EFFECTS OF GENDER ON NORTH CAROLINA COMMUNITY COLLEGE
BOARDS OF TRUSTEES’ PERCEPTIONS OF COMMUNITY COLLEGE
PRESIDENTS
by
Cynthia I. Dean
Liberty University

A Dissertation Presented in Partial Fulfillment
Of the Requirements for the Degree
Doctor of Education

Liberty University
April, 2013
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ABSTRACT

The purpose of this causal-comparative study was to compare the effects of gender on the perceptions that members of the boards of trustees of community colleges have of community college presidents. This study was guided by two research questions; the first one comparing the participants’ perceptions of the male and female leader with the leader’s gender acting as the sole independent variable; the second one examining the interaction effect of the participant’s gender and the leader’s gender on the participant’s perception of the leader. Twelve boards of trustees within the North Carolina Community College System self-selected to participate. Participants read a brief vignette depicting a community college president exhibiting a transformational leadership style then evaluated that leader using the three Outcomes of Leadership subscales of the MLQ – 5X Short: extra effort (EE), effectiveness (EFF), and satisfaction (SAT). Half the boards of trustees received a vignette and survey depicting a male leader and half received a vignette and survey depicting a female leader. One hundred forty-seven surveys were distributed. Ninety-four surveys were returned. Data analyzed using MANOVAs and ANOVA revealed that, while both male and female participants rated the female president lower than the male president on all three subscales, the difference was not statistically significant; resulting in a failure to reject all null hypotheses.
Dedication

This dissertation is dedicated to my loving and supportive family. To my husband, Daniel, your faith in me has sustained me throughout this process and I love you very much! To my mother, your example of a strong, intelligent, independent woman instilled in me the strength and confidence to pursue my goals. To my siblings, thank you for your unending confidence in me. To my late grandmother, your quiet and gentle strength continues to inspire me in all aspects of my life. And, to all my nieces, never forget you are strong, capable women and you can accomplish anything you set your mind to.
Acknowledgements

Many people have supported and encouraged me on this journey and I would like to take a moment to acknowledge them. I am grateful to my committee, Dr. Donna Joy, Dr. Mary Garzon, and Dr. Jana Ulrich, whose patience, support, and encouragement have been invaluable to me; to Dr. Watson, my research consultant, whose feedback provided clarity in my research design; finally, to my colleagues at Stanly Community College, you inspired my topic and continue to inspire me every day. I am grateful to you for sharing this journey with me.
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List of Abbreviations

EE -- Extra Effort subscale of the Multifactor Leadership Questionnaire
EFF -- Effectiveness subscale of the Multifactor Leadership Questionnaire
MLQ – 5X Short -- Multifactor Leadership Questionnaire form 5X Short
NCCCS -- North Carolina Community College System
SAT -- Satisfaction subscale of the Multifactor Leadership Questionnaire
CHAPTER ONE: INTRODUCTION

Women lag behind men in obtaining leadership positions in many professions (Catalyst, 2007; Krefting, 2003). Education is no different (Coleman, 2005; Cook & Kim, 2012). The percentage of female educational leaders is disproportional to the number of women working in education; “Over the past two decades, the percentage of female college presidents has increased, yet their numbers remain disproportionately low” (Brown, 2005, p. 659). Women hold more leadership positions in community colleges than they do in four-year colleges and universities (Bragg, 2009; Liu, 2007). However, they still are not proportionally represented in positions of leadership even in community colleges (Drake, 2008). Much research has been conducted and much commentary provided on the topics of leadership styles, gender and leadership, and gender inequity. As a result, it has been proven that women’s leadership styles are as effective as the leadership styles exhibited by men (Eagly, 2007; Eagly, Johannesen-Schmidt, & van Engen, 2003; Garcia-Retamero & Lopez-Zafra, 2006). One related aspect of women and leadership that is lacking from the extant literature is a current analysis of the perceptions of those who hire leaders, especially in the field of education. This study proposes to address that gap. This chapter provides the background, problem statement, purpose statement, and significance of the present study as well as presents the research questions and related hypotheses guiding the research. It concludes with the identification of variables being examined in the research and the definitions relevant to the study.
Background

Leadership is perceived to be a masculine characteristic (Coleman, 2003; Schein, 1978; Schein, 2001). Historically, women have had difficulty breaking through the glass ceiling to achieve the highest position of leadership in all professions (Hymowitz & Shellhardt, 1986; Ridgeway, 2001). Studies have shown that women continue to face discrimination, prejudice, and sexism in obtaining positions of leadership, especially in industries that are considered incongruous with the female role (Eagly & Karau, 2002; Garcia-Retamero & Lopez-Zafría, 2006). Education is not considered incongruous with the role of females. However, perhaps educational leadership is (Coleman, 2007).

Women hold a higher percentage of leadership positions in community colleges than they do in 4-year colleges and universities (Liu, 2007). Still, they are not equitably represented in positions of leadership, even in community colleges (Drake, 2008). In 1986 only 8% of the nation’s community college presidents were women. That number had increased to 29% by 2010, but the rate of increase slowed in the first decade of the twenty-first century reflecting an increase of only 2% between 2001 and 2006. Women still do not have parity with men among community college presidents nor do their numbers reflect the proportion of female students or female community college faculty and staff (Eddy, 2010). Currently, women account for only 31% of community college presidents (Cook & Kim, 2012) while they make up more than 54% of executive and administrative and managerial positions; 53% of the faculty; and 57% of all full-time community college employees (National Center for Education Statistics [NCES], 2010).

Researchers have examined many different possible causes of the continued inequity, and while their studies add to the broader discourse on gender inequity among community
college presidents, they have not examined the perceptions of the members of the boards of trustees. Boards of trustees are responsible for recruiting, hiring, and evaluating their institutions’ presidents. Yet there is no available literature on the topic of trustees’ perceptions of women as presidents. This study seeks to fill this gap in the research.

**Problem Statement**

If women are as qualified as men to be leaders then why do they continue to lag behind in filling leadership positions in community colleges? Women have been proven to possess as effective leadership skills as men (Coleman, 2003; Eagly, 2007; Eagly et al, 2003; Garcia-Retamero & Lopez-Zafra, 2006). Women have been proven to be as qualified as men by virtue of having similar career paths and experiences (Cejda, McKenney, & Burley, 2001). And studies have shown that there are adequate and proportional numbers of women in the educational leadership pipeline (Aud et al., 2011; Catalyst, 2011; McKenney & Cejda, 2000). Therefore none of these potential causes can be attributed to the problem of gender inequity among community college presidents. Other factors such as unfavorable attitudes and perceptions of those that hire educational leaders, such as boards of trustees, toward female leaders must be considered and examined.

**Purpose Statement**

The purpose of this causal-comparative study is to test the theory of the male orthodoxy of leadership (Coleman, 2003) and the role congruity theory of prejudice toward female leaders (Eagly & Karau, 2002) by comparing the effects of gender (both the president’s and the participant’s) on the perceptions that members of the boards of trustees of North Carolina community colleges have of community college presidents per
the extra effort (EE), effectiveness (EFF), and satisfaction (SAT) subscales of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short) (Avolio and Bass, 2004) when controlling for the leadership style exhibited by the president in the design of the survey instrument.

**Significance of the Study**

By examining the perceptions held by the members of community college boards of trustees, this study will add to the body of research and knowledge regarding gender and educational leadership and will help illuminate or eliminate causes of the continued gender imbalance among community colleges’ top leadership positions. According to Madden (2005), “Although stereotypes are activated automatically and perceivers are usually unconscious of them, awareness of biases can mitigate their effects” (p. 5). Thus, if the results of the present research reveal more negative perceptions of female leaders than male leaders, then perhaps this study might help reduce any continued gender disparity that stems from negative perceptions of women as leaders simply by virtue of providing additional information and perspective to the issue.

**Research Questions and Null Hypotheses**

This study is guided by the research questions and correlating hypotheses as noted below. Perceptions referred to in the following research questions will be measured using the extra effort (EE), effectiveness (EFF), and satisfaction (SAT) subscales of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short) (Avolio and Bass, 2004).
**Research Question One (RQ1)**

Are there differences in the perceptions the members of community college boards of trustees hold about community college presidents by the gender of the president (male vs. female) per the extra effort (EE), effectiveness (EFF), and satisfaction (SAT) subscales of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short)?

$H_{01.1}$: There are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the president (male vs. female) per the extra effort (EE), effectiveness (EFF), and satisfaction (SAT) subscales of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short).

$H_{01.2}$: There are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the president (male vs. female) per the extra effort (EE) subscale of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short).

$H_{01.3}$: There are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the president (male vs. female) per the effectiveness (EFF) of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short).

$H_{01.4}$: There are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the president (male vs. female) per the satisfaction (SAT) subscale of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short).
Research Question Two (RQ2)

Are there differences in the perceptions the members of community college boards of trustees hold about community college presidents by the gender of the president (male vs. female) and the gender of the members of community college boards of trustees (male vs. female) per the extra effort (EE), effectiveness (EFF), and satisfaction (SAT) subscales of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short)?

H₀₂.₁: There are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the president (male vs. female) and the gender of the members of community college boards of trustees (male vs. female) per the extra effort (EE), effectiveness (EFF), and satisfaction (SAT) subscales of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short).

H₀₂.₂: There are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the president (male vs. female) per the extra effort (EE), effectiveness (EFF), and satisfaction (SAT) subscales of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short).

H₀₂.₃: There are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the members of community college boards of trustees (male vs. female) per the extra effort (EE), effectiveness (EFF), and satisfaction (SAT) subscales of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short).
H_{02.4}: There are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the president (male vs. female) and the gender of the members of community college boards of trustees (male vs. female) per the extra effort (EE) subscale of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short).

H_{02.5}: There are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the president (male vs. female) per the extra effort (EE) subscale of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short).

H_{02.6}: There are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the members of community college boards of trustees (male vs. female) per the extra effort (EE), subscale of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short).

H_{02.7}: There are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the president (male vs. female) and the gender of the members of community college boards of trustees (male vs. female) per the effectiveness (EFF) subscale of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short).

H_{02.8}: There are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the president (male vs. female) per the effectiveness (EFF) subscale of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short).
\( H_{02.0} \): There are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the members of community college boards of trustees (male vs. female) per the effectiveness (EFF) subscale of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short).

\( H_{02.10} \): There are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the members of community college boards of trustees (male vs. female) per the satisfaction (SAT) subscale of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short).

\( H_{02.11} \): There are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the president (male vs. female) per the satisfaction (SAT) subscale of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short).

\( H_{02.12} \): There are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the members of community college boards of trustees (male vs. female) per the satisfaction (SAT) subscale of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short).

**Identification of Variables**

The following variables will be examined in the proposed research.
Independent Variables

Gender comprises both sets of independent variables (IV) and refers to the sex, female and male, of both the community college president depicted in the survey vignette and the participating trustees.

- **Gender of the leader** - Gender of the leader (community college president) is categorized as male and female and is an active independent variable. Active independent variables are ones which the researcher can control and manipulate (Ary, Jacobs, Razavieh, & Sorensen., 2006, p. 356).

- **Gender of the participant** - Gender of the participants (trustees) is categorized as male and female and is an attribute independent variable. Attribute independent variables are ones which the participants have prior to the study and which the researcher cannot control or manipulate (Ary et al., 2006, p. 355).

In addition to the independent variables listed above, this study includes a potentially confounding independent variable of leadership style which will be controlled for in the design of the survey instrument in that both leaders (male and female) depicted in the surveys’ vignettes will be displaying the same transformational leadership style as defined below.

Dependent Variables

Dependent variables (DV) include the means of the three Outcomes of Leadership subscales – extra effort (EE), effectiveness (EFF), and satisfaction (SAT) -- of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short). The MLQ was designed to measure both transformational and transactional leadership. The three Outcomes of Leadership subscales were designed to measure the success of both types of
leaders; although for the purposes of this study they will only be measuring the perceived success of a leader exhibiting a transformational leadership style. For each of the following subscales, trustee participants will evaluate a fictional community college president in a leadership vignette using a Likert-type scale ranging from, (0) not at all, to (4) frequently, if not always (Avolio and Bass, 2004).

- **Extra Effort (EE)** - This subscale measures “how often the raters perceive [the] leader to be motivating” (Avolio and Bass, 2004, p. 96); and consists of three items on the MLQ – 5X Short measuring the raters’ perceptions of the extent to which the leader can, a) “get others to do more than they expected to;” b) “heighten others’ desire to succeed;” and c) “increase others’ willingness to try harder” (p. 96).

- **Effectiveness (EFF)** - This subscale measures “how effective raters perceive [the] leader to be at interacting at different levels of the organization” (Avolio and Bass, 2004, p. 96); and consists of four items which measure the raters’ perceptions of the extent to which the leader, a) is “effective in meeting others’ job-related needs;” b) is “effective in representing their group to higher authority;” c) is “effective in meeting organizational requirements;” as well as d) the leader’s ability to “lead a group that is effective” (p. 96).

- **Satisfaction (SAT)** - This subscale measures “how satisfied raters are with [the] leader’s methods of working with others (Avolio and Bass, 2004, p. 96); and consists of two items which measure the raters’ perceptions of the extent to which the leader, a) “[uses] methods of leadership that are satisfying;” and b) “[works] with others in a satisfactory way” (p. 96).
Definitions

The following words and concepts relevant to this study are used in the context of the definitions provided.

- **Board of Trustees** - the governing bodies of the individual community colleges which bear the responsibility of hiring the college president (Dowdy, 2007).

Throughout this manuscript, for the sake of brevity, the word trustee is used to indicate an individual member of a board of trustees and, in the present study, is used interchangeably with the word *participant*.

- **Community College** - a public institution of higher education granting associate degrees, diplomas, and certificates. Often described as two-year institutions and the “people’s college,” community colleges serve a diverse population through a variety of programs including basic skills, continuing education, vocational and technical education, and college transfer preparation (Stafford, 2006).

- **Gender** - the sex, female and male, of both the community college president and the trustees. While some researchers distinguish between the word *gender* and the word *sex*, the former referring to the characteristics considered appropriate for each sex and the latter referring to a biological distinction (Powell et al., 2008, p. 169), the terms are used interchangeably in this study with *gender* being the preferred and most frequent word choice used herein.

- **Perceptions** – opinions of trustees toward leaders as evaluated on the Outcomes of Leadership subscales (extra effort, effectiveness, and satisfaction) of the Multifactor Leadership Questionnaire, Form 5X-Short (Avolio & Bass, 2004).
• *President* - the chief executive officer of a community college who is “[responsible] for all administrative and managerial aspects of the institution” (Dowdy, 2007, p. 28) including but not limited to, fiscal management; management of faculty and staff; and overseeing educational and curriculum policies (p. 28).

• *Proportional representation (parity)* – refers to the ratio of women to men leaders comparable to the ratio of women to men working in community colleges as well as the ratio of women to men students in community colleges (Eddy, 2010).

• *Transformational leadership style* – a style of leadership that inspires subordinates and facilitates change in organizations through creative problem-solving and innovative decision-making (Hackman & Johnson, 2009, pg. 104). Transformational leaders encourage and inspire others to work for the good of the organizational mission by exhibiting their own hard work and commitment to the mission (Avolio and Bass, 2004; Bass, 1985a; Bass, 1985b) and is often contrasted with transactional leadership which inspires and motivates others by appealing to their own self-interest (Avolio and Bass, 2004; Burns, 1978).
CHAPTER TWO: LITERATURE REVIEW

Introduction

This chapter presents a review of the relevant literature regarding gender and educational leadership. This review includes literature pertaining to the theoretical background of gender and leadership; gender and leadership in a broader context; and gender and educational leadership specifically, examining factors such as professional inexperience, different leadership styles, and a dearth of women in the leadership and/or educational pipeline in regards to the disproportional representation of women in the top educational leadership positions. Moreover, by examining related research and its methodology, this chapter will reveal a gap in the research in that the perceptions held by the most important players involved in the process of hiring community college presidents have never been examined vis-à-vis gender.

While this review will include information about leadership styles in general and the transformational leadership style specifically, it is not an examination of leadership styles or theories of leadership per se. There has been much research and analysis of the differences between male and female leaders and which traits or characteristics are considered the most effective. This study is not concerned with theories of leadership or the variety of leadership styles individuals exhibit. Therefore, the work of researchers of leadership styles such as Kouzes and Posner (2007) will not be included. What concerns this author is why, even after studies have shown that men and women have equally effective leadership styles (Coleman, 2003; Eagly, 2007; Eagly et al., 2003; Garcia-
Retamero & Lopez-Zafra, 2006), women still are not reaching the top educational leadership positions as readily as men.

