leadership development programs specific to American minority students may provide a comprehensive body of student's insight on their future as a leader. These modes of intervention may be beneficial to sustain the student's interest in leadership while in their program and in their professional career. Both male and female students would benefit from the findings of this study to aide in their understanding of their female peer's experience.

A final implication is surrounding the need to recognize ethnicity cannot be underestimated as relevant to one's experience. The results of the current study indicate ethnicity moderates the relationship between leadership self-efficacy and leadership aspiration. Race and ethnicity are found to impose unique work life realities (King, 1988). National labor force data suggests that the needs and resources of women of color and white women are different (Frevert, Culberston, & Huffman, 2014). African American females have an identifiable handicap due to the double enslavement based on their gender and race (King, 1988). Ultimately, from an organizational leadership standpoint, the findings may be used to design

leadership development programs for women of various ethnicities to prepare them for leadership opportunities in corporate America (Yukl, 2006).

Limitations

As with all research, this study has limitations to be considered when interpreting the results and findings. The limitations presented in this chapter are intended to serve as a tool while interpreting the findings along with potential implications for practice. The following limitations that merit discussion are introduced.

Limitations were identified, but were outside of the researcher's control. No apparent weakness in the design was noted. No uncontrollable biases were observed during the process. For the most part, the researcher had control over the approximately 2-week timeframe to collect responses from the recipients. The things that could not be controlled and the issues addressed are also outlined in this section of the chapter.

First, generalization of the study may be an area of limitation. The study may not be generalizable to the entire population of female business students. This study focused on two ethnicities. In essence, ethnicity was found to affect the relationship between leadership self-efficacy and leadership aspirations. Limiting the number of ethnic groups may have restricted the opportunity to explore the significance of ethnicity on the variables. The two ethnic groups were not studied in depth. The inclusion of additional ethnic groups would have introduced potentially significant variables. Community college students were excluded from the study further hindering the generalization of the study to a broader female student population.

The nature of self-reports presents another limitation. Participants may have been willing to be honest and the amount of self-bias may have been reduced considering the lack of personal risk capable while conducting the current study. The questionnaire format administered online

caused areas that could not be controlled. It is nearly impossible to ensure all the participants had identical conditions or control distraction capable of affecting results. These conditions ultimately proposed limitations consistent with research performed in a similar fashion are reported.

Next, the results of this study do not support the view that African American and White American female business students' have significantly different leadership self-efficacy or leadership aspiration levels. This study identified ethnicity as a moderator of the relationship between leadership self-efficacy and leadership aspirations. This presents the possibility that despite the racial discrimination and additional biases, African American females have the same level leadership self-efficacy and leadership aspiration levels as White American females. This study restricted the exploration to observe only leadership self-efficacy and other studies as the influential Boatwright and Egidio (2003) study explored various variables' and leadership aspiration. Other psychological factors than self-efficacy were not considered in the current study.

Based on the methodology of the current study, there is another limitation. It was determined not to collect demographic information from the participants other than their race, whether they were females and over the age of 18. Marital status or income were not deemed necessary to ask during the data collection process. Although socioeconomic status was not collected as part of the study, it can be presumed that participants recruited by Qualtrics' partners represented various socioeconomic backgrounds from various institutions of higher learning and socioeconomic backgrounds. Qualtrics maintains the highest quality by utilizing over 20 different online Grand Mean certified sample partners to supply diverse participants (Qualtrics,

2014). Considering limited demographic information is known about the participants, this presents a limitation.

Self-report questionnaires are commonly used methodology in research to gather data, but a potential limitation to the present study is the self-selection sampling. Considering the potential research subject volunteered to participate there is likely a degree of self-selection bias. The decision to participate in the study may reflect some inherent bias in the characteristics or traits of the participants. The participant may exaggerate their results. In addition, self-selection bias does not benefit from the random choice of subject selection as probability sampling.