**Conceptual and Theoretical Framework**

Research has revealed that women exhibit as good as and sometimes more effective leadership skills than men (Coleman, 2003; Eagly, 2007; Eagly et al., 2003; Garcia-Retamero & Lopez-Zafra, 2006). Yet, leadership is more often considered a masculine trait and associated with men rather than women (Coleman, 2003; Kawakami, White, & Langer, 2000). If women are as qualified as men to be leaders then why do they continue to be underrepresented in positions of executive leadership in colleges and universities? Research suggests that other reasons must be examined for the gender inequity in leadership. Researchers have developed many theories to explain why women continue to be underrepresented in positions of leadership. Most of the current theories are variations on the same theme – prejudice and discrimination.

**Glass Ceiling**

Discrimination against women in the 1970s and 1980s was described as a “glass ceiling.” The glass ceiling theory holds that through the imposition and use of artificial barriers women and minorities are purposely denied advancement on the “corporate ladder” (Federal Glass Ceiling Commission, 1995). The term was used as early as 1986 by Carol Hymowitz and Timothy Shellhardt in a *Wall Street Journal* article when they declared,

More than a decade after large numbers of women joined American corporations as first-level managers, few have climbed as far or as fast as their male
The term has subsequently been used to describe the invisible barriers that women face in attaining the highest positions of leadership (Jackson & O’Callaghan, 2009). Ridgeway (2001) asserts the glass ceiling is principally caused by the negative effect of gender expectations of women and the legitimacy reactions of others due to such expectations resulting in “nearly invisible nets of comparative devaluation” (p. 652), that serve to hinder women as they pursue leadership positions. The concern about a glass ceiling led to government action resulting in the Federal Glass Ceiling Commission created by the Civil Rights Act of 1991, which expanded the definition to include racial discrimination. More recently, however, Cotter, Hermsen, Ovadia, & Vanneman (2001) have shown that while the glass ceiling no longer applies to men of color, it still is a reality for women of all races. Accordingly, they have identified and defined four criteria of inequality that must exist in order for a glass ceiling effect to be present:

A glass ceiling inequality represents a gender or racial difference (a) that is not explained by other job-relevant characteristics of the employee… (b) that is greater at higher levels of an outcome than at lower levels… (c) in the chances of advancement into higher levels, not merely the proportions of each gender or race currently at those levels…, and (d) that increases over the course of a career. (pp. 657-659)

They found that the second and fourth criteria do not relate to racial discrimination (p. 671), thus the glass ceiling remains a “distinctively gender phenomenon” (abstract).

Over the years, corporate and educational institutions have taken measures to
eliminate this glass ceiling by actively recruiting and promoting women to positions of leadership (Lively, 2000a). Citing a report from the American Council on Education, Lively (2000b) notes that in higher education specifically, the number of female presidents doubled between 1986 and 1998 (para. 1). These efforts were largely due to governmental pressure and legislation preventing discrimination (Evans & Chun, 2007); however, they were inadequate in bringing about gender parity. Despite the fact that federal law prohibits such discrimination, gender inequalities persist in the highest levels of management; thus proving that for women, the glass ceiling is still in effect (Cotter et al., 2001).

The glass ceiling seems to be a catch-all term for the various barriers to female advancement (Guyot, 2008; Moreau, Osgood & Halsall, 2007). According to Guyot (2008), a glass ceiling can be shattered and once shattered would allow the free flow of women to the top. However, this has not happened. He suggests a different metaphor is more appropriate, specifically that female advancement is more fluid with varying levels of viscosity (p. 529). In examining women in government, Guyot notes that a greater number of women are appointed rather than elected and that at the state level the percentages of women are even greater at both the appointed and elected positions. This differentiation in the representation of women in government is not unlike the educational field. As teachers, women are represented more in the elementary grades and the proportion of women to men decreases as the grade level increases. At the public school level, women comprise 83% of the faculty in elementary education (Grogan, 2005). There are more women faculty members in community colleges than there are in senior institutions (White, 2005). In senior institutions there are more women instructors than
professors (Catalyst, 2011). In fact, women are underrepresented in positions of leadership across the educational spectrum, with differing levels of gender disproportionality at different levels of educational leadership; i.e. principals versus superintendents (Grogan, 2005), community college presidents versus baccalaureate-granting institutions versus research institutions (June, 2008), and women are more readily able to ascend to mid-level leadership positions than they are the top leadership positions (Eagly, 2007).

**Pipeline Theory**

The glass ceiling is only one concept, and a vague one at that, used to describe the inequitable representation of women in leadership positions. More specific and identifiable causes must be explored. One of these causes could be explained by the so-called “pipeline” theory. According to this theory, there are not enough women in the educational or professional pipeline to advance in equitable numbers to the top leadership positions (White, 2005). This explanation may have been relevant as recent as 20 years ago. However, the past ten years especially has seen a proportional increase in the number of women in both the requisite educational programs and professional positions (Eagly & Carli, 2007), particularly in the field of education (Catalyst, 2011; McKenney & Cejda, 2000). In fact, on average, there are more women than men pursuing higher education (Aud et al., 2011) and more women than men seeking advanced degrees (Snyder & Dillow, 2011).

White (2005) acknowledges that there are sufficient numbers of women in the educational leadership pipeline, but argues that the pipeline may be obstructed or leaking. Women encounter more obstacles and difficulties along their pathway to educational
leadership, including family responsibilities and gender discrimination (Eddy & Cox, 2008; Leatherwood & Williams, 2008). Similarly, Dominici, Fried, and Zeger (2009) contend that women have a more indirect pathway to leadership positions than do men because they are not recruited into the sequential administrative ranks leading to higher positions of leadership as readily as men. Again, the concept of an obstructed pipeline comes back to the problem of discrimination; but the root cause of this discrimination has yet to be determined.

**Male Orthodoxy of Leadership**

Many researchers have put forth more specific theories to explain continued discrimination against women leaders (Coleman, 2003; Eagly & Karau, 2002; Eddy & Cox, 2008; Rusch & Marshall, 2006; Schein, 1978; Schein, 2001). Coleman (2003) asserts that women are underrepresented in leadership positions because of the inherent male orthodoxy of leadership. This orthodoxy holds true even for the field of education which, if not viewed more as a female profession, is more gender-balanced. Furthermore, this male orthodoxy of leadership perpetuates a masculine, or macho, vision of leadership style. Finally, theories about educational leadership tend to ignore or marginalize gender (abstract). This dominant male culture seems to persist despite efforts by educational institutions to be more gender-balanced in their leadership. In a study of South African schools, Chisholm (2001) found that despite proactive recruiting efforts in the 1990s that resulted in an unprecedented number of women being appointed to key educational leadership positions by 1994, the number of women leaders declined over the next five years. Once in positions of leadership, women could not effectively
operate within the male leadership culture that continued to exist. This case shows that much of the problem lies in the traditional and dominant patriarchal culture of leadership.

Eddy and Cox (2008) found similar issues in community colleges within the United States. They argue that community colleges are gendered organizations that operate through an organizational structure and hierarchy based on male norms. Only by mimicking accepted male professional patterns do women achieve higher positions. Women cannot achieve such positions based on their own unique gender characteristics. They must assume the characteristics of their male counterparts to even be considered, such as disembodiment. Disembodied workers make no concession to their home lives. Men are the “natural” leaders because they are disembodied. They can pursue their careers despite having a family because they have a supportive wife or partner to maintain the home front. Female professionals, on the other hand, are often the primary caretakers in their homes. As such, they must try to balance their family responsibilities with those of their professional life (Coleman, 2005). They must put their careers on hold or take a less direct approach to the higher positions to accommodate their personal responsibilities (Coleman, 2007). Therefore, if women want to achieve positions of leadership at the same rate and level as men then they must do what men do and become disembodied; put their professional life ahead of their personal, or have a nontraditional family situation such as a husband or partner that shares in or even takes the lead role in the family’s care (Lively, 2000). And becoming a disembodied worker and doing what men do to succeed reinforces that male norm by which successful women leaders are judged.
Arguing that inequity continues to exist for women in the top educational positions because of gender filters, Rusch and Marshall (2006) add to the discussion that inequity does not lie in individual or organizational efforts, but in the leadership and organizational culture. They contend that these gender filters prohibit the recognition of a problem of inequity, silence any discussion of inequity, and “function to maintain the privilege of the dominant culture by silencing ideas and people who might disrupt the privilege of dominance” (p. 233). While the proposed study will not examine the psychology of the persistence of any prejudice against female leaders, two of Rusch’s and Marshall’s five filters, denial and posturing and intellectualizing, may inform the present research into the perceptions of female educational leaders. People exhibiting the denial filter claim that gender issues do not exist, that the organization is gender-neutral, and discussions of gender are dismissed as irrelevant time-wasters. People that exhibit posturing and intellectualizing boast that the organization actively recruits women, is supportive of gender equity, and recognizes the need for gender equity in education. However, their words, while gaining them positive recognition for their positions on equity, often are not reflected in their actions (p. 233).

**Gendered language.** Eddy (2003) found entrenched gender notions about leaders in the language used by leaders to describe themselves and the language used by others to describe their leaders. Male leaders were described with masculine adjectives such as regular guy, hero, and straight shooter (pp. 58-59); whereas descriptions of the female leader reflected feminine language, compared to men, and often included her gender as a descriptor. For example, the female leader in Eddy’s study was described as using her authority “gracefully”; as being “comparable to many men presidents”; and as
bringing “all of the positive things of what a woman brings” (p. 54). These gendered descriptions illustrate and reflect the male orthodoxy of leadership.

Coleman (2005) revealed that female educational leaders reported that colleagues often addressed or referred to them using sexist language. Sexist language has also been applied to educational leadership job descriptions. Barden (2006b) states that boards of trustees and hiring committees often draft job descriptions for leaders who possess, “the metaphorical equivalent of blue tights, a cape, and a capital S” (para. 17). Moreover, “[boards of trustees and hiring committees] really believe that the leaders they seek must be giants of superhuman ability…ever vigilant, to slay the dragons (emphasis added) that lurk in the shadowy future” (para. 18). These allusions to Superman and fairytale heroes bring to mind men only; again reinforcing the theory that gendered language reflects a male-dominant culture of leadership, i.e. “think manager-think male” (Schein, 1978; Schein, 2001). But subordinates, supervisors, and men are not the only ones who use gendered language when describing leaders. Female leaders also use such language when describing themselves and their roles (Isaac, Behar-Horenstein, & Koro-Ljungberg, 2009); demonstrating that women, as well as men, are impacted by and help perpetuate the male orthodoxy of leadership and are affected by a perceived role incongruity between their gender and their leadership position. Women deans spoke of their power, but felt the need to mitigate it with words such as compassion or substituting the word influence for power (p. 145).

**Role Congruity**

According to Coleman (2003), the masculine perception of leadership is contradicted by the research which shows that both men and women report more
feminine than masculine characteristics in their leadership patterns and behaviors. The question needing to be explored is why do people perpetuate the male orthodoxy in both organizational and leadership culture even when research shows that leadership styles are not inherently male (Coleman, 2003; Coleman, 2007). The answer may be found in the role congruity theory of prejudice toward female leaders (Eagly & Karau, 2002), which argues leadership is a male role and therefore leads to negative perceptions of and resistance to women who attempt to fill leadership roles. The negative perceptions of and resistance to female leaders stem from the stereotypes about female characteristics and the perceived skills needed to be a leader. Gender roles reflect both descriptive (how men and women behave) and prescriptive (how men and women should and should not behave) norms of social roles formed by the division of labor (Diekman & Goodfriend, 2006). Nothing in the description or prescription of the female gender role is consistent with the described and prescribed qualities of a leader. In short, society perceives that women do not naturally possess the qualities and characteristics necessary to be leaders. Thus, women are generally perceived to be less capable leaders than men, and women who are perceived as capable leaders are disliked because they are perceived to be violating their prescribed gender role (Catalyst, 2007; Diekman & Goodfriend, 2006; Eagly & Karau, 2002).

Perceptions of Female Leaders

Role Congruity and Perceptions

Empirical research has shown that women are perceived to be less effective leaders than men (Ayman & Korabik, 2009; Garcia-Retamero & Lopez-Zafra, 2006; Heilman, Wallen, Fuchs, & Tamkins, 2004; Isaac, Griffin, & Carnes, 2010; Ritter &
Yoder, 2004; Simon & Hoyt, 2008; Wittmer, 2001), and these negative perceptions are more acute in industries or occupations that are considered incongruous with their female role (Eagly & Karau, 2002; Garcia-Retamero & Lopez-Zafra, 2006, Ritter & Yoder, 2004). Studies comparing attitudes toward men and women leaders go back years with more recent studies showing little, if any, progress for female leaders. In 1985 Morrison and Stein found that men were more valued than women in positions of authority. When examined for their emotional responsiveness, both men and women were perceived more positively in general; yet, unexpectedly, the women perceived as emotionally responsive were more acutely devalued for their effectiveness as a leader while men’s perceived leadership value increased with their emotional responsiveness. Thus, in this 1985 study, women leaders were devalued more for their emotional responsiveness while men leaders were rewarded for it. The results revealed an incongruity between the perceived effectiveness of women leaders vis-à-vis their emotional responsiveness which is congruent with their gender. More recently, in their review of the relevant literature, Eagly and Karau (2002) came to similar conclusions. When women are perceived to be effective leaders they are devalued in respect to their gender. In short, when a female leader acts in the same way a male leader would, she is perceived to be an effective leader but is less valued as a woman (Isaac et al., 2009). When a female leader behaves according to her prescribed gender role, i.e. she acts like a woman, she is perceived positively as a woman but negatively as a leader. Heilman et al. (2004) found similar results which were compounded when women leaders were operating within the context of an occupation or task characterized as male. Moreover, successful women who violated their descriptive and prescriptive gender role by succeeding in a male-oriented
profession were personally devalued. The personal devaluation can bias performance-based evaluations which hinder women’s professional reward and/or advancement (Heilman, 2001; Heilman et al., 2004).

Some studies have shown that unfavorable opinions of female leaders can be mitigated when women couple their male-stereotypic behavior with female-stereotypic behavior (Isaac et al., 2010; Kawakami & White, 2000). Kawakami and White (2000) argue that women leaders can be freed from negative stereotypes when imparting genuineness coupled with a warm manner. In their study they found that women leaders who were evaluated by men were perceived as effective leaders when they demonstrated mindfulness or genuineness and a gender-congruent warm demeanor; whereas women who demonstrated mindlessness or lack of genuineness and a gender-incongruent or masculine cool demeanor were evaluated as the least effective. While this study seems to contradict Eagly’s and Karau’s (2002) role congruity theory, there were gaps in it. In Kawakami’s and White’s (2000) study, only women leaders were being evaluated. The participants were not comparing women and men leaders. They were comparing only those women leaders who exhibited different leadership characteristics and behaviors. They may have had different results had they included men in their study. A study conducted by Diekman and Goodfriend (2006) did include a comparison of men and women. In three experiments these researchers examined the cross-temporal perceptions of men and women vis-à-vis gender-stereotypic characteristics. Their results revealed that, when projecting into the future, participants positively evaluated women who exhibited male-stereotypic behaviors and characteristics. However, similar to Kawakami’s and White’s (2000) findings, these results were qualified by the fact that
participants anticipated women to continue displaying female-stereotypic characteristics and it is such that may serve to temper the assumption of male-stereotypic characteristics. These results also suggest that as the number of women increase in nontraditional roles, the more positively they will be evaluated. However, is this truly the case?

Research based on role congruity theory (Eagly & Karau, 2002) has shown that the perceptions of women, especially of those in leadership roles, remain largely negative (Garcia-Retamero & Lopez-Zafra, 2006; Heilman et al., 2004; Isaac et al., 2010; Ritter & Yoder, 2004; Simon & Hoyt, 2008; Wittmer, 2001). The number of women in nontraditional roles has increased over time, albeit slowly, but, despite their increased numbers, women still are not as positively evaluated in those roles when compared to men; nor do they seem to be making much progress in either obtaining parity with men in nontraditional, male-dominated roles; or being positively evaluated when they do. Duehr’s and Bono’s (2006) study contradicts the conclusion that women are perceived to be less effective leaders than men. On the contrary, their results revealed male managers’ perceptions of women as managers have become more favorable over the past 30 years to the point of attaining parity with their perceptions of men as managers. However, similar to Diekman’s and Goodfriend’s (2010) findings, they found that women are being attributed with more male characteristics such as masculinity and agency more so than they were 30 and even 15 years ago. So, the increase in favorable perceptions of women as leaders seems positively correlated with the increase in the attribution of male characteristics to women. This correlation, again, reinforces the male orthodoxy of leadership asserted by Coleman (2003) in that in order to be rated favorably as a leader, women must assume male leadership characteristics.
Politics and government. The question of whether women are as qualified as men to be leaders or whether they can be as effective leaders as men was at the forefront of American political discourse in 2008 when Hillary Clinton ran for president and Sara Palin for vice-president. Simon and Hoyt (2008) examined the apparent gender gap that existed in the support for Hillary Clinton’s presidential bid. They found that women held more favorable perceptions of female political candidates in general, and Clinton specifically, than did men. Among their results, they found that women were more favorably disposed to a woman president because they identified with the woman candidate as belonging to their gender ingroup and the women participants tended to have more liberal views of women’s gender roles. In contrast, men were less favorably disposed to a woman candidate because she belonged to their gender outgroup and men participants revealed a more traditional view of gender roles. These results could be extrapolated as a confirmation that men perceive women leaders more negatively than do women. Also examining gender in a political context, Dolan (2010) found that women candidates were evaluated more favorably than men on issues considered to be more female-stereotypic such as education and health care, while men were more favorably evaluated on issues typically considered to be in the male domain, such as terrorism and the economy. Her review of relevant literature revealed similar stereotypes; specifically showing that when the idea of more women in government was viewed positively, it was due to women’s perceived natural characteristics. Women’s feminine instincts and innate capabilities make them better leaders. Conversely, when the idea of more women in government was viewed negatively, it was because women were perceived to be naturally unsuited and incapable of possessing the requisite leadership skills. Both views reinforce
gender-stereotypic beliefs, with the latter viewpoint confirming Coleman’s (2003) theory of the male orthodoxy of leadership. Similar to Diekman’s and Goodfriend’s (2010) results regarding future projections of perceptions of women, Dolan’s own (2010) findings revealed that when asked about the gender make-up of the ideal government, participants expressed a desire for gender equity among their political leaders.

In a cross-temporal review of perceptions of female political candidates ranging from 1937 to 2006, Eagly (2007) reports that favorable opinions of the concept of a woman president have increased from 33% in 1937 to 92% in 2006. However, when poll respondents were asked the more direct question “about whether America is ‘ready for a woman president,’” (p. 7) favorable responses increased from 40% in 1996 to only 55% in 2006. While this is a significant increase, placing favorable opinions in the majority, 55% favorability about an actual woman president is not consistent with the 92% reported when the notion of a woman president was more theoretical.

**Gender, Leadership Styles and Behavior**

There has been much research comparing men’s and women’s leadership styles and on gender and leadership more generally (Barbuto, Fritz, & Makin, 2007; Eagly, 2007; Eagly et al., 2003; Gardiner & Tiggeman, 1999; Mandell & Pherwani, 2003; Sikdar & Mitra, 2009; Stout-Stewart, 2005; van Engen, van der Leeden, & Willemsen, 2001; Young, 2004). In a review of the literature on the topic of female leadership, Eagly et al., (2003) found that women exhibit a transformational leadership style more often than men as well as the contingent reward aspect of the transactional leadership style. Eagly (2007) suggests that gender alone may not account for this difference. According to her literature review, women often have to be more qualified than their male
counterparts in order to obtain positions of leadership. Therefore, women’s adoption of more effective leadership styles and behaviors such as those associated with a transformational leadership style may be a result of their having to overcome more barriers and scrutiny on the ladder to leadership. However, Barbuto et al. (2007) report no differences in raters’ perceptions of men and women regarding transformational leadership style. Transformational leadership has emerged in recent years as the preferred leadership style (Coleman, 2007) and is perceived as the more effective when compared to the transactional and laissez-faire styles of leadership (Eagly, 2007). However, in cases where men and women leaders both report using a transformational leadership style, women are evaluated more negatively than men; especially by male subordinates (Ayman, Korabik, & Morris, 2009).

A comparison of men and women in relation to leadership styles may provide some useful information regarding theory and/or methodology. In a case study, Young (2004) examined leadership styles of a college during a period of change. Male and female leaders were analyzed regarding their tendency toward a transformational or transactional leadership style. All managers displayed both types of behavior, but demonstrated more transactional behaviors over time. Women identified more with male leadership models, but men displayed some identification with female leadership models. Eagly et al., (2003) conducted a meta-analysis of 45 studies of transformational, transactional, and laissez-faire leadership styles. They discovered that female leaders were more transformational than male leaders. Male leaders were generally more likely to display aspects of transactional leadership and laissez-faire leadership. The authors concluded that all of the aspects of leadership on which women exceeded men relate
positively to leader effectiveness; whereas all of the aspects on which men exceeded women relate negatively to leader effectiveness.

Gardiner and Tiggemann, (1999) examined the relationship between gender and leadership style, job stress, and mental health in male- and female-dominated industries. The researchers were motivated by reports that women working in a male-dominated industry are pressured into altering their leadership style to mimic that of male leaders, thus negatively impacting women’s mental health. Results indicated that women do indeed alter their leadership style when working in a male-dominated industry versus working in a female-dominated industry.

Operating from the theory that leadership is perceived as a masculine trait, Kawakami and White (2000) examined the perceptions of female leaders displaying mindful, or genuine, masculine leadership behaviors. Their results found that women who displayed genuine masculine leadership behaviors were received more positively than women who displayed non-genuine, or mindless, masculine leadership behaviors. The researchers concluded that genuineness in leadership behavior is the most important factor in how female leaders are perceived. Mandell and Pherwani (2003) examined the relationship between emotional intelligence and transformational leadership style. Specifically, they were endeavoring to discover if there were any gender differences in regards to each criterion or in the relationship between the two. They found that there is a relationship between emotional intelligence and transformational leadership style but no difference in the relationship along gender lines. This study reveals that there is a significant relationship between emotional intelligence and transformational leadership style and that a transformational leadership style could be predicted according to an
individual’s emotional intelligence score. However, this predictive relationship does not differ according to gender. While no significant difference was found between men and women in regards to transformational leadership style, women were found to have higher emotional intelligence scores.

Richardson (2004), in the context of a college setting, examined whether or not differences exist between females and males in regards to leadership styles, behaviors, traits, and characteristics. Participants were given a set of six questions relating to leadership and gender. They were asked to respond based on their experience with a previous male university president and their current female president. Results found that while there were perceived differences between the male and female presidents; they are inconclusive as to whether or not these differences are due to gender or simply leadership styles.

In a study unrelated to leadership, yet relevant to the discussion of gender differences and abilities, Woodfield, Earl-Novell, and Solomon (2005) examined the relationship between gender and modes of assessment in an English university. The researchers, motivated by reports that women were performing better than their male counterparts at universities, sought to determine if this success was due to any gender bias in the assessments or gender preference for a particular type of assessment. Results indicated that there was no significant difference between the genders in regards to mode of assessment. However, females outperformed males on both modes of assessment. Both genders fared better on coursework than on unseen exams.

All of these related studies show that when men and women were compared using the same criteria there were no significant differences between how members of the two
genders performed. Additionally, whenever differences were discovered they were not described as failures or abilities for either group. Any differences found between the genders could not be ascribed to the uniqueness of their gender. Thus, there is no definitive or clear explanation as to why women are not elevated to positions of leadership as readily as men. One can only conclude that the gender inequity among educational leadership positions is due to continued negative perceptions about women’s abilities to effectively and adequately perform in such positions. The gap in the research regarding the perceptions of female educational leaders is what needs to be addressed.

**Gender and Educational Leadership**

**Secondary Education**

Women are disproportionally represented in positions of leadership at all levels of education, including senior leadership positions in public schools (Coleman, 2007; Grogan, 2005; Wiggins & Coggins, 2001). There are more women secondary school teachers than men yet more men than women superintendents (Grogan, 2005). Coleman (2003) attributes this gender disparity to what she calls the male orthodoxy of leadership. Education may seem like a suitable and appropriate profession for women, meaning it is considered to be congruous with stereotypically female gender characteristics. Accordingly, the majority of secondary teachers are women (Grogan, 2005). However, leadership is considered a male attribute and congruous with stereotypically male gender characteristics (Eagly & Karau, 2002). Thus, while female gender characteristics are considered consistent with the field of education in general, male gender characteristics are considered more consistent with leadership, even in the field of education (Coleman, 2007).
Higher Education

Despite gains in recent decades, women remain underrepresented in positions of leadership at all levels and types of higher education. A recent report published by the American Council on Education reveals that the number of women college presidents increased from 23% in 2006 to over 26% in 2012 (Cook & Kim, 2012). However, a dearth of women leaders remains despite anti-discrimination laws, policies promoting gender equity, and leadership development and recruitment programs aimed at women (Madden, 2005).

Community colleges. According to Liu (2007), women hold more leadership positions in community colleges than they do in 4-year colleges and universities. Since research shows that community colleges provide more opportunities at leadership than do senior institutions, the question remains as to why. If community colleges do promote more female leaders than the senior institutions, are community colleges more deliberate in their efforts in establishing gender equity? Is the more gender-balanced nature of community colleges by accident or design? Applying four dimensions of diversity Townsend and Twombly (2007) sought to determine if the higher percentage of female students and faculty in community colleges as compared to universities is a result of a more equitable climate at community colleges. They conclude that, overall, community colleges provide a positive atmosphere for both female students and faculty. However, the equitable climate is due more to accident than design. Community college leaders have not made concerted efforts to make their institutions more equitable (Townsend, 2006). Further, in an interview with Bragg (2008), Barbara Townsend, a leading community college educator and researcher (Lester, 2009), suggests that perhaps
community colleges appear to exhibit more gender equity by having more women leaders than their 4-year counterparts because there are more community colleges and, thus, more women working in them. However, a recent report published by the American Council on Education reveals that while the number of women college presidents increased from 23% in 2006 to over 26% in 2012, women represent about a third of all community college presidents (Cook & Kim, 2012). Hagedorn and Laden (2002) suggest that gender politics is softer at community colleges because of the inherently equitable nature of their educational missions. In fact, the flexibility of community college organization has prompted many women to consciously choose employment at community colleges rather than 4-year institutions (Wolf-Wendel, Ward, & Twombly, 2007); thus adding to the reputation of these institutions as being more gender-equitable or women-friendly institutions. Ultimately, though, despite the fact that community colleges have better numbers vis-à-vis gender equity than their 4-year counterparts, community colleges remain gendered organizations with traditional organizational structures which perpetuate the male hegemonic culture of leadership (Garza-Mitchell & Eddy, 2008); and until community college leaders change this culture and stop equating women’s differences in leadership style and behavior with deficiencies, community colleges will remain gendered organizations (Townsend, 2006; Townsend & Twombly, 1998; Vanderlinden, 2004).

**Pipeline and pathways to leadership.** There is no significant difference between men and women presidents and their pathways to the community college presidency (Amey, Vanderlinden, & Brown, 2002). However, one difference between men and women is the fact that women who do move up the professional ladder seem to ascend it
quicker than their male counterparts (McKenney & Cejda, 2000). Most presidents, both men and women, follow a traditional career path to the presidency; beginning with a faculty position, leading to mid-level administration, with the largest percentage ascending to the presidency directly from the position of chief academic officer (Amey et al., 2002); which is the most common path to the presidency (Keim & Murray, 2008; Renick, 2008). Studies show that the position of chief academic officer tends to be filled internally by community colleges (Cejda & McKenney, 2000; Cejda et al., 2001). Similar research reveals that slightly more women than men presidents had been promoted to the presidency from within their 2-year institution (Amey et al., 2002). This internal labor market may serve to mitigate some gender discrimination as boards of trustees may have more favorable perceptions of known women leaders than unknown women leaders. However, since the same study shows that slightly more men than women presidents had been an outside hire with previous presidential experience, it also demonstrates that an unknown man is preferable to both a known and unknown woman. And, while there is only a slight percentage difference in the figures, the numeric number of women in each instance was much smaller than the numeric number of men (Amey et al., 2002). But, while men and women community college presidents follow the same traditional pathway to the presidency, beginning with a faculty position, the question remains as to why comparatively so few women reach the presidency when women outnumber men in faculty positions (American Association of Community Colleges, n.d.c; Clark, 1998). The rich diversity of community college faculty remains an unrealized pool of potential leaders (Cejda et al., 2001).
Green (2008) suggests that potential community college leaders, including women, are reluctant to rise higher in the administrative ranks because of the pressures, challenges, and demands of leadership positions, especially in community colleges. In describing her own experiences and challenges to becoming a community college president, Green cites long hours, trying to balance professional life with her personal life, and the unique demands of community college leadership, i.e. increasing accountability, trying to meet the needs and demands of all constituents (students, faculty and staff, community, business, boards of trustees), and the diverse nature of the student population and curriculum as being among the “barrier[s] that strangl[e] the pipeline for up and coming community college leaders” (p. 817). Garza-Mitchell and Eddy (2008) cite satisfaction in their current positions and the desire to maintain their roles as teachers as other potential deterrents or reasons as to why women delay or restrict their pursuit of higher leadership positions. Other research reveals that many women delay their move up the career ladder to leadership until their children are older (Green, 2008) or their husbands are retired (Eddy, 2008). However, while such a delay may have limited the pool of women for leadership positions in earlier decades, it could be argued that the sheer number of women of all ages that is now available, including those who may have delayed their professional ascension, provides an adequate supply of potential talented and qualified leaders.

Throughout their careers in community colleges, many women have found themselves in leadership positions by mere chance, unexpected opportunity (Green, 2008), and even “serendipity” (Eddy, 2008, p. 63). The small size of many community colleges affords women faculty opportunities at ad hoc leadership positions such as
unofficial department heads, committee chairs, or supervisor of adjunct faculty that unexpectedly lead to more formal and higher leadership positions (Garza-Mitchell & Eddy, 2008). These opportunities at and successful performance in these accidental leadership positions demonstrate that women have the requisite leadership skills necessary to administer community colleges; again conceivably expanding the potential candidate pool for senior leadership positions.

\textit{North Carolina Community College System.} Since it is the setting of the present study, it is appropriate to include information on research relevant to the North Carolina Community College System (NCCCS). The NCCCS is the third largest community college system in the nation serving a total (curriculum and continuing education) population of over 800,000 students (North Carolina Community College System [NCCCS], 2008). Roughly 63% of these students are female, which is comparable to, and even slightly higher, than the national figure of 61% (American Association of Community Colleges, n. d.a). Between its creation in 1963 (North Carolina State Board of Education, 1966) and the end of the twentieth century, only five women had served as a president among the 58 constituent institutions of the NCCCS (Lesslie, 1998) and as late as 1995 there were only two women presidents in the entire system (Gillet-Karam, Baker Smith, & Simpson, 1997; Leslie, 1998). By the dawn of the new millennium that number had increased to eight women presidents (Gorham, 2000); by 2008 that number had only risen to 10 (Leatherwood & Williams, 2008); and since then, as of the date of this study, that number has increased to a total of 18 (NCCCS, n.d.b ). While the increase from 3% in 1995 to 31% in 2012 is noteworthy, the ratio of women to men presidents still is not proportional to, nor has it kept pace with, the gender ratio of the student
population as noted above or the gender ratio of faculty and staff, which in the school year 2007-2008 was 63% female and 37% male (NCCCS, 2008).

*Male orthodoxy of leadership.* Women administrators within the NCCCS have cited the male dominated organizational culture as an obstacle or barrier to advancement (Gillett-Karam, Baker Smith, & Simpson, 1997; Leatherwood & Williams, 2008; Lesslie, 1998). Whether it was in the mid-1990s or the first decade of the twenty-first century, while they were advancing to mid-level and even senior administrative positions within the NCCCS, women referenced the same barriers as many other women working in other types of institutions and at other educational levels such as family responsibilities and/or support, mobility (willingness to relocate), and gender inequities (Gillett-Karam et al., 1997; Leatherwood & Williams, 2008; Lesslie, 1998). All of these perceived obstacles reflect an organizational culture that is friendlier to men than women and perpetuate the masculine culture of leadership.

In 1992, the NCCCS State Board of Community Colleges committed itself to a policy of actively encouraging and supporting administrative diversification (Deese & NCCCS, 1991; Leslie, 1998; NCCCS, 1992). To this end, they adopted a new policy statement which expanded on their extant mission statement along with a set of 20 recommendations for implementation which called for the state board as well as the individual colleges to develop diversity plans; create and expand professional development programs; and examine and strengthen recruitment efforts (NCCCS, 1992, pp. 4-5). The policy statement declared in part, “Given the changing demographics of the North Carolina Community College System… with almost 60 percent [of the student population] female… the State Board recognizes the necessity for department and college
administrations to reflect more nearly the composition of their constituencies” (p. 4). While the number of women administrators has risen since the adoption of this policy, the largest proportion of the increase has been in mid-level administrative positions. Additionally, many women administrators within the NCCCS feel the diversity plan has had little if any positive effect on their careers (Lesslie, 1998).