A final limitation to the study lies in the instruments. The literature did not present an instrument that had sufficient utilization among African American samples. Hence it is possible that African American participants' responses may not truly reflect their leadership self-efficacy and leadership aspirations. The Multi-Institutional Study of Leadership questionnaire (MSL) was the only measurement identified to have evidence of somewhat sufficient use among non-White American samples (Dungan & Komives, 2007; Nygun, 2016). This study's researcher found the MSL to have low reliability, but the results were the same as the Leadership self-efficacy questionnaire (LSE) when analyzed except when examining the interaction between ethnicity and leadership self-efficacy. The MSL found leadership self-efficacy significant and ethnicity was not found significantly interacting with leadership aspirations (See Appendix D). Ultimately, the instrumentation reduces the study results generalizability.

Recommendations

The current study investigated leadership self-efficacy and leadership aspirations of female business students. The specific goal of this study was to identify if ethnicity moderates the relationship between leadership self-efficacy and leadership aspirations among female

undergraduate and graduate business students. Ethnicity (specifically, African Americans and White Americans) was found to moderate the relationship significantly. Based on the findings, the following recommendations for future research and practice are presented.

Future researchers may wish to replicate this study with a larger sample including more ethnicities in the sample to examine the effect of leadership self-efficacy on leadership aspiration. This would strengthen the leadership literature that is dominated by research with homogeneous samples. Also, increasing the number of ethnicities will extend the generalizability beyond the current scope. Information about specific ethnicities would provide guidance to leadership educators in their suggestions for students. Furthermore, this could be useful in steering students towards supportive environments and prepare them to address dynamics they may face associated with their ethnicity.

Another suggestion for a potential research opportunity is to conduct a study including an investigation of an entire African American female student sample. Researchers (e.g., Fouad & Byars-Winston, 2005; Gloria & Hird, 1999; Harvey, 2007; Metz et al., 2009; Swanson & Gore, 2000) have noted the unique challenges of the population. This study did not explore specific experiences of the sample. Future researchers of African American females' leadership development may want to examine the influence of leadership self-efficacy on leadership aspirations from a qualitative approach and gain narratives of the future leader's experiences. The students' personal narrative would bring to life the findings of this research offering additional evidence of the importance of creating supportive contexts for student learning. The details of this current study in conjunction with other studies present unique experiences of African American females. This information serves to understand how to help prepare this population in need of support during their pursuit of their leadership goals.

Further research should focus on similarities among ethnicities and various college majors to determine if findings from the study would hold. This study demonstrated differential effects on leadership self-efficacy and leadership aspirations among female business students based on ethnicity. In addition, researchers should not make the assumption that the same predictors will arise because a student is majoring in business. Findings among other predictors may be similar, but there are specific factors of business major that cannot be overlooked.

Another recommendation is to examine the replicability of the factor structure with a male population. This could provide additional information on how ethnicity moderates the relationship between leadership self-efficacy and leadership aspirations. A study with African American and White American male business students may not have the gender discrimination factor, but the other dynamics of the study could remain the same. It is also suspected African American males may have higher levels of self-efficacy to withstand discrimination and injustices as they aspire leadership careers.

The above mentioned suggestions for future research would benefit from including a qualitative follow-up interview with students examining the results of the study and the degree to which it is either consistent or divergent from their experiences. This would help identify additional variables for consideration in future research.

Considering that African American participants with low levels of leadership self-efficacy had higher leadership aspiration than White American females, the following recommendation is offered. The population may benefit from what the literature calls sociocultural conversations with peers formally and informally about differences and interacting with those who are different (Dungan et al., 2013). The conversation is recognized as necessary

to offer the students an opportunity to cultivate dialogue about their skills and foster socially responsible leadership.