Mentoring and leadership development. According to research, mentoring and leadership development is essential to expanding leadership opportunities for women (Eddy, 2008; Garza Mitchell & Eddy, 2008; Green, 2008) and is cited by women who have attained positions of leadership as being instrumental in their success (Garza Mitchell & Eddy, 2008; Green, 2008). In 1989, prior to the NCCCS’s adoption of the diversity plan, the North Carolina Department of Community Colleges, in conjunction with the North Carolina Chapter of the American Association of Women in Community and Junior Colleges, co-sponsored the creation of the North Carolina Community College Leadership Program (NCCCLP) to identify and develop new and potential leaders; placing an emphasis on the recruitment of women and minorities (Gorham, 2000). Among their stated goals, the NCCCLP is dedicated to, a) “assist[ing] colleges in identifying motivating, and training community college employees who can assume leadership roles in their own institutions;” and b) “provid[ing] a diverse pool of qualified leaders in community college education” (Gorham, 2000; North Carolina Community College Leadership Program [NCCCLP], 2010). According to Pat Akers, founding co-director of the NCCCLP and current lead facilitator, since its inception the NCCCLP has graduated 813 participants, 632 of which are women; many of whom have gone on to become college presidents, vice-presidents, and deans (P. Akers, personal
communication, April 4, 2012). There are other leadership development programs within the NCCCS, with many schools offering their own programs (Robison, Sugar, & Miller, 2010). However, these programs do not necessarily target women, nor do they exclude them. The fact that many individual colleges offer their own programs allows these institutions to help develop their own potential leaders from a pool of faculty and staff that, as has been shown, is predominantly comprised of women.

Crisis and Opportunity in Higher Education

Retirement and Turnover

Due to the impending retirements of a generation of presidents, colleges and universities are facing a crisis in leadership (Ekman, 2010; Kirwan, 2008; Renick 2008; Skinner, 2010). The same is true for community colleges (Campbell, Syed, and Morris, 2010; Hassan, Dellow, and Jackson, 2010; Vaughan, 2004; Vaughan & Weisman, 2003; Weisman & Vaughan, 2007), with one study revealing that 84% of community college presidents reported in 2006 that they planned to retire within 10 years (Weisman & Vaughan, 2007). Additionally, the tenures of college presidents in general are getting shorter (Amey et al., 2002; Barden, 2006b). The impending spate of presidential retirements coupled with the higher turnover rate among presidents in general equals potential opportunity for women who aspire to the community college presidency. As more and more presidencies are vacated, the opportunity exists for more and more women to help fill those vacancies (Renick, 2008). It would behoove boards of trustees to take advantage of the growing number of women in the leadership pipeline as they seek to replace their presidents. Community college campuses have a very diverse student population and presidents, as well as trustees, should reflect this diversity
Furthermore, by including women, boards of trustees would have a larger and more diverse leadership pool from which to choose future presidents (Kirwan, 2008).

**Hiring**

In order for women to realize this opportunity, colleges and universities must rethink the traditional hiring process (Kirwan, 2008; Renick, 2008), as well as the definitions of leadership and requisite experiences for positions of leadership (Amey et al., 2002). Despite their reputations for being liberal bastions, colleges and universities are very conservative when it comes to organization and governance (Kirwan, 2008). At the community college level, boards of trustees show a preference for hiring presidents with previous executive experience (Amey et al., 2002) which puts women at a numerical and proportional disadvantage. Boards of trustees will need to break tradition in order to diversify their leadership and meet the challenges of the future (Amey et al., 2002; Kirwan, 2008; Potter & Phelan, 2008). The most common path to the presidency is through academic affairs; yet many senior administrators in academic affairs may also be nearing the retirement age (Lester, 2008; Renick, 2008); forcing colleges and universities to seek out presidents from other areas in academe and possibly other professions (Kirwan, 2008). As the ones tasked with hiring their presidents, boards of trustees must make a concerted effort to diversify the presidency by intentionally seeking out more qualified women and minorities (Perrakis, Campbell, & Antonaros, 2009; Vaughan, 2004).

Dennis Barden, senior vice president and director of a higher education executive search firm, has written several essays on the hiring process that boards of trustees
undertake when filling leadership vacancies. In these essays he shares his observations and offers advice and guidance to applicants and boards. In one such commentary, Barden (2006a) asserts that while boards of trustees seek to diversify their presidential candidate pool, they are prohibited by law to ask applicants about gender, race/ethnicity, or other characteristic of diversity. Therefore, he advises presidential candidates to voluntarily disclose this information. If a board is seeking to diversify, female applicants may be able to increase their chances if boards are aware of their gender up front. Barden refers to this policy as, “don’t ask, please tell” (para. 10). However, Barden maintains there are still discriminatory aspects of the hiring process that place women at a disadvantage. While the law prohibits selection committees from asking specific discriminatory questions, members of those committees often violate those prohibitions by asking candidates questions about their family situations, or other personal information (paras. 16-21), which place women at a disadvantage. Sartorial expectations also place women at a disadvantage. While male candidates can meet wardrobe expectations easily with a traditional suit and tie, female candidates must walk a fine line when it comes to their apparel. Women must carefully consider their wardrobe choices such as pants or skirt, make-up, jewelry, and shoes; and then make judgments of the style of each: if a skirt, how long or short; how much make-up; what type of jewelry and how much; and how high of a heel on their shoe. Selection committees may form opinions of a woman’s skill and judgment as a leader based on her ability to choose the “appropriate” outfit (paras. 11-13).

A candidate’s wardrobe is not the only intangible criterion that boards and selection committees use to fill the presidential position. Despite regulations that strive
to make the hiring process as objective as possible, the human element cannot be eliminated from selection committees; and it explains why candidates are interviewed and not hired on their résumés and credentials alone. Selection committees use the interview process to determine a candidate’s “fit” for their institution (Barden, 2007a). While boards may actively recruit female applicants and follow all laws in the hiring process, women applicants must pass the “fit” test. But how is “fit” defined? It cannot be defined. Barden (2007a) describes it as a candidate’s ability to “mesh” with the institution. He argues, “fit is soft, subjective, intuitive, and very, very personal” (para. 6). While the concept of “fit” may be useful and legitimate in selecting the right candidate, it can also be used to surreptitiously discriminate against certain individuals, including women. Because “fit” is the perception board members have of any applicant (Barden, 2007b), it is important to examine the perceptions and opinions of boards of trustees to determine if they hold any prejudices for or against any particular group that might influence their decisions based on “fit.”

**Related Research**

**Methodology**

While a body of research on gender equity in community college leadership exists, there are calls for additional research utilizing new perspectives, methods, and theories to help root out causes and explanations for continued gender inequity (Vanderlinden, 2004); specifically, research of attitudes that may contribute to gender inequity (Lesslie, 1998; Lester, 2008). A qualitative research design might seem better suited for research on perceptions and attitudes. Types of qualitative research, such as case studies and phenomenological studies, and qualitative research techniques, such as
interviews and observations, allow researchers to directly study, observe, and inquire about individuals’ perceptions of others (Ary et al., 2006). However, such forms of research are limiting in that they may not elicit candid responses or natural behaviors from study participants. Participants in qualitative studies might be sincere in their responses, but their true attitudes may lie in their subconscious and only surface in a quantitative study which allows more anonymity and, thus, freedom to respond more genuinely. There are several researchers of perceptions of gender and educational leadership who have utilized quantitative methodologies instead (Dennis & Kunkel, 2004; Embry, Padgett, & Caldwell, 2008; Griffin, 1992; Peachey & Burton, 2010; Powell et al., 2008; Tyler & McCullough, 2009; Wiggins & Coggins, 1986) to gather more objective data. Quantitative studies allow researchers to identify whether or not a problem exists; in this case gender inequity in educational leadership, which then can be used to prompt and inform qualitative studies to examine the issue more closely and in context.

**Participants**

The participants of a study are as important as the methodology. Qualitative studies on gender and educational leadership often include interviews of women leaders inquiring about the challenges, obstacles, and barriers they may have encountered in their career (Eddy, 2008). Or they may include interviews with subordinates of women and men leaders (Isaac et al., 2010) to elicit comparisons of those leaders. Certainly, such studies are valuable and add to the body of information on the subject of gender and educational leadership. Quantitative studies, meanwhile, have been a little less relevant or specific in their sample population. Many quantitative researchers of gender and
educational leadership have used college students as study participants (Dennis & Kunkel, 2004; Embry et al., 2008; Powell et al., 2008; Tyler & McCullough, 2009).
While college students are representative of people in general, reflecting any general positive or negative perceptions of leaders based on gender, they are not directly involved in the hiring or evaluation of women educational leaders. Therefore, the results of such studies derived from a population of college students do not necessarily add sufficiently or effectively to the explanation as to why women are so disproportionately represented in the highest positions of educational leadership. Studies employing participants directly involved in the hiring or evaluation of educational leaders are rare. Wiggins and Coggins (1986) used members of a board of education as their study population in examining gender bias in the selection of superintendents. As the people tasked with hiring the superintendent, it was beneficial to examine their perceptions of potential superintendents based on the applicants’ gender, providing information more relevant to those involved in such real-life situations. While their study speaks to the larger topic of gender and educational leadership, it does not directly relate to higher education in general or community colleges specifically. Boards of trustees are the hiring bodies of institutions of higher education; the perceptions of which have yet to be studied.

Very few studies have been found wherein participants included members of community college boards of trustees. Basham, Campbell, and Mendoza (2008) included trustees as participants in their study of the critical issues facing community colleges. However, this study did not examine trustees’ perceptions of presidents, vis-à-vis their gender. Similarly, Hassan et al., (2010) included trustees as participants in their study regarding leadership competencies of community college presidents but did not include
gender as a variable or characteristic. This author has located only one study that involved the direct examination of perceptions of boards of trustees regarding community college presidents. Plinske and Packard (2010) surveyed members of community college boards of trustees regarding their perceptions of the desired qualifications of community college presidents. However, their study did not include gender as a variable.

Meanwhile, women senior administrators have cited boards of trustees “as being barriers to advancement” (Lesslie, 1998, pp. 108-109). Thus, a gap remains in the literature regarding community college trustees’ perceptions of presidents based on gender; a gap the current study seeks to address.

**Research Design**

Vignettes, such as the one used in the present study and other similar fictional representations of real-life situations, have often been used effectively in research on gender and leadership (Powell et al., 2008, p. 162). Some vignettes have included a leader operating in the context of a real-world situation (Embry et al., 2008; Powell et al., 2008; Welty Peachey & Burton, 2010), or some other context, such as a fictional job application (Tyler & McCullough, 2009; Wiggins & Coggins, 1986); while others have included a description of a leader’s behavior (Griffin, 1992). Embry et al., (2008) used a vignette to study gender and leadership in which an androgynously named sales leader exhibited traits associated with either a feminine or a masculine leadership style. In part, participants were asked to evaluate the leader and identify whether the leader was male or female based on the leader’s actions in the vignettes. They found that the leader exhibiting a masculine leadership style was identified as male and the leader exhibiting a feminine leadership style of leadership as female. However, it is noteworthy that more
than 70% of all respondents identified the leader as male regardless of the leadership style, which is consistent with the theory of male orthodoxy of leadership (Coleman, 2003). Moreover, consistent with the theory of role congruity theory (Eagly & Karau, 2002), the leader identified as male and exhibiting a gender-inconsistent, or feminine, leadership style was evaluated more positively than the leader identified as female exhibiting a gender-inconsistent, or male, leadership style; but women participants evaluated the woman exhibiting a masculine leadership style more favorably than did the male participants.

Griffin (1992) used a vignette in her study of gender and leadership; but her vignette did not involve a leader exhibiting a particular leadership style. Instead it featured a description of a leader as having specific leadership characteristics and measured participants’ perceptions of male and female leaders exhibiting either an authoritative or authoritarian leadership style. Results showed that leaders who exhibited a gender-consistent leadership style were evaluated more positively than leaders who did not. Interestingly, but not unexpectedly, women exhibiting an authoritarian leadership style received the lowest ratings.

Rather than a leadership vignette, Tyler & McCullough (2009) used fictional job applicant résumés to study gender and leadership. Their study featured an identical resume in which only the gender of the applicant was manipulated. Participants were asked to evaluate the applicant on such characteristics as likeability and competence. Results indicated that the résumés of female applicants were evaluated more negatively when they violated their stereotypical gender prescriptions. Conversely, Wiggins and Coggins (1986) used fictional résumés as well; creating six different résumés, three
women and three men, featuring similar professional and educational backgrounds. Participants were given all six résumés to review and asked to rank them according to preference. They found that gender was not a significant factor in how the applicants were ranked.

The vignette used in the present study was adapted from one used by Powell et al., (2008) to examine gender and leadership in the context of a fictional financial services company by depicting a male and female leader exhibiting a transformational or transactional leadership style. Powell et al. (2008) asked participants to evaluate the leader both on gender and leadership style with the participant’s gender serving as an additional variable. Their results revealed that female leaders exhibiting a transformational leadership style were evaluated more positively than male leaders exhibiting a transformational leadership style. Moreover, when analyzing for the interaction effect of participant gender and leader gender, they found that female participants evaluated the female-transformational leader more favorably than male leaders evaluated male-transformational leaders. Welty Peachey and Burton (2010) successfully adapted the same vignettes to the context of a collegiate athletic department, similarly using the vignettes to examine both gender and leadership style. Their results were similar to Powell et al. (2008) in that the transformational leadership style was evaluated more positively than the transactional leadership style: although, they found no significant difference in how the participants evaluated the female leader as compared with the male leader. For the present study, the vignette will be set in the context of a community college and, because gender is the primary focus of this research, the transformational leadership style will be used as a control only. Both leaders will exhibit
a transformational leadership style and perceptions of the leader will be analyzed according to the leader’s gender and the interaction of the leader’s gender with the participant’s gender.

Summary

Women are underrepresented in leadership positions in all professions. Education is no different. The percentage of female leaders is disproportional to the number of women working in education and disproportional to the number of women attending college. But, an examination of the literature regarding factors such as professional inexperience, different leadership styles, and a dearth of women in the leadership and/or educational pipeline reveals that these factors do not fully account for the disproportional representation of women in the top educational leadership positions. Research suggests that other reasons must be examined for the gender inequity in community college leadership. Women hold more leadership positions in community colleges than they do in 4-year colleges and universities (Liu, 2007). Still, they are not equitably represented in positions of leadership, even in community colleges (Drake, 2008). As this literature review revealed, much research has been conducted and much commentary provided on the topics of leadership styles, gender and leadership, and gender inequity in general, as these issues relate to education more narrowly, and as they relate to community colleges specifically. One related aspect of women and leadership that is lacking from the extant literature is a current analysis of the perceptions about female leaders among those that do the hiring; especially in the field of education.

The preceding review of literature provides an examination of the related topics and reveals a gap in the research regarding the perceptions among members of
community college boards of trustees of female educational leaders. In his study of women senior administrators within the North Carolina Community College System, Lesslie (1998) stated, “Boards of trustees were mentioned as being barriers to advancement by women senior administrators” (pp. 108-109). Yet, as this chapter reveals, very little, if any research has been conducted on this subject and with this population. It is intended that this study will help fill the gap in the research by examining the perceptions of those who hire community college presidents about their perceptions of female leaders; thus helping explain why women continue to lag behind men in educational leadership positions. But if it is revealed that trustees hold more negative perceptions of women leaders than they do men leaders, the question remains as to why. Explanation may be found in the Male Orthodoxy of Leadership theory (Coleman, 2003), which argues that leadership is a male role, and the Role Congruity theory (Eagly & Karau, 2002), which contends the male culture of leadership leads to negative perceptions of and resistance to women who attempt to fill leadership roles. These theories serve as the conceptual framework for the proposed study. Just as Rusch and Marshall (2006) argue “that awareness of the filters in action may help educational leaders to examine and moderate their own interactions and to interpret and moderate the reactions of others” (p. 247), it is the contention of this writer that prejudices, if they do exist, can change only if people are aware of their prejudices.
CHAPTER THREE: METHODOLOGY

Introduction

Much research has been conducted and much commentary has been provided on the topics of leadership styles, gender and leadership, and gender inequity in educational institutions. One related aspect of women and educational leadership that is lacking from the extant literature is a current analysis of the perception of those who hire the leaders. The present quantitative study fills the gap in the research by examining the perceptions of female versus male educational leaders held by those that do the hiring by surveying the members of community college boards of trustees. This causal-comparative study examined whether board members’ perceptions of female community college presidents differ from their perceptions of male community college presidents; and if so, is this perception affected by the leaders’ gender and/or the trustees’ gender. This chapter includes a description of the study’s design, research questions and hypotheses; participants, setting, instrumentation, procedures, and data analysis.