Essentially, this study responded to the need for additional examination of the convergence of the following three topics: leadership and race (Chao & Tian, 2010; Chin, 2010; Coleman & Campbell-Stephens, 2010; Dugan, 2011; Sanchez-Hucles & Davis, 2010; Ospina & Foldy, 2009; Waring, 2003), leadership and gender (Appelbaum, Audet, & Miller, 2003; Avolio, Mhatre, Norman, & Lester, 2009; Barclay et al., 2007; Chung & Sahgal, 2007; Kreuzer, 1992; Nanton, 2015; Simon & Hoyt, 2013; Stake, 1983; Warner, 2014), and leadership and college students (Boatwright & Egidio, 2003; Boatman, 1999; Carry, 2003; Leithwood, & Jantzi, 2008; Leone, 2016; Nygun, 2016). There is still more to be discovered related to female leadership as the number of women in leadership positions is increasing, and the work force is increasingly diversifying. Colleges, universities, and organizations can benefit from personal and unique perspectives of their female leaders.

Conclusion

This current quantitative study started with seeking to understand what inspires women to be leaders knowing they may face a glass ceiling, gender discrimination, gender wage gap, and other challenges? It is important to reiterate the major finding of this study revealed at low levels of leadership self-efficacy African American females had higher leadership aspiration levels than and their White American counterparts. The results may help those who aim to understand future female leaders and effectively help a broad range of business students to develop a positive future in leadership.

Albert Bandura's social cognitive theory presents self-efficacy as an internal belief system (Cervone, Shadel, & Jencius, 2001). The findings in this study revealed all the female

business students demonstrated overall high levels of leadership self-efficacy. The high levels of leadership self-efficacy discovered among individuals who live in a society that has prevailing hindrances support the principles presented in the social cognitive theory that people rely on overt behavioral tendencies, personal determinations of actions, and unique qualities (Cervone, Shadel, & Jencius, 2001).

Role congruity theory and role theory also offer insight on the college students in the study in relation to the significant findings. Role congruity theory emphasizes one's ability to recognize social roles and social expectations based on a social position, as well as a specific social category. Role theory also argues the individual is influenced by the role expectations of others in their lives, learned role behaviors, role skills acquired and role expectations of their community (Schulz, 2015). Both gender roles and expectations require females to balance the demands of their careers, personal lives, together with society. Self-efficacy is a person's personal belief about their ability moreover than their actual ability (Barclay et al., 2007). Leadership self-efficacy is a form of self-efficacy that considers both the leader and the leader's actions (Hannah, Avolio, Luthans, & Harms, 2008). Considering these theories in relation to roles and the definition of these terms, the female business students in the study presented a belief in their leadership ability despite society's gender differences, moreover biases.

The leadership self-efficacy levels of African American females in the current study were found higher than White American females in the study as suspected by the researcher, but the scores were not significant. Never the less, African American females had significantly higher levels of leadership aspirations. Ethnicity was also found to moderate the relationship between leadership self-efficacy and leadership aspirations. Considering the dynamics of both gender and ethnicity the population of females embody, the matter must be complex. National labor force

data suggests that the needs and resources of women of color and white women are different (Frevert, Culberston, & Huffman, 2014). The Dual Jeopardy Theory recognizes the experience African American women may face as hostile work climates, isolation, and discrimination (Johnson & Thomas, 2012).

The author of this study continues to maintain the belief that the leadership self-efficacy level of African Americans requires higher levels than that of White Americans who aspire a career in leadership. The results of the study support this reasoning. The African American female leader faces both gender and racial discrimination in America. The belief in their ability to perform as a leader despite unwarranted injustices requires an unprecedented source of psychological strength. Leading a business, managing employees and regulating day-to-day operations requires extraordinary ability. This study presents the high level of leadership self-efficacy a female and an African American female embodies in order to lead is rooted in her belief system about herself.

The results offer implications for change. The findings of the study provide an important addition to the field of leadership studies and address the limited research of African American female leadership aspiration. Although further meaning is necessary to understand leadership self-efficacy of female business students, there is hope that the contribution the participants presented in this study will support efforts of leadership research. This study advances our understanding of the choices and challenges that females face in the workplace. The researcher hopes the study emphasized the importance not to overlook supporting young women aspiring leadership in a culture that is not fully supporting their pursuit to fill powerful roles. This research will benefit business students, aspiring leaders, current leaders, higher education

institutions, and organizations. Understanding the converging of leadership, gender, and ethnicity will serve society in general.

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Appendix A: Recruiting Statement

Dear Student,

I am a Business Psychology doctoral student at The Chicago School of Professional Psychology. I am investigating the topic of female leadership aspiration for my dissertation research study to seek an understanding of how self-efficacy may impact the population. You will be asked to answer such questions as: “How confident are you that you can be successful at leading others?” Also, you will be asked to rate your confidence in abilities as described in the following statements: “I hope to become a leader in my career field” and “I can gain my employees’ commitment to new goals”.

Currently, I am in the data collection phase of my dissertation and would be extremely grateful and appreciative if you would participate. I understand that your time is limited and valuable; the completion of the surveys would only take 15 to 20 minutes. Please follow the directions to complete the survey. Also, kindly read the eligibility questions prior to starting to confirm your eligibility for the study. I would be extremely grateful and appreciative if you would participate.

You were contacted because you were identified to have one of the qualifying requirements to participate in the study. I am looking for undergraduate and graduate White American and African American Female students over the age of 18 who have declared business as their major. Also, the study requires that you have no previous paid leadership experience. Your participation in this study may not benefit you directly, but your participation may benefit others by contributing to our knowledge about our future leaders.

As a token of my appreciation for your participation, you will have the opportunity to enter a drawing for a \$50 Amazon gift card upon completion of the survey. Your respondent ID will not be revealed and you will remain anonymous. Your contact information (respondent ID) will only be used if you wish to enter into the drawing for a \$50 Amazon gift card upon completion of the survey. You may choose not to participate in the drawing if you are uncomfortable. If you have any concerns about providing your contact information, or if you have any questions regarding this letter, the purpose of the survey, or the survey process feel free to contact the researcher at sar5955@ego.thechicagoschol.edu. Thank you very much in advance for your time and contribution to my research. To begin and continue each step press the red button below with the white arrows.

Sincerely,

Soyini Richards

sar5955@ego.thechicagoschol.edu

Appendix B: Consent Form

Investigator: Soyini Richards

Title: Assessing self-efficacy levels of future African American and White American female leaders

Purpose. The purpose for this research is to better understand how self-efficacy influences the leadership aspiration of African American and White American female undergraduate and graduate business students.

Procedures. You will be asked first to answer several eligibility questions. If you meet the eligibility requirements, you will be asked questions regarding your thoughts about pursuing a career as a leader. The questions are short, clear and will take you no more than 20 minutes to answer. Your participation may be compensated in the form of a chance to win a \$50 Amazon gift card. You will be asked whether you wish to enter the drawing. All participants completing the survey and agreeing to participate in the drawing will be eligible for the gift card.

Risks to Participation: Participants will remain anonymous. In order to ensure confidentiality, all participants' respondent numbers will be solely used to notify potential winners of drawing, will be separated from responses, stored separately, and immediately deleted after the list of respondent numbers who are interested in participating in the drawing are forwarded to Qualtrics. The surveys include questions about your leadership aspiration and may induce some uncomfortable feelings such as worrying about the future as a female leader. However, potential discomfort should fall within normal reactions to everyday life. In other words, if any discomfort is experienced, it should be confined to the normal feelings one would encounter during self-evaluation.

Benefits to Participation: Although you may benefit from self-awareness of your leadership aspiration, you will not receive a direct benefit from this study. However, the researcher hopes the information learned from this study may benefit society in our understanding the future female leaders.

Alternatives to Participation: Participation in this study is voluntary. You may withdraw from study participation at any time and without any penalty.

Compensation: Your participation may be compensated in the form of a chance to win one of the five \$50 Amazon gift cards. You will be asked whether you wish to enter the drawing and if so to indicate “yes” or “no”. All students completing the survey will be eligible for the drawing.

Confidentiality: During this study, information will be collected about you for the purpose of this research. The results of the surveys will be confidential and participants, nor you, or anyone else, will have access to individual results or identifiers. This means that your identity will remain anonymous and will not be linked to your data. Only the three members of the dissertation committee and myself will have access to the data. An encrypted format will be used after the collection of data on all laptops, iPads, tablets, USB drives (portable media) or devices to store the participant’s personal identifiable information in order to ensure confidentiality of the participant’s responses. In the event the data is intercepted during transmission, the data cannot be decoded. The individual responses cannot be traced back to an individual respondent. Research material will be kept for five years to comply with the American Psychological Association guidelines.