Research Design

The present study is quantitative in form. “Quantitative research uses objective measurement and statistical analysis of numeric data to understand and explain phenomena” (Ary et al., 2006, p. 25). While a qualitative design may be more desirable when attempting to understand perceptions and opinions, in such a study it is difficult to guard against bias. A study on gender whereby a female researcher such as this one is asking participants to reveal their opinions on gender and leadership may result in inaccurate information.
This causal-comparative study compares the effect of the leader’s gender on the participants’ perception of the female and male leaders as measured on the three Outcomes of Leadership subscales of the MLQ – 5X Short (Avolio & Bass, 2004). Additionally, it assesses the effect of the interaction between the two independent variables of leader gender and participant gender on the participants’ perception of the leader as measured on the three dependent variables of the Extra Effort (EE), Effectiveness (EFF), and Satisfaction (SAT) subscales. A causal-comparative design involves the investigation of the cause and effect relationship between the independent variable(s) and the dependent variable(s) (Ary et al., 2006); examines whether a pre-existing independent variable affects a dependent variable (Gay, Mills, & Airasian, 2006); and is appropriate in cases where there is a comparison of two or more groups which already differ on an independent variable (Creswell, 2009).

Threats to Validity

There were several possible threats to internal and external in the present study which had to be controlled for, as much as possible, to ensure results could be accurately evaluated (internal validity) and generalized to a larger or different population (external validity) (Ary et al. 2006, pp. 291-320).

Internal Validity. Internal validity refers to the extent to which inferences or conclusions can be drawn from a study’s results; or the extent to which the researcher can be confident that the changes in the dependent variable(s) was caused by the independent variable(s) in the given experimental context and not some extraneous variable(s) (Ary et al. 2006, p. 291). There were two possible threats to internal validity in this study: a) experimenter effect, and b) subject effects (Ary et al., 2006).
Experimenter effect refers to the “unintentional effects that the researcher [herself] has on the study” (Ary et al., 2006, p. 300). Personal characteristics such as gender, researcher behavior during implementation, or the researcher’s bias relative to the independent variables all can serve to affect results. Threats to internal validity due to experimenter effect can be controlled for by standardizing all procedures and/or letting another trained person work with the participants. It is also helpful for the researcher to limit communications with the study’s administrator about the study’s hypotheses (Ary et al., 2006, p. 301). In the present study, experimenter effect was controlled for by presenting the study as one on leadership rather than one on gender and leadership. Since the researcher is a woman, participants’ responses could be affected by knowledge of the researcher’s gender if they were to know that gender was the primary focus of the study. Additionally, the researcher was not present when participants completed the survey; nor did she divulge to the survey administrator that gender is the primary focus of the study or any hypotheses of the study.

Subject effects refer to the influence of the research situation itself on participant responses. Instead of responding naturally, participants may respond the way they believe the researcher wants them to (Ary et al., 2006, p. 301). For the present study, subject effect is closely related to experimenter effect. Again, if the participants were to know the researcher’s gender they may make assumptions about the hypotheses or primary focus of the study possibly resulting in less genuine responses. To control for the threat of subject effects, the researcher did not divulge that gender is the primary focus of the study; she was not present when participants completed the survey; nor did she divulge to the survey administrator the primary focus or any hypotheses of the study.
**External Validity.** External validity refers to the extent to which the results of a study can be generalized to other populations, settings, or treatments (Ary et al., 2006). There were four possible threats to external validity in this study: a) selection-treatment interaction; b) setting-treatment interaction; (c) subject effects; and d) experimenter effects.

Selection-treatment interaction refers to the threat of different populations possessing different characteristics that could produce different results given the same experimental conditions. A large random sample population can control for this threat (Ary et al., 2006). In this study a random sample population of 147 participants was used.

The threat of setting-treatment interaction refers to the effect of setting on the results of a study (Ary et al., 2006). To control for this threat in the present study, a cluster randomized sampling process was used to select the participants and included different geographic regions, college sizes, and settings (i.e. urban and rural). However, while the sampling process included participants from a variety of settings, the general setting is North Carolina community colleges and any repetition of the study outside of North Carolina or in other educational institutions could affect results. Thus, the setting-treatment interaction threat could not be completely controlled for. Finally, as with threats to internal validity, external validity threats include subject and experimenter effects. These threats refer to any characteristics having to do with either the experimenter or participant affecting the participant’s responses or behavior in a study; thus, affecting the generalizability of the results (Ary et al., 2006). In this study the threats of subject and experimenter effects on external validity were controlled for as they...
are for the same threats to internal validity. The researcher did not disclose that gender is the primary focus of the study; she was not present during the administration of the survey; nor did she divulge any information regarding the hypotheses or any other study-related information to the test administrator or the participants that was not immediately relevant to the participants’ role in the study.

Research Questions and Null Hypotheses

The effects and interactions of the variables being analyzed are presented in the following research questions and corresponding hypotheses:

Research Question One (RQ1)

Are there differences in the perceptions the members of community college boards of trustees hold about community college presidents by the gender of the president (male vs. female) per the extra effort (EE), effectiveness (EFF), and satisfaction (SAT) subscales of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short)?

H_{01,1}: There are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the president (male vs. female) per the extra effort (EE), effectiveness (EFF), and satisfaction (SAT) subscales of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short).

H_{01,2}: There are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the president (male vs. female) per the extra effort (EE) subscale of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short).
H₀₁.₃: There are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the president (male vs. female) per the effectiveness (EFF) of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short).

H₀₁.₄: There are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the president (male vs. female) per the satisfaction (SAT) subscale of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short).

Research Question Two (RQ2)

Are there differences in the perceptions the members of community college boards of trustees hold about community college presidents by the gender of the president (male vs. female) and the gender of the members of community college boards of trustees (male vs. female) per the extra effort (EE), effectiveness (EFF), and satisfaction (SAT) subscales of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short)?

H₀₂.₁: There are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the president (male vs. female) and the gender of the members of community college boards of trustees (male vs. female) per the extra effort (EE), effectiveness (EFF), and satisfaction (SAT) subscales of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short).

H₀₂.₂: There are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the president (male vs. female) per the extra effort (EE), effectiveness (EFF),
and satisfaction (SAT) subscales of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short).

$H_{02.3}$: There are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the members of community college boards of trustees (male vs. female) per the extra effort (EE), effectiveness (EFF), and satisfaction (SAT) subscales of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short).

$H_{02.4}$: There are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the president (male vs. female) and the gender of the members of community college boards of trustees (male vs. female) per the extra effort (EE) subscale of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short).

$H_{02.5}$: There are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the president (male vs. female) per the extra effort (EE) subscale of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short).

$H_{02.6}$: There are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the members of community college boards of trustees (male vs. female) per the extra effort (EE) subscale of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short).

$H_{02.7}$: There are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the
gender of the president (male vs. female) and the gender of the members of community college boards of trustees (male vs. female) per the effectiveness (EFF) subscale of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short).

$H_{02.8}$: There are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the president (male vs. female) per the effectiveness (EFF) subscale of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short).

$H_{02.9}$: There are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the members of community college boards of trustees (male vs. female) per the effectiveness (EFF) subscale of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short).

$H_{02.10}$: There are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the president (male vs. female) and the gender of the members of community college boards of trustees (male vs. female) per the satisfaction (SAT) subscale of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short).

$H_{02.11}$: There are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the president (male vs. female) per the satisfaction (SAT) subscale of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short).

$H_{02.12}$: There are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the
gender of the members of community college boards of trustees (male vs. female) per the satisfaction (SAT) subscale of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short).

Participants

The framing population for this study is the boards of trustees of the 58 institutions of the North Carolina Community College System (NCCCS). Boards of trustees of the institutions comprising the NCCCS are charged with appointing, evaluating, and terminating the presidents of their respective institutions (Dowdy, 2007). An examination of the perceptions held by the members of these governing bodies of female leaders as compared to male leaders is essential to understanding the gender gap that still exists at the highest levels of leadership in education in general and within the NCCCS specifically. Each NCCCS institution’s board of trustees consists of a minimum of 12 voting members (North Carolina Community College System, 2008). The North Carolina Community College System was chosen for convenience and its size. Because it is such a large and diverse system, it is reasonable to expect that the attitudes and perceptions of the members of the boards of trustees within this community college system would be representative of other community college systems in the United States specifically and other types of higher educational systems in the United States in general.

The study’s sample population was determined using self-selected cluster sampling. Cluster sampling is appropriate when the framing population is organized according to preexisting groups or organizations (Creswell, 2009). The framing population for this study is grouped by individual college boards of trustees, all of which include both male and female trustees. The boards of trustees of only 57 of the 58
colleges were invited to participate. In an effort to avoid any bias due to familiarity with the researcher and other factors explained below in the description of the setting, the board of trustees of Stanly Community College, the researcher’s employer, was not included in the sample population. Twelve of the 57 college boards solicited agreed to participate totaling 147 individual participants.

**Setting**

The NCCCS is the third largest community college system in the nation. The constituent colleges range from small rural institutions with only a couple thousand students to large urban schools with tens of thousands of students. Overall, the system enrolls more than three-quarters of a million students each year. With a total of 100 counties in the state, the 58 schools in the system are within 30 miles of 100 percent of the state’s population (Community College System, 2009).

The 58 colleges in the NCCCS are divided into three geographic regions: the eastern region, including the coastal area; the central region, including the piedmont; and the western region, which includes the mountains. Within each of these regions, colleges vary according to size (i.e. student population) and setting (i.e. rural or urban). There are 21 colleges in the eastern region; 19 in the central region; and 18 in the western region (N4CSGA, n.d.). The geographic division of the system is reflected in Figure 1.
Of the 58 institutions in the NCCCS, 17, or 29%, have female presidents. Eight colleges in the eastern region have female presidents; five colleges in the central region have female presidents, and four colleges in the western region have female presidents. This gender distribution is subject to change in the near future as there are currently two colleges seeking new presidents (North Carolina Community Colleges, 2012). It has already changed since the present research study began. In 2011, 18, or 31% of the presidents were women.

Each institution’s board of trustees consists of a minimum of 12 voting members. However, colleges that include satellite campuses in other counties may have up to two additional board members to be appointed by the resident county’s commissioners (Dowdy, 2007). In 57 of the colleges, four of the members are appointed by the governor; four are appointed by the local county commission; and four are appointed by the local school board (North Carolina Community College System, 2008). A law passed in 2011 by the North Carolina General Assembly altered the appointment procedure for Stanly County alone. According to Session law 2011-175 (2011), a local law passed by
the North Carolina General Assembly, the members of Stanly Community College’s board of trustees are appointed as follows: eight by the local county commission; and four appointed by the governor. Again, Stanly Community College was not included in this study so the difference in the appointment of its trustees will not serve as a potential covariant in the study.

Instrumentation

The researcher utilized a survey which includes a vignette of a community college president exhibiting a transformational leadership style followed by Likert-style questions taken from the Multifactor Leadership Questionnaire 5X Short form (MLQ – 5X Short) (Avolio & Bass, 2004). After obtaining permission from the lead author (Appendix A), the researcher adapted a transformational leadership style vignette used by Powell et al., (2008). The adapted vignette depicts a community college president exhibiting a transformational leadership style in the context of a community college setting. A transformational leadership style was chosen because, while research shows that women more than men exhibit a transformational leadership style (Eagly, 2007) and it is congruent with their prescribed gender role, it has not been shown to give women an advantage over men when both report using a transformational leadership style (Ayman et al., 2009). Thus, since on the one hand, women have the advantage vis-à-vis a transformational leadership style in that it is congruent with their prescribed female gender role and, on the other, does not give them an advantage when compared with men displaying the same style of leadership, this researcher feels that a transformational leadership style is the most balanced between men and women and yields the most reliable results. Two forms of the survey were created: male leader (ML) and female
leader (FL). The leadership vignette in each form of the survey is identical except for the gender of the leader being depicted. Surveys were evenly and randomly distributed to study participants as noted below in the Procedures section.

Participants evaluated the leader depicted in each vignette using the three Outcomes of Leadership subscales of the MLQ – 5X Short: extra effort, effectiveness, and satisfaction. Each item of the MLQ - 5X Short is rated using a five-point scale as follows: (0) not at all; (1) once in a while; (2) sometimes; (3) fairly often; and (4) frequently, if not always. The score for each subscale is determined by averaging the scores of the items included in each subscale. The extra effort (EE) subscale consists of three items of the MLQ – 5X Short: questions 39, 42, and 44. The effectiveness (EFF) subscale consists of four items: questions 37, 40, 43, and 45. The satisfaction (SAT) subscale consists of two items: questions 38 and 41 (Avolio and Bass, 2004). Because the present study did not use all 45 items on the MLQ – 5X Short (Appendix B), the researcher shortened the survey to include the nine items from the relevant subscales and added one extra random question from the MLQ - 5X Short so that the survey has an even number of ten questions (Appendix B). On the survey instrument for this study, question 1 is the extra question which is not relevant to the survey and, thus, was not included in the analysis. Questions 2 through 10 are the exact items from the three subscales but have been renumbered as follows: items 4, 7, and 9 are from the EE subscale; items 2, 5, 8, and 10 are from the EFF subscale; and items 3 and 6 are from the SAT subscale. Surveys included a demographics section so that participants could note their age range, gender, race/ethnicity, tenure as a trustee, whether they are a voting member of the board, and whether or not as a trustee they have been involved in hiring a
college president. While all demographic information is reported in chapter four, gender was the only demographic used in the analysis of the data.

Validity

Validity refers to the extent to which an instrument measures what it claims to be measuring, thus allowing the researcher “to make meaningful and appropriate interpretations” (Ary et al., 2006, p. 242). The present study uses a vignette created by Powell et al. (2008) in which the leader exhibits a transformational leadership style and is measuring for extra effort, effectiveness, and satisfaction using three subscales of the MLQ – 5X Short (Avolio & Bass, 2004). In regards to the leadership vignette, Powell et al. (2008) performed a manipulation check on the chosen vignette to see whether or not the leader in the vignette was indeed exhibiting a transformational leadership style. Using analyses of variance where \( p < 0.001 \), their results indicated that the scores on the transformational leadership scales and subscales of the MLQ – 5X Short were significantly higher for transformational leadership when compared to the scores of the transactional leadership vignette (p. 163). In regards to external validity of the MLQ – 5X Short and its measurement of transformational leadership, Avolio and Bass (2004) report studies have shown that transformational leadership tends to produce more effectiveness and satisfaction among followers than does transactional leadership (p. 33) and that transformational leadership is more highly correlated with effectiveness as compared to transactional leadership (pp. 34-36). In regards to construct validity, Avolio and Bass (2004) revised an earlier version of the MLQ, the MLQ – 5R, in response to criticisms of the validity of that earlier version then tested the revised version using Confirmatory Factor Analysis (CFA). Their results revealed that the fit indices of their
model exceeded the recommended minimum cut-offs; including a Goodness of Fit index of .91 and a Root Mean Square Residual (RMSR) of .05 (Avolio & Bass, 2004, p. 52-53).

**Reliability**

Reliability refers to the degree to which an instrument yields consistent results (Ary et al., 2006). The reliability scores of the extra effort, effectiveness, and satisfaction subscales of the MLQ – 5X Short are .85, .83, and .77 respectively (Avolio & Bass, 2004).

**Procedures**

Prior to conducting research, the researcher received approval from Liberty University’s Institutional Research Board. Once approved, the researcher finalized the survey instrument by consulting leaders within the North Carolina Community College system to ensure the survey’s face validity. Face validity refers to the appearance of the survey and whether the survey appears to be relevant and meaningful to the purpose of the survey (Ary et al., 2006, pp. 439-440).

After the instrument was confirmed, the researcher contacted the president of each institution by email explaining the study. The presidents were asked to make a request of their institution’s board of trustees for their participation. As the participating boards were identified, a packet containing the surveys was mailed to the president or her/his designee and the surveys were distributed to the trustees and completed at a regular board meeting. The members of an even number of boards were surveyed. There are two forms of the survey and the surveys were distributed so that half the boards received the FL form of the survey and half received the ML form of the survey. The president of each participating college or her/his designee administered the survey. Instructions for
administering the survey were provided with each packet. A letter of introduction and explanation accompanied each survey and was distributed to the participants. The study was presented as one on leadership. The fact that it is a study on gender comparison was not disclosed as it was this researcher’s judgment that such information may serve to bias the participants’ responses. Once all the trustees completed their survey the designated administrator at each college collected all their board members’ surveys and returned them to the researcher in a pre-addressed, postage-paid envelope.