Questions/Concerns: You can contact the researcher Soyini Richards at: sar5955@ego.thechicagoschool.edu at any time if you have questions or concerns. You may also

contact the dissertation chair/research supervisor Dr. Noelle Newhouse at nnewhouse@thechicagoschool.edu. If you have questions concerning your rights in this research study you may contact the Institutional Review Board (IRB), which is concerned with the protection of subjects in research project. You may reach the IRB office Monday-Friday by calling 312.467.2343 or writing: Institutional Review Board, The Chicago School of Professional Psychology, 325 N. Wells, Chicago, Illinois, 60654.

By clicking on “I agree,” you acknowledge that you have been informed of and understand the procedures involved in this survey, and agree to voluntarily participate in the research project. Thank you very much for considering participating in this research study.

Regards,

Soyini A. Richards

I have read the above information and have received satisfactory answers to my questions. I understand the research project and the procedures involved have been explained to me. I agree to participate in this study. My participation is voluntary and I do not have to sign this form if I do not want to be part of this research project. I will receive a copy of this consent form for my records.

I agree I Decline

Date _____

Appendix C: Eligibility Questions for Students

Thank you for choosing to participate in this research study. Your participation is greatly appreciated. This study is investigating the topic of female leadership aspiration of undergraduate and graduate business majors. For this reason, the researcher needs to determine your major and program.

Please feel free to contact the researcher at sar5955@ego.thechicagoschol.edu if you have any questions regarding the purpose of the survey, or the survey process. You may at any time opt out of the survey without consequences. Thank you again for your participation. Enjoy your day!

Instructions: Please answer the following questions to determine your eligibility for this research study. Kindly circle your response, or fill in your response when necessary.

1. Please select your gender.

Female

Male

2. Are you 18 years, or older?

Yes

No

3. Please select your ethnicity.

African American/Black

White American/European Decent

Neither

4. Have you declared yourself a business major in college?

Yes

No

5. Are you currently enrolled in an undergraduate program or a graduate program?

Choose one:

undergraduate program

graduate program

none of the above

6. Are you enrolled in a community college?

Yes

No

7. Have you ever held a paid professional leadership role?

Yes

No

* Red indicates eligible to participate in the study.

Appendix D: Questionnaires

Multi-Institutional Study of Leadership

Leadership self-efficacy: The leadership self-efficacy scale measures how confident a student is in his or her ability to take on a leadership role.

How confident are you that you can be successful at the following? (Select one response for each)

Leading others

1=Not at All Confident

2=Somewhat Confident

3=Confident

4=Very Confident

Organizing a group's tasks to accomplish a goal

1=Not at All Confident

2=Somewhat Confident

3=Confident

4=Very Confident

Taking initiative to improve something

1=Not at All Confident

2=Somewhat Confident

3=Confident

4=Very Confident

Working with a team on a group project

1=Not at All Confident

2=Somewhat Confident

3=Confident

4=Very Confident

Source Citation:

Dugan, J. P. (2015). *Multi-Institutional Study of Leadership 2015: Institutional reports*. College Park, MD: National Clearinghouse for Leadership Programs.

Leadership Self-Efficacy Scale

Please rate your confidence in your ability to perform each of the following tasks. In these questions, "unit" refers to the group of employees currently reporting to you.

Rate your confidence level by circling one number on the 100-point probability scale. For example, 0% reflects not at all confident, 50% reflects an intermediate level of confidence, and 100% means completely confident.

1. I can figure out the best direction for where my unit needs to go in the future.

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

2. I can identify the most critical areas for making meaningful improvements in my unit's effectiveness.

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

3. I can develop plans for change that will take my unit in important new directions.

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

4. I see the path my unit needs to take in order to significantly improve our effectiveness.

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

5. I can develop trusting relationships with my employees such that they will embrace change goals with me.

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

6. I can obtain the genuine support of my employees for new initiatives in the unit.

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

7. I can develop relationships with my employees that will motivate them to give their best efforts at continuous improvement.