**Data Analysis**

Data was analyzed using SPSS version 20.0 for Windows. Descriptive statistics are used to describe the sample demographics and the research variables. For categorical or nominal data, frequencies and percentages were calculated. Means and standard deviations were calculated for interval/ratio data (Howell, 2010). Analysis for each of the research questions was conducted as follows:

**Research Question One (RQ1)**

Are there differences in the perceptions the members of community college boards of trustees hold about community college presidents by the gender of the president (male vs. female) per the extra effort (EE), effectiveness (EFF), and satisfaction (SAT) subscales of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short)?

H$_{01.1}$: There are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the president (male vs. female) per the extra effort (EE), effectiveness (EFF), and satisfaction (SAT) subscales of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short).
H₀₁.₂: There are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the president (male vs. female) per the extra effort (EE) subscale of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short).

H₀₁.₃: There are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the president (male vs. female) per the effectiveness (EFF) of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short).

H₀₁.₄: There are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the president (male vs. female) per the satisfaction (SAT) subscale of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short).

To assess RQ1, a multivariate analysis of variance (MANOVA) and three analyses of variance (ANOVA) were conducted to assess if there are differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the president (male vs. female). The MANOVA is the appropriate statistic when the goal of research is to assess if there are differences on a set of dependent variables by two or more discreet groups (independent variables) (Tabachnick & Fidell, 2006). The dependent variables in this analysis are extra effort, effectiveness, and satisfaction from the MLQ – 5X. The MANOVA examined the combined effect of the three subscales while individual ANOVAs examined each subscale individually.
The extra effort (EE) subscale consists of three items of the MLQ – 5X Short: questions 39, 42, and 44. The effectiveness (EFF) subscale consists of four items: questions 37, 40, 43, and 45. The satisfaction (SAT) subscale consists of two items: questions 38 and 41 (Avolio and Bass, 2004). Scores for each subscale are averages and data is continuous. The independent variable in the analysis is gender (male vs. female) of the community college presidents.

Typically, an alpha of .05 would be used to assess the results of the analysis, however the same dependent variables are used in research questions one and two, therefore, a Bonferroni correction must be utilized to reduce the chance of a Type 1 error (Tabachnick & Fidell, 2006). This adjustment was calculated by dividing alpha .05 by the number of analyses; the new alpha value is .012 (.05/4).

**Research Question Two (RQ2)**

Are there differences in the perceptions the members of community college boards of trustees hold about community college presidents by the gender of the president (male vs. female) and the gender of the members of community college boards of trustees (male vs. female) per the extra effort (EE), effectiveness (EFF), and satisfaction (SAT) subscales of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short)?

H₀₂: There are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the president (male vs. female) and the gender of the members of community college boards of trustees (male vs. female) per the extra effort (EE), effectiveness (EFF), and satisfaction (SAT) subscales of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short).
$H_{02.2}$: There are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the president (male vs. female) per the extra effort (EE), effectiveness (EFF), and satisfaction (SAT) subscales of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short).

$H_{02.3}$: There are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the members of community college boards of trustees (male vs. female) per the extra effort (EE), effectiveness (EFF), and satisfaction (SAT) subscales of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short).

$H_{02.4}$: There are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the president (male vs. female) and the gender of the members of community college boards of trustees (male vs. female) per the extra effort (EE) subscale of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short).

$H_{02.5}$: There are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the president (male vs. female) per the extra effort (EE) subscale of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short).

$H_{02.6}$: There are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the members of community college boards of trustees (male vs. female) per the
extra effort (EE) subscale of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short).

$H_{0.7}$: There are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the president (male vs. female) and the gender of the members of community college boards of trustees (male vs. female) per the effectiveness (EFF) subscale of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short).

$H_{0.8}$: There are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the president (male vs. female) per the effectiveness (EFF) subscale of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short).

$H_{0.9}$: There are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the members of community college boards of trustees (male vs. female) per the effectiveness (EFF) subscale of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short).

$H_{0.10}$: There are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the president (male vs. female) and the gender of the members of community college boards of trustees (male vs. female) per the satisfaction (SAT) subscale of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short).

$H_{0.11}$: There are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the
gender of the president (male vs. female) per the satisfaction (SAT) subscale of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short).

H<sub>0.12</sub>: There are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the members of community college boards of trustees (male vs. female) per the satisfaction (SAT) subscale of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short).

To assess RQ2, a two-between multivariate analysis of variance (MANOVA) and three two-between analyses of variance (ANOVAs) were conducted to assess if there are differences in the perceptions the members of community college boards of trustees hold about community college presidents by the gender of the president (male vs. female) and the gender of the members of community college boards of trustees (male vs. female). The MANOVA is the appropriate statistic when the goal of research is to assess if there are differences on a set of dependent variables by two or more discreet groups (independent variables) (Tabachnick & Fidell, 2006). The dependent variables in this analysis are extra effort, effectiveness, and satisfaction from the MLQ – 5X. The MANOVA examined the three subscales combined while individual ANOVAs examined each subscale individually.

The extra effort (EE) subscale consists of three items of the MLQ – 5X Short: questions 39, 42, and 44. The effectiveness (EFF) subscale consists of four items: questions 37, 40, 43, and 45. The satisfaction (SAT) subscale consists of two items: questions 38 and 41 (Avolio and Bass, 2004). Scores for each subscale are averages and data is continuous. The independent variables in the analysis are gender (male vs. female),
female) of the community college presidents and the gender of the members of community college boards of trustees (male vs. female).

Typically, an alpha of .05 would be used to assess the results of the analysis, however the same dependent variables are used in research question one and two, therefore, a Bonferroni correction must be utilized to reduce the chance of a Type 1 error (Tabachnick & Fidell, 2006). This adjustment was calculated by dividing alpha .05 by the number of analyses; the new alpha value is .012 (.05/4).

Reliability

While reliability for the MLQ – 5X Short was reported earlier, the authors of the MLQ – 5X Short note that the reliability analysis was conducted on and applies only to the complete 45-question format of the survey. They suggest that researchers using only parts of the survey conduct their own reliability analysis (Avolio and Bass, 2004). Thus, Cronbach’s alpha tests were conducted on three subscales of the Multifactor Leadership Questionnaire 5X Short form (MLQ – 5X Short) -- extra effort, satisfaction, and effectiveness -- to assess the internal consistency of the instrument. Cronbach’s alpha assesses the mean correlation between each pair of items in the scale (Brace, Kemp & Snelgar, 2006). The alpha coefficients were evaluated according to the guidelines established by George and Mallery (2003) whereby > .9 Excellent, > .8 Good, > .7 Acceptable, > .6 Questionable, > .5 Poor, < .5 Unacceptable.

Sample Size

The present study included two MANOVA analyses. G*Power 3.1.2 was used to calculate sample size for a MANOVA. For a medium effect size of .25, a generally
accepted power of .80, a significance level of .05, four groups, and three dependent
variables, the suggested sample size to achieve empirical validity is a total of 64
participants (Faul, Erdfelder, Buchner, & Lang, 2008). A minimum sample of 64
participants was met and exceeded.
CHAPTER FOUR: FINDINGS

The purpose of this causal-comparative study was to compare the effects of gender on the perceptions that members of the boards of trustees of community colleges have of community college presidents per the extra effort (EE), effectiveness (EFF), and satisfaction (SAT) subscales of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short) (Avolio and Bass, 2004). Twelve boards of trustees within the North Carolina Community College System self-selected to participate and 147 surveys were distributed, one for each board member. Seventy participants received the male version of the survey and 77 participants received the female version. Ninety-four surveys were returned; 53 of the male version and 41 of the female version. The data for all 94 participants were transferred into SPSS 20.0 for analysis. Descriptive statistics were generated, tests for reliability and assumptions were performed, two MANOVAs were conducted - one for each research question; and two sets of three ANOVAs were conducted – one set for each research question. The results are presented in this chapter.

Outliers

The data for all 94 participants were transferred into SPSS 20.0 for analysis. Data were screened for missing data and outliers. Means and standard deviations were conducted to determine that responses were within possible range of values; no cases were removed. The presence of outliers was assessed by creating and examining standardized residuals (z scores). Standardized values were created for extra effort (EE), effectiveness (EFF), and satisfaction (SAT). Cases were examined for values that fell above 3.29 and values that fell below -3.29 by gender. It is a general rule that anything
beyond a z-score of 3.29 is highly unlikely to occur; 99.95% of data in a normal
distribution will have z-scores smaller between 3.29 and -3.29 (Tabachnick & Fidell,
2012). For males, one z score for SAT fell outside the recommended range and that score
was removed from the dataset. For females, one z score for SAT and one for EE fell
outside the recommended range and both scores were removed from the data set.

**Multivariate Outliers**

Multivariate outliers were examined for using Mahalanobis distances. For the
MANOVA with 4 total variables (three dependent variables and the independent
variable), the critical value was determined to be $\chi^2 (4) = 13.28$ at $p = .001$ (Tabachnick
& Fidell, 2012). No multivariate outliers were detected. Multivariate outliers were also
assessed for the analysis that looked at the interaction of gender of the president and
gender of the members and was examined using Mahalanobis distances. For the
MANOVA with 5 total variables (four dependent variables and the independent variable),
the critical value was determined to be $\chi^2 (5) = 15.09$ at $p = .001$ (Tabachnick & Fidell,
2012). No multivariate outliers were detected. The data from 94 participants were use in
the descriptive portion of the analysis. To assess research question one, 91 participants
were used in the MANOVA, as three outliers were removed in a listwise deletion. For
the first second and third ANOVAs, a sample size of 93, 94, and 92 were used,
respectively. To assess research question two, 87 cases were used for analysis; three
outliers were removed in a listwise deletion and four participants did not report their
gender and were therefore removed from the analysis. For the fourth, fifth, and sixth
ANOVAs, the sample size was 89, 90, and 88, respectively.
Descriptive Statistics

The members of 57 boards of trustees within the North Carolina Community College System were invited to participate in the study. Twelve boards of trustees self-selected to participate and 147 surveys were distributed, one for each board member. Six boards with a total of 70 trustees received the male version of the survey and six boards totaling 77 trustees received the female version of the survey. Ninety-four surveys were returned -- 53 male surveys and 41 female surveys. Participants were asked to report their gender, age range, race/ethnicity, length of service as a trustee, and whether or not they have had experience hiring a college president. The slight majority of participants were male. Four participants did not report their gender. Frequencies and percentages for gender are presented in Table 1.

Table 1

Frequencies and Percentages for Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>n</th>
<th>Valid %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>56</td>
<td>62</td>
</tr>
<tr>
<td>Female</td>
<td>34</td>
<td>38</td>
</tr>
<tr>
<td>Missing</td>
<td>4</td>
<td>-</td>
</tr>
</tbody>
</table>

A majority of the participants were over the age of 50 with one third falling within the 60 – 69 age range. Five were 80 years old or older and one was between the ages of 20 and 29. Participants’ ages are presented in Figure 1. Seventy-three of the 94 participants self-identified as Caucasian; 15 identified themselves as African-Americans; and a small minority self-identified as Other (Asian/Pacific Islander, Latino, and Native
American, which included two participants each). Figure 2 presents the racial/ethnic make-up of the participants.

![Figure 2. Participant Age](image1)

![Figure 3. Race/Ethnicity of Participants](image2)
Participants’ years of service as a trustee ranged from one month to 27 years. The average number of years of service as a trustee was eight; the median number of years of service was six; and the mode was four years of service as a trustee. Figure 3 presents the years of service as a trustee for all participants. While only 93 participants noted their length of service, all 94 reported whether or not as a trustee they had experience in hiring a president. Fifty-two participants reported they had experience hiring a president while 42 reported they had not. Figure 4 presents the percentage of participants’ experience hiring a president.

Figure 4. Length of Service as a Trustee. One participant did not report length of service; $n = 93$. 

90
Participants were asked to read a vignette about the president of a fictional community college and were then asked to rate the president presented in the vignette according to a series of questions that relate to EE, EFF, and SAT. Means and standard deviations for EE, EFF, and SAT were conducted by the gender of the president. For those who read the vignette depicting a male president, EE scores ranged from 2.00 - 4.00, EFF scores ranged from 0.50 - 4.00, and SAT scores ranged from 2.00 - 4.00. For those participants who read the vignette depicting a female president, EE scores ranged from 2.33 - 4.00, EFF scores ranged from 0.00 - 4.00, and SAT scores ranged from 1.00 - 4.00. Means and standard deviations for EE, EFF, and SAT by gender of the president are presented in Table 2.
Table 2

*Means and Standard Deviations for Testing Scales*

<table>
<thead>
<tr>
<th>Item</th>
<th>M</th>
<th>SD</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>EE</td>
<td>3.62</td>
<td>0.50</td>
<td>3.47</td>
<td>0.49</td>
</tr>
<tr>
<td>EFF</td>
<td>3.10</td>
<td>0.79</td>
<td>2.74</td>
<td>0.98</td>
</tr>
<tr>
<td>SAT</td>
<td>3.54</td>
<td>0.66</td>
<td>3.21</td>
<td>0.80</td>
</tr>
</tbody>
</table>

**Reliability**

Cronbach’s alpha reliability was conducted on the three scales, extra effort (EE), effectiveness (EFF), and satisfaction (SAT). The alpha values ranged from .75 -.88, indicating reliability ranged from acceptable to good (George and Mallery, 2010). The results of the Cronbach’s alpha tests of reliability are presented in Table 3.

Table 3

*Cronbach’s Alpha Tests of Reliability*

<table>
<thead>
<tr>
<th>Item</th>
<th>No. of items</th>
<th>α</th>
</tr>
</thead>
<tbody>
<tr>
<td>EE</td>
<td>3</td>
<td>.75</td>
</tr>
<tr>
<td>EFF</td>
<td>4</td>
<td>.88</td>
</tr>
<tr>
<td>SAT</td>
<td>2</td>
<td>.88</td>
</tr>
</tbody>
</table>
Assumptions

Normality was assessed by examining values of skew and kurtosis. According to Kline (2012), to meet the assumption of normality, values for skew must be within the absolute value of 2.00 and values for kurtosis must be within the absolute value of 7.00. All data met the assumption of normality. Preliminary Pearson correlations were conducted to assess the relationships among the dependent variables and to be certain the assumption of absence of multicollinearity was met. According to Tabachnick & Fidell (2012), the absence of multicollinearity is met if no variables are correlated at .90 or greater. All variables were significantly correlated; however, no two variables were correlated at the .90 or greater level, indicating the absence of multicollinearity was met. The correlation analysis is presented in Table 4.

Table 4

*Pearson Product Moment Correlation among Dependent Variables*

<table>
<thead>
<tr>
<th>Variables</th>
<th>EE</th>
<th>EFF</th>
</tr>
</thead>
<tbody>
<tr>
<td>EFF</td>
<td>.33**</td>
<td></td>
</tr>
<tr>
<td>SAT</td>
<td>.57**</td>
<td>.70**</td>
</tr>
</tbody>
</table>

*Note.  *p < .05, **p < .001.*

Research Question One

Are there differences in the perceptions the members of community college boards of trustees hold about community college presidents by the gender of the president (male vs. female) per the extra effort (EE), effectiveness (EFF), and satisfaction (SAT) subscales of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short)?
To assess research question one, a MANOVA and three ANOVAs were conducted to determine if there are differences in the perceptions the members of community college boards of trustees hold about community college presidents by the gender of the president (male vs. female) per the extra effort (EE), effectiveness (EFF), and satisfaction (SAT) subscales of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short). Equality of covariance was assessed with Box’s M and the assumption was met ($p = .874$). Equality of variance was assessed with three Levene’s tests. The Levene’s test were not significant for EE ($p = .689$), EFF ($p = .614$), or SAT ($p = .490$), indicating the assumption was met. For the MANOVA and ANOVA analyses, typically an alpha of .05 would be used to assess the results, however the same dependent variables were used in research question for multiple analyses, therefore, a Bonferroni correction was utilized to reduce the chance of a Type 1 error (Tabachnick & Fidell, 2006). This adjustment was calculated by dividing alpha of .05 by the number of analyses; the new alpha value was set at .012 (.05/4).

The result of the MANOVA was not significant at an alpha level of .012, $F (3, 87) = 1.39, p = .251$, partial $\eta^2 = .05$, power = .36, suggesting that there were not simultaneous, significant differences on the dependent variables by president’s gender. The null hypothesis ($H_{01.1}$) - there are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the president (male vs. female) per the extra effort (EE), effectiveness (EFF), and satisfaction (SAT) subscales of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short) - cannot be rejected. The result of the
MANOVA is presented in Table 4. Means and standard deviation are presented in Table 5. Means and standard deviations are presented in Table 6.

Table 5

**MANOVA and Individual ANOVAs for EE, EFF, and SAT by President’s Gender**

<table>
<thead>
<tr>
<th>Source</th>
<th>MANOVA</th>
<th>ANOVA F (1, 89)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F (3, 87)</td>
<td>EE</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>p</td>
</tr>
<tr>
<td>President’s gender</td>
<td>1.39</td>
<td>2.46</td>
</tr>
</tbody>
</table>

*Note. n = 91, *p < .05, **p < .01, F values reported are Wilks’ Lambda.*

Table 6

**Means and Standard Deviations for EE, EFF, and SAT by President’s Gender**

<table>
<thead>
<tr>
<th>President’s gender</th>
<th>EE</th>
<th>EFF</th>
<th>SAT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>Male</td>
<td>3.63</td>
<td>0.50</td>
<td>3.12</td>
</tr>
<tr>
<td>Female</td>
<td>3.47</td>
<td>0.48</td>
<td>2.84</td>
</tr>
</tbody>
</table>

*Note. n = 91*

The ANOVA conducted to assess differences on EE by president’s gender was not significant at an alpha level of .012, F(1, 91) = 1.78, p = .185, indicating there were not differences on EE by president’s gender. The null hypothesis (H_{01.2}) - there are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the president (male vs. female) per the extra effort (EE) subscale of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short) - cannot be rejected.
The ANOVA conducted to assess if there were differences on EFF by president’s gender was not significant at an alpha level of .012, \( F(1, 91) = 3.73, p = .057 \), indicating there were not differences on EFF by president’s gender. The null hypothesis (\( H_{0.2} \)) - there are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the president (male vs. female) per the effectiveness (EFF) of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short) - cannot be rejected.

The ANOVA conducted to assess differences on SAT by president’s gender was not significant at an alpha level of .012, \( F(1, 91) = 4.72, p = .032 \), indicating there were not differences on SAT by president’s gender. The null hypothesis (\( H_{0.3} \)) - there are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the president (male vs. female) per the satisfaction (SAT) subscale of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short) - cannot be rejected. The results of the ANOVAs are presented in Table 7.

Table 7

ANOVAs to Assess Differences on EE, EFF, and SAT by President’s Gender

<table>
<thead>
<tr>
<th>Variable</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( M )</td>
<td>( SD )</td>
</tr>
<tr>
<td>EE (( n = 93 ))</td>
<td>3.62</td>
<td>0.50</td>
</tr>
<tr>
<td>EFF (( n = 94 ))</td>
<td>3.09</td>
<td>0.79</td>
</tr>
<tr>
<td>SAT (( n = 92 ))</td>
<td>3.54</td>
<td>0.66</td>
</tr>
</tbody>
</table>
Research Question Two

Are there differences in the perceptions the members of community college boards of trustees hold about community college presidents by the gender of the president (male vs. female) and the gender of the members of community college boards of trustees (male vs. female) per the extra effort (EE), effectiveness (EFF), and satisfaction (SAT) subscales of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short)?

To assess research question two, a two-between MANOVA and three two-between ANOVAS were conducted to determine if there are differences in the perceptions the members of community college boards of trustees hold about community college presidents by the gender of the president (male vs. female) and the gender of the members of community college boards of trustees (male vs. female) per the extra effort (EE), effectiveness (EFF), and satisfaction (SAT) subscales of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short). Equality of covariance was assessed with Box’s M and the assumption was met ($p = .606$). Equality of variance was assessed with three Levene’s tests. The Levene’s test were not significant for EE ($p = .412$), EFF ($p = .357$), or SAT ($p = .081$), indicating the assumption was met. After application of the Bonferroni correction, the new alpha value for the MANOVA and ANOVAs was set at .012.

The result of the MANOVA conducted on EE, EFF, and SAT was not significant for the interaction of president’s gender and trustee member’s gender at an alpha level of .012, $F (3, 81) = 0.41, p = .744$, partial $\eta^2 = .02$, power = .13, suggesting that there were not simultaneous, significant differences on the dependent variables by the interaction of president’s gender and trustee’s gender. The null hypothesis ($H_{02.1}$) - there are no
significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the president (male vs. female) and the gender of the members of community college boards of trustees (male vs. female) per the extra effort (EE), effectiveness (EFF), and satisfaction (SAT) subscales of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short) - cannot be rejected. The result of the MANOVA conducted on EE, EFF, and SAT was not significant for differences by the president’s gender at an alpha level of .012, $F(3, 81) = 1.69, p = .175$, partial $\eta^2 = .06$, power = .43, suggesting that there were not simultaneous, significant differences on the dependent variables by president’s gender. The null hypothesis ($H_{02.2}$) - there are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the president (male vs. female) and the gender of the members of community college boards of trustees (male vs. female) per the extra effort (EE), effectiveness (EFF), and satisfaction (SAT) subscales of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short) - cannot be rejected. The result of the MANOVA conducted on EE, EFF, and SAT was not significant for differences by trustee member’s gender at an alpha level of .012, $F(3, 81) = 1.88, p = .139$, partial $\eta^2 = .07$, power = .47, suggesting that there were not simultaneous, significant differences on the dependent variables by trustee’s gender. The null hypothesis ($H_{02.3}$) - there are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the president (male vs. female) and the gender of the members of community college boards of trustees (male vs. female) per the extra effort (EE), effectiveness (EFF), and satisfaction (SAT)
subscales of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short) - cannot be rejected. The result of the MANOVA is presented in Table 8. Means and standard deviation are presented in Table 9.

Table 8

**MANOVA and Individual ANOVAs for EE, EFF, and SAT by President’s Gender and Trustee’s Gender**

<table>
<thead>
<tr>
<th>Source</th>
<th>MANOVA</th>
<th>ANOVA F (1, 83)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F (3, 81)</td>
<td>EE</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>p</td>
</tr>
<tr>
<td>President’s gender</td>
<td>1.69</td>
<td>.18</td>
</tr>
<tr>
<td>Trustee’s gender</td>
<td>1.88</td>
<td>.07</td>
</tr>
<tr>
<td>President’s gender*trustee’s gender</td>
<td>0.41</td>
<td>.36</td>
</tr>
</tbody>
</table>

*Note. n = 87, *p < .05, **p < .01, F values reported are Wilks’ Lambda*
Table 9

Means and Standard Deviations for EE, EFF, and SAT by President’s Gender and Trustee’s Gender (n = 87)

<table>
<thead>
<tr>
<th>Trustee’s Gender</th>
<th>President’s Gender</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Total</td>
<td>Male</td>
<td>Female</td>
<td>Total</td>
</tr>
<tr>
<td>EE</td>
<td></td>
<td></td>
<td></td>
<td>3.59</td>
<td>0.53</td>
<td>3.38</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>3.72</td>
<td>0.41</td>
<td>3.64</td>
<td>0.37</td>
<td>3.69</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td></td>
<td></td>
<td>3.72</td>
<td>0.41</td>
<td>3.64</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>3.64</td>
<td>0.49</td>
<td>3.47</td>
<td>0.49</td>
<td>3.56</td>
</tr>
</tbody>
</table>

| EFF              |                    |        |        | 3.07 | 0.72   | 2.83 | 0.85 | 2.95 | 0.79 |
|                  | Male               | 3.07   | 0.72   | 2.83 | 0.85   | 2.95 | 0.79 |
|                  | Female             | 3.32   | 0.62   | 2.83 | 1.00   | 3.09 | 0.84 |
|                  | Total              | 3.17   | 0.69   | 2.83 | 0.89   | 3.00 | 0.81 |

| SAT              |                    |        |        | 3.43 | 0.72   | 3.14 | 0.72 | 3.28 | 0.72 |
|                  | Male               | 3.43   | 0.72   | 3.14 | 0.72   | 3.28 | 0.72 |
|                  | Female             | 3.76   | 0.40   | 3.43 | 0.75   | 3.61 | 0.61 |
|                  | Total              | 3.56   | 0.63   | 3.24 | 0.73   | 3.40 | 0.70 |

The ANOVA that was conducted to determine if there were differences in EE by president’s gender and trustee member’s gender was not significant at an alpha level of .012, $F(1, 85) = 0.82, p = .367$, indicating there were not differences on EE by the interaction of president’s gender and trustee member’s gender. The null hypothesis
(H_{02.4}) - there are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the president (male vs. female) and the gender of the members of community college boards of trustees (male vs. female) per the extra effort (EE) subscale of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short) – cannot be rejected. The main effect that looked at differences in EE by president’s gender was not significant at an alpha level of .012, \( F(1,85) = 1.18, p = .281 \), indicating there were not differences in EE by president’s gender. The null hypothesis (H_{02.5}) - there are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the president (male vs. female) per the extra effort (EE) subscale of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short) – cannot be rejected. The main effect that looked at differences in EE by trustee member’s gender was not significant at an alpha level of .012, \( F(1, 85) = 3.17, p = .078 \), indicating there were not differences in EE by trustee member’s gender. The null hypothesis (H_{02.6}) - there are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the members of community college boards of trustees (male vs. female) per the extra effort (EE), subscale of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short) – cannot be rejected. The results of the ANOVA are presented in Table 10.
Table 10

*Two-Between ANOVA to Assess Differences on EE by President’s Gender and Trustee’s Gender (n = 89)*

<table>
<thead>
<tr>
<th>Variable</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
<th>Partial η</th>
</tr>
</thead>
<tbody>
<tr>
<td>President gender</td>
<td>0.28</td>
<td>1</td>
<td>0.28</td>
<td>1.18</td>
<td>.281</td>
<td>.01</td>
</tr>
<tr>
<td>Trustee member gender</td>
<td>0.75</td>
<td>1</td>
<td>0.75</td>
<td>3.17</td>
<td>.078</td>
<td>.04</td>
</tr>
<tr>
<td>Interaction</td>
<td>0.19</td>
<td>1</td>
<td>0.19</td>
<td>0.82</td>
<td>.367</td>
<td>.01</td>
</tr>
<tr>
<td>Error</td>
<td>20.15</td>
<td>85</td>
<td>0.24</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The ANOVA that was conducted to determine if there were differences in EFF by president’s gender and trustee member’s gender was not significant at an alpha level of .012, $F(1, 86) = 0.65, p = .421$, indicating there were not differences on EFF by the interaction of president’s gender and trustee member’s gender. The null hypothesis ($H_{02.7}$) - there are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the president (male vs. female) and the gender of the members of community college boards of trustees (male vs. female) per the effectiveness (EFF) subscale of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short) – cannot be rejected. The main effect that looked at differences in EFF by president’s gender was not significant at an alpha level of .012, $F(1, 86) = 5.48, p = .022$, indicating there were not differences in EFF by president’s gender. The null hypothesis ($H_{02.8}$) - there are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the president (male
vs. female) per the effectiveness (EFF) subscale of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short) – cannot be rejected. The main effect that looked at differences in EFF by trustee member’s gender was not significant at an alpha level of .012, \( F(1, 86) = 0.03, p = .873 \), indicating there were not differences in EFF by trustee member’s gender. The null hypothesis \( (H_{0.9}) \) - there are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the members of community college boards of trustees (male vs. female) per the effectiveness (EFF) subscale of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short) – cannot be rejected. The results of the ANOVA are presented in Table 11.

Table 11

<table>
<thead>
<tr>
<th>Variable</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
<th>Partial η</th>
</tr>
</thead>
<tbody>
<tr>
<td>President gender</td>
<td>4.11</td>
<td>1</td>
<td>4.11</td>
<td>5.48</td>
<td>.022</td>
<td>.06</td>
</tr>
<tr>
<td>Trustee member gender</td>
<td>0.02</td>
<td>1</td>
<td>0.02</td>
<td>0.03</td>
<td>.873</td>
<td>.00</td>
</tr>
<tr>
<td>Interaction</td>
<td>0.49</td>
<td>1</td>
<td>0.49</td>
<td>0.65</td>
<td>.421</td>
<td>.01</td>
</tr>
<tr>
<td>Error</td>
<td>64.50</td>
<td>86</td>
<td>0.75</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The ANOVA that was conducted to determine if there were differences in SAT by president’s gender and trustee member’s gender was not significant at an alpha level of .012, \( F(1, 84) = 0.01, p = .935 \), indicating there were not differences on SAT by the interaction of president’s gender and trustee member’s gender. The null hypothesis
(H_{0.10}) - there are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the president (male vs. female) and the gender of the members of community college boards of trustees (male vs. female) per the satisfaction (SAT) subscale of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short) – cannot be rejected. The main effect that looked at differences in EFF by president’s gender was not significant at an alpha level of .012, \( F(1, 84) = 4.79, p = .031 \), indicating there were not differences in SAT by president’s gender. The null hypothesis (H_{0.11}) - there are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the president (male vs. female) per the satisfaction (SAT) subscale of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short) – cannot be rejected. The main effect that looked at differences in SAT by trustee member’s gender was not significant at an alpha level of .012, \( F(1, 84) = 5.00, p = .028 \), indicating there were not differences in SAT by trustee member’s gender. The null hypothesis (H_{0.12}) - there are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the members of community college boards of trustees (male vs. female) per the satisfaction (SAT) subscale of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short) – cannot be rejected. The results of the ANOVA are presented in Table 12.
### Table 12

**Two-Between ANOVA to Assess Differences on SAT by President’s Gender and Trustee’s Gender (n = 88)**

<table>
<thead>
<tr>
<th>Variable</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
<th>Partial η</th>
</tr>
</thead>
<tbody>
<tr>
<td>President gender</td>
<td>2.41</td>
<td>1</td>
<td>2.41</td>
<td>4.79</td>
<td>.031</td>
<td>.05</td>
</tr>
<tr>
<td>Trustee member gender</td>
<td>2.51</td>
<td>1</td>
<td>2.51</td>
<td>5.00</td>
<td>.028</td>
<td>.06</td>
</tr>
<tr>
<td>Interaction</td>
<td>0.01</td>
<td>1</td>
<td>0.01</td>
<td>0.01</td>
<td>.935</td>
<td>.01</td>
</tr>
<tr>
<td>Error</td>
<td>42.20</td>
<td>84</td>
<td>.50</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Summary

The purpose of this causal-comparative study was to compare the effects of gender on the perceptions that members of the boards of trustees of North Carolina community colleges have of community college presidents per the extra effort (EE), effectiveness (EFF), and satisfaction (SAT) subscales of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short) (Avolio and Bass, 2004). Descriptive statistics were presented for 94 participants and the results of the two MANOVAs, one for each research question, were reported and the results for two sets of three ANOVAs were reported, one set for each research question. The majority of participants were white males over the age of 50 with 10 or fewer years of service as a trustee. A slight majority had experience hiring a community college president. Data analysis revealed no significant correlation between gender and perception as measured per the EE, EFF, and SAT subscales of the MLQ (5X-Short) (Avolio and Bass, 2004) for either of the research questions resulting in a failure to reject the null hypotheses.
CHAPTER FIVE: DISCUSSION

The purpose of this study was to compare the effects of gender on the perceptions that members of the boards of trustees of North Carolina community colleges have of community college presidents per the extra effort (EE), effectiveness (EFF), and satisfaction (SAT) subscales of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short) (Avolio and Bass, 2004). Two research questions guided this study. The related hypotheses were tested using two MANOVAs and two sets of three ANOVAs. The MANOVA for research question one tested one independent variable - the gender of the president represented in the survey vignette - for its effect on the three dependent variables of the EE, EFF, and SAT subscales of the MLQ - 5x Short. Individual ANOVAs were examined for each subscale. A two-between MANOVA was conducted for research question two, testing two independent variables - gender of the president in the vignette and gender of the participant - for their interactive effects on the three dependent variables of the EE, EFF, and SAT subscales. Three two-between ANOVAs were examined for each subscale. Because the same dependent variables were used in all analyses, a Bonferroni correction was utilized to reduce the chance of a Type 1 error (Tabachnick & Fidell, 2006). This adjustment was calculated by dividing alpha of .05 by the number of analyses; the new alpha value was set at .012 (.05/4). The hypotheses could only be rejected if $p < .012$.