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

8. I can gain my employees' commitment to new goals.

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

9. I can figure out ways for overcoming resistance to change from others whose cooperation we need to improve things.

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

10. I can figure out ways for my unit to solve any policy or procedural problems hindering our change efforts.

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

11. I can work with my employees to overcome any resource limitations hindering our efforts at moving the unit forward.

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

12. I can find the needed supporters in management to back our change efforts.

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Source Citation:

Paglis, L. L., & Green, S. G. (2002). Leadership self-efficacy and managers' motivation for leading change. *Journal of Organizational Behavior*, 23, 215-235.

Career Aspiration Scale - Revised
(Gregor & O'Brien, 2015)

In the space next to the statements below please circle a number from “0” (not at all true of me) to “4” (very true of me). If the statement does not apply, circle “0”. Please be completely honest. Your answers are entirely confidential and will be useful only if they accurately describe you.

0 = Not at all true of me

1 = Slightly true of me

2 = Moderately true of me

3 = Quite a bit true of me

4 = Very true of me

- 1 I hope to become a leader in my career field. _____
- 2 I do not plan to devote energy to getting promoted to a leadership position in the organization or business in which I am working. _____
- 3 I want to be among the very best in my field. _____
- 4 Becoming a leader in my job is not at all important to me. _____
- 5 When I am established in my career, I would like to manage other employees. _____
- 6 I plan to reach the highest level of education in my field. _____
- 7 I want to have responsibility for the future direction of my organization or business. _____
- 8 I want my work to have a lasting impact on my field. _____
- 9 I aspire to have my contributions at work recognized by my employer. _____
- 10 I will pursue additional training in my occupational area of interest. _____
- 11 I will always be knowledgeable about recent advances in my field. _____
- 12 Attaining leadership status in my career is not that important to me. _____
- 13 Being outstanding at what I do at work is very important to me. _____
- 14 I know I will work to remain current regarding knowledge in my field. _____
- 15 I hope to move up to a leadership position in my organization or business. _____
- 16 I will attend conferences annually to advance my knowledge. _____
- 17 I know that I will be recognized for my accomplishments in my field _____
- 18 Even if not required, I would take continuing education courses to become more knowledgeable. _____
- 19 I would pursue an advanced education program to gain specialized knowledge in my field. _____
- 20 Achieving in my career is not at all important to me. _____
- 21 I plan to obtain many promotions in my organization or business. _____
- 22 Being one of the best in my field is not important to me. _____
- 23 Every year, I will prioritize involvement in continuing education to advance my career. _____
- 24 _____
I plan to rise to the top leadership position of my organization or business. _____

Scoring Instructions:

Reverse score items 2, 4, 12, 20, 22 so the responses are changed in the following way: 0=4, 1=3, 2=2, 3=1, 4=0. Please the new scores in the spaces below that correspond with the item.

Place all remaining scores in the spaces with their corresponding item number below. Sum responses to each item for each scale. Higher scores indicate higher aspirations in each domain (achievement, leadership, education).

Below are the numbers corresponding to each scale. The reverse scored items have an asterisk.

Achievement Aspiration items: 3, 8, 9, 13, 17, 20*, 21, 22*

Leadership Aspiration items: 1, 2*, 4*, 5, 7, 12*, 15, 24

Educational Aspiration items: 6, 10, 11, 14, 16, 18, 19, 23

FACTOR 1:
LEADERSHIP
ASPIRATIONS

1 _____
2* _____
4* _____
5 _____
7 _____
12* _____
15 _____
24 _____

SUM _____

FACTOR 2:
ACHIEVEMENT
ASPIRATIONS

3 _____
8 _____
9 _____
13 _____
17 _____
20* _____
21 _____
22* _____

SUM _____

FACTOR 3:
EDUCATIONAL
ASPIRATIONS

6 _____
10 _____
11 _____
14 _____
16 _____
18 _____
19 _____
23 _____

SUM _____

Source Citation:

Gregor, M.A. & O'Brien, K.M. (2016). Understanding Career Aspirations Among Young

Women: Improving Instrumentation. *Journal of Career Assessment*, 24(3) 559-572.