This chapter provides a summary and discussion of findings, theoretical implications, limitations, practical and methodological implications, recommendations for future research, and summary and conclusion.
Summary of Findings

Research Question One

Research question one asked: Are there differences in the perceptions the members of community college boards of trustees hold about community college presidents by the gender of the president (male vs. female) per the extra effort (EE), effectiveness (EFF), and satisfaction (SAT) subscales of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short)? Null hypothesis 1.1 stated: there are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the president (male vs. female) per the extra effort (EE), effectiveness (EFF), and satisfaction (SAT) subscales of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short). A MANOVA was used to test $H_{01.1}$. Equality of covariance was assessed with Box’s M and the assumption was met. Equality of variance was assessed with three Levene’s tests, one for each of the subscales (EE, EFF, SAT). The Levene’s tests were not significant for any of the three subscales, indicating the assumption was met. The result of the MANOVA was not significant, suggesting that there were not simultaneous, significant differences on the dependent variables by president’s gender. Thus, the null hypothesis was not rejected.

Individual ANOVAs were used to assess the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the president (male vs. female) per the individual subscales. The ANOVA conducted to assess differences on EE by president’s gender was not significant indicating there were not differences on EE by president’s gender. Therefore, $H_{01.2}$ -
there are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the president (male vs. female) per the extra effort (EE) subscale of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short) – was not rejected. The ANOVA conducted to assess if there were differences on EFF by president’s gender was not significant indicating there were not differences on EFF by president’s gender. As a result, H$_{01.3}$ - there are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the president (male vs. female) per the effectiveness (EFF) subscale of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short) – was not rejected. The ANOVA conducted to assess differences on SAT by president’s gender was not significant indicating there were not differences on SAT by president’s gender. Thus H$_{01.4}$ - there are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the president (male vs. female) per the satisfaction (SAT) subscale of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short) – was not rejected.

**Research Question Two**

Research question two asked: Are there differences in the perceptions the members of community college boards of trustees hold about community college presidents by the gender of the president (male vs. female) and the gender of the members of community college boards of trustees (male vs. female) per the extra effort (EE), effectiveness (EFF), and satisfaction (SAT) subscales of the Multifactor Leadership
Questionnaire form 5X Short (MLQ - 5X Short)? Null hypothesis 2.1 stated: there are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the president (male vs. female) and the gender of the members of community college boards of trustees (male vs. female) per the extra effort (EE), effectiveness (EFF), and satisfaction (SAT) subscales of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short).

A two-between MANOVA was conducted to test $H_{02.1}$. Equality of covariance was assessed with Box’s M and the assumption was met. Equality of variance was assessed with three Levene’s tests, one for each of the subscales (EE, EFF, SAT). The Levene’s tests were not significant for any of the three subscales, indicating the assumption was met. The result of the MANOVA conducted on EE, EFF, and SAT was not significant for the interaction of president’s gender and trustee member’s gender, suggesting that there were not simultaneous, significant differences on the dependent variables by the interaction of president’s gender and trustee’s gender. Consequently, $H_{02.1}$ was not rejected.

Null hypothesis 2.2 stated: there are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the president (male vs. female) per the extra effort (EE), effectiveness (EFF), and satisfaction (SAT) subscales of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short). The result of the MANOVA conducted on EE, EFF, and SAT was not significant for differences by the president’s gender, suggesting that there were not simultaneous, significant differences on the dependent variables by president’s gender. Therefore, $H_{02.2}$ was not rejected.

Null hypothesis 2.3 stated: there are no significant differences in the perceptions the members
of community college boards of trustees hold about the community college presidents by the gender of the members of community college boards of trustees (male vs. female) per the extra effort (EE), effectiveness (EFF), and satisfaction (SAT) subscales of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short). The result of the MANOVA conducted on EE, EFF, and SAT was not significant for differences by trustee member’s gender, suggesting that there were not simultaneous, significant differences on the dependent variables by trustee’s gender. Thus, $H_{02.3}$ was not rejected.

Individual two-between ANOVAs were used to assess the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the president (male vs. female) and the gender of the members of community college boards of trustees (male vs. female) per the individual subscales.

The ANOVA that was conducted to determine if there were differences in EE by president’s gender and trustee member’s gender was not significant indicating there were not differences on EE by the interaction of president’s gender and trustee member’s gender. Therefore, $H_{02.4}$, which stated there are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the president (male vs. female) and the gender of the members of community college boards of trustees (male vs. female) per the extra effort (EE) subscale of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short), was not rejected. The main effect that looked at differences in EE by president’s gender was not significant indicating there were not differences in EE by president’s gender. Consequently, $H_{02.5}$, which stated there are no significant differences
in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the president (male vs. female) per the extra effort (EE) subscale of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short), was not rejected. The main effect that looked at differences in EE by trustee member’s gender was not significant indicating there were not differences in EE by trustee member’s gender. Thus, \( H_{0.6} \), which stated there are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the members of community college boards of trustees (male vs. female) per the extra effort (EE) subscale of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short), was not rejected.

The ANOVA that was conducted to determine if there were differences in EFF by president’s gender and trustee member’s gender was not significant indicating there were not differences on EFF by the interaction of president’s gender and trustee member’s gender. As a result, \( H_{0.7} \), which stated there are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the president (male vs. female) and the gender of the members of community college boards of trustees (male vs. female) per the effectiveness (EFF) subscale of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short), was not rejected. The main effect that looked at differences in EFF by president’s gender was not significant indicating there were not differences in EFF by president’s gender. Thus, \( H_{0.8} \), which stated there are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the president (male vs. female) per the
effectiveness (EFF) subscale of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short), was not rejected. The main effect that looked at differences in EFF by trustee member’s gender was not significant indicating there were not differences in EFF by trustee member’s gender. Therefore, $H_{0.9}$, which stated there are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the members of community college boards of trustees (male vs. female) per the effectiveness (EFF) subscale of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short), could not be rejected.

The ANOVA that was conducted to determine if there were differences in SAT by president’s gender and trustee member’s gender was not significant indicating there were not differences on SAT by the interaction of president’s gender and trustee member’s gender. Consequently, $H_{0.10}$, which stated there are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the president (male vs. female) and the gender of the members of community college boards of trustees (male vs. female) per the satisfaction (SAT) subscale of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short), was not rejected. The main effect that looked at differences in EFF by president’s gender was not significant indicating there were not differences in SAT by president’s gender. As a result, $H_{0.11}$, which stated there are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the president (male vs. female) per the satisfaction (SAT) subscale of the Multifactor Leadership Questionnaire form 5X Short
(MLQ - 5X Short), was not rejected. The main effect that looked at differences in SAT by trustee member’s gender was not significant indicating there were not differences in SAT by trustee member’s gender. Thus, $H_{02.12}$, which stated there are no significant differences in the perceptions the members of community college boards of trustees hold about the community college presidents by the gender of the members of community college boards of trustees (male vs. female) per the satisfaction (SAT) subscale of the Multifactor Leadership Questionnaire form 5X Short (MLQ - 5X Short), was not rejected.

**Discussion of Findings and Implications Related to Literature**

The results of the data analyses were not statistically significant for gender impacting the perceptions that trustees hold toward community college presidents, thus, caution must be exercised when discussing the results. However, while the results were not statistically significant, the data for both research questions show a negative trend in the perceptions of the female president and her gender. Lack of statistical significance in the present study revealing no difference between the perceptions of the members of the boards of trustees toward female presidents as compared with male presidents makes these results consistent with Hagedorn’s and Laden’s (2002) assertion that gender politics is softer at community colleges. In fact, research suggests that the flexibility of community college organization has prompted many women to consciously choose employment at community colleges rather than 4-year institutions (Wolf-Wendel et al., 2007); thus adding to the reputation of these institutions as being more gender-equitable or women-friendly institutions.
However, in contrast, the present study’s data do reveal a more negative trend in the perceptions toward the female president, even if data analysis has shown it not to be significant. The means for the testing scales as revealed in Table 2, which included all 94 participants, show lower ratings for the female president as compared to the male president on all three subscales for participants as a whole prior to the removal of outliers. The means for research question one as reflected in Table 6, which included data for 91 participants after the removal of outliers through listwise deletions, also show the female president was rated lower than the male president on all three subscales when examining participants as a whole. The means for research question two, as shown in Table 9, reveal that both the male and female participants rated the male president higher than the female president on all three subscales. Furthermore, if a traditional $p$ value of .05 could be used to assess the results, there would be a significant difference, as revealed in Table 8, for the EE and SAT subscales for president’s gender alone, and for the SAT subscale for trustee’s gender alone. But, according to Tabachnick and Fidell (2006), in order to reduce the chance of a Type 1 error, the $p$ value must be adjusted since the same dependent variables are used in both research questions for multiple analyses. The new $p$ value of .017 (.05/3) was enough to make the results non-significant, as shown in Tables 11 and 12; making it impossible to reject the null hypotheses for the EE and SAT subscales. So, while these results were not significant enough to reject the null hypotheses, they do trend negative, based on gender, for the female president and how she is rated, and thus perceived, as a president.
**Transformational Leadership**

In regards to leadership style, the present study presented both the male president and female president in the exact same context of a transformational leadership style. Research suggests that a transformational leadership style balances the field for men and women vis-à-vis perceived leadership abilities, and may even give women an advantage. In a review of the literature on the topic of female leadership, Eagly et al., (2003) found that female leaders were more transformational than male leaders. Male leaders were generally more likely to display aspects of transactional leadership and laissez-faire leadership. Additionally, Coleman (2007) suggests that transformational leadership has emerged in recent years as the preferred leadership style and is perceived as more effective when compared to the transactional and laissez-faire styles of leadership (Eagly, 2007). In contrast to Eagly and Van Engen (2003), Barbuto et al. (2007) report no differences in raters’ perceptions of men and women regarding transformational leadership style, which begs the question, if, as research suggests, women exhibit the transformational leadership style more often than men and if the transformational leadership style is preferred then, at the very least, one could conclude that women should be rated equally, if not higher, than men when exhibiting it. However, in cases where men and women leaders both report using a transformational leadership style, women are evaluated more negatively than men (Ayman et al., 2009). Such is the case with the present study. Although both presidents in the current study exhibited, rather than revealed, a transformational leadership style, the male president was consistently rated higher on all three subscales than the female president; but, again, these results were not significant.
Leader Effectiveness

The lack of statistical significance in the present study would suggest that trustees’ perceptions of female presidents are comparable to their perceptions of male presidents. This result is consistent with Duehr’s and Bono’s (2006) conclusion that women are perceived to be as effective leaders as men and with research suggesting that women exhibit as good as and sometimes more effective leadership skills than men (Coleman, 2003; Eagly, 2007; Eagly et al., 2003; Garcia-Retamero & Lopez-Zafra, 2006). Eagly et al. (2003) concluded that all of the aspects of leadership on which women exceeded men relate positively to leader effectiveness whereas all of the aspects on which men exceeded women relate negatively to leader effectiveness. However, although the current study’s results lack statistical significance, the data contrast with these earlier studies. The data for the effectiveness (EFF) scale as illustrated in Table 2 show that, with an average of 2.74, the female president was rated lower than the male president, who had an average rating of 3.10, by the participants as a whole group prior to the removal of outliers. Similarly, the data from research question one which tested the perceptions of all participants toward the female president as compared to the perceptions of the male president after the removal of outliers through listwise deletions, irrespective of the participants’ gender, show that the female president was rated lower on the effectiveness scale with an average rating of 2.84 as compared to the male president who received an average rating of 3.12. Similarly, the data from research question two vis-à-vis effectiveness as revealed in table 8, which included data for 87 participants following the exclusion of four participants who did not reveal their gender and the removal of outliers through listwise deletions, and which tested for an interaction effect of the
participant’s gender with the president’s gender on the participant’s perceptions of the president, shows that while both the male and female participants rated the male president higher on effectiveness (3.07 and 3.32 respectively) than the female president, there was no difference in how the female president was rated by the female participants as compared with the male participants. Both female and male participants rated the female president’s effectiveness with an average rating of 2.83.

**Theoretical Implications**

The role congruity theory of prejudice toward female leaders (Eagly & Karau, 2002) argues leadership is a male role and therefore leads to negative perceptions of and resistance to women who attempt to fill leadership roles. Research based on role congruity theory has shown that the perceptions of women, especially of those in leadership roles, remain largely negative (García-Retamero & López-Zafría, 2006; Heilman et al., 2004; Isaac et al., 2010; Ritter & Yoder, 2004; Simon & Hoyt, 2008; Wittmer, 2001). While the statistical results of the present study do not align with this theory, the data do show more negative perceptions of the female leader than the male leader.

Coleman (2003) asserts that women are underrepresented in leadership positions because of the inherent male orthodoxy of leadership and that this male orthodoxy of leadership perpetuates a masculine, or macho, vision of leadership style. This orthodoxy holds true even for the field of education which, if not viewed more as a female profession, is more gender-balanced as a whole. This dominant male culture seems to persist despite efforts by educational institutions to be more gender-balanced in their leadership. Eddy and Cox (2008) found similar issues in community colleges within the
United States. They argue that community colleges are gendered organizations that operate through an organizational structure and hierarchy based on male norms. While the present study does not speak directly to these theories, its results are relevant. The lack of statistical significance in the results of the present study would seem to contradict the male orthodoxy of leadership theory or the theory that community colleges specifically are gendered organizations. However, again the fact that the data of the current study show a negative correlation between the perceptions of the female president and her gender, despite all things being equal in the vignettes, suggests that a bias against women as leaders may still exist. At best, the results of the current study are inconclusive on this point.

It is noteworthy that while both male and female participants rated the male president higher on all three subscales than the female president, the female participants rated both the male president and the female president higher on all three subscales than the male participants rated the presidents. These results are consistent with other studies that included gender of the participant as a variable (Ayman et al., 2009; Duehr & Bono, 2006; Isaac et al., 2010; Schein, 2001). In their study of gender and transformational leadership style, Ayman et al., (2009) found that male participants devalued a woman leader when she exhibited a self-described transformational leadership style, more than female participants did. Other studies have found that perceptions of female leaders have improved over time (Diekman & Goodfriend, 2010; Duehr & Bono, 2006; Schein, 2001); suggesting when the number of women as presidents reaches a critical mass then the perceptions of women as leaders should normalize as female leaders become part of the normal standard of leadership (Diekman & Goodfriend, 2010; Duehr & Bono, 2006).
The more women become leaders, the less leadership will be considered exclusively a part of the male or masculine domain, breaking the male hegemonic culture of leadership.

The gender composition of boards of trustees and other governing boards in higher education in general informs this discussion. The demographics of the participants in this research, as illustrated in Table 1 and Figures 1 and 2, show that the majority of the members of the boards of trustees are older (over 50), white males. These demographics are reflected in the national demographics of community college presidents (American Association of Community Colleges, n. d.b). Research suggests that as more women become leaders, the more women will become leaders (Bragg, 2009; Drake, 2008; Eddy 2008). Women leaders act as role models and mentors for other women and as more women ascend to positions of leadership, the more they will inspire and assist other women in elevating to positions of leadership (Brown, 2005; Eddy, 2008).

However, boards of trustees tend to hire presidents with previous presidential experience (Amey et al., 2002). Consequently, as long as the gender composition of boards of trustees remains disproportional, so will positions, such as community college presidencies, for which boards do the hiring. Because so few women are members of boards of trustees relative to men, the boards tend to hire more men than women presidents. However, studies have shown that as the number of female trustees has risen, so too has the number of female presidents (Vaughan & Weisman, 1997). Ehrenberg (2010) argues that until board membership reaches a critical mass of female members, the gender disparity among the presidents they hire will persist.
Limitations

The present study was limited to the North Carolina Community College System and there are several threats to validity that could not be mitigated and which must be considered before applying the results to other educational institutions, other regions, or other populations. External validity refers to the extent to which the results of a study can be generalized to other populations, settings, or treatments (Ary et al., 2006). The first threat to external validity present in this study is sampling bias. While the different versions of the survey were randomly assigned to the participants, the participants in the study volunteered. A second threat is sample size. The rate of return for the surveys was strong (64%). However, the overall number of participants was low when compared to the NCCCS as a whole. The researcher distributed 147 surveys among 12 boards of trustees. The NCCCS has 58 individual boards of trustees with an overall member count of about 800 trustees, according to the North Carolina Association of Community College Trustees (NCCCACT) website. Thus, when excluding the researcher’s own community college, only 21% of the boards were represented and the 94 participants who returned their surveys represent a small minority (12%) of the total number of trustees in the system.

Implications

Practice

Arguing that inequity continues to exist for women in the top educational positions because of gender filters, Rusch and Marshall (2006) assert that inequity does not lie in individual or organizational efforts, but in the leadership and organizational culture. They contend that these gender filters prohibit the recognition of a problem of
inequity and silence any discussion of it. While