DOI: 10.1177/1069072715599537

I wish to enter the drawing for a chance to win one of \$50 Amazon gift card. I understand that my respondent ID will only be used to notify me in the event that I am the winner and will be subsequently deleted.

Yes

No

Completion Messages

If the participant did not meet either of the eligibility questions, participants saw the following message: “Thank you for your willingness to participate in the research study. Unfortunately, you do not meet the eligibility criteria. If you have any question regarding eligibility requirements, please feel free to email the researcher at:

sar5955@ego.thechicagoschool.edu. Thank you for your time. Enjoy your day.”

If the participant declined to participate, participants saw the following message: “Thank you for your time and consideration. If you have any questions regarding the survey, feel free to email the researcher at sar5955@ego.thechicagoschool.edu. Enjoy your day.”

If a student successfully completed the survey, participants saw the following message: “Thank you for time and for taking the survey. Enjoy your day.”

Appendix E: Results Using MLS as a Measure of Leadership Self-Efficacy

The MSL was not used to formally test the hypotheses because of its low reliability. The scale has 4 items each rated on a scale of 1 to 4. The decision was made to use the MSL to informally analyze the hypothesis to observe if the scale would produce similar results as the LSE.

Hypothesis 1A

The first hypothesis was analyzed using an independent samples *t*-test to determine whether there was a statistically significant difference between African American and White American female business students' leadership self-efficacy score (measured by MLS). Results indicated that African American students ($M = 3.143$, $SD = 0.60$) and White American students ($M = 3.05$, $SD = 0.61$) did not differ significantly in leadership self-efficacy, $t(260) = 1.25$, $p = .212$. The same conclusion is reached whether using LSE or MSL.

Hypothesis 1B

This hypothesis does not include self-efficacy in the hypothesis, so no additional analysis is warranted.

Hypothesis 2A

Leadership self-efficacy as measured by MSL was dichotomized using a median split into high and low leadership self-efficacy levels. An independent samples *t*-test was also appropriate to analyze differences in mean leadership aspiration by self-efficacy level. Results indicated that for students with low leadership self-efficacy, their leadership aspiration scores ($M = 20.12$, $SD = 6.71$) differed significantly from the leadership aspiration of students with high leadership self-

efficacy ($M = 25.49$, $SD = 5.79$), $t(260) = 6.69$, $p < .001$. Students with high levels of leadership self-efficacy had higher mean leadership aspiration scores than students with low leadership self-efficacy. These results lead to the same conclusions as those using LSE as a measure of leadership self-efficacy.

Hypothesis 2B

This hypothesis was analyzed using a 2 x 2 ANOVA to examine the interaction between the dichotomous variables of leadership self-efficacy and ethnicity on leadership aspiration. The overall ANOVA was significant, $F(3, 258) = 15.36$, $p < .001$. Since the overall model was significant, an examination of the interaction between ethnicity and leadership self-efficacy was conducted. The interaction between ethnicity and leadership self-efficacy was not statistically significant, $F(1, 258) = 0.944$, $p = .332$ using MSL as a measure of leadership self-efficacy. This is a different result than achieved using LSE. In this case, the main effect of leadership self-efficacy was significant, $F(1, 258) = 42.69$, $p < .001$, but ethnicity was not, $F(1, 258) = 0.975$, $p = .324$.

Summary

The LSE has much higher reliability than MSL. Leadership aspiration is positively significantly correlated with both measures of leadership self-efficacy (MSL and LSE). That is, as scores on leadership self-efficacy increase, so do scores on leadership aspiration. Correlations were similar for both African Americans and Whites Americans. For African Americans, the correlation between leadership aspiration and MSL, $r = .415$, $p < .001$, were slightly lower than for White Americans, $r = .460$, $p < .001$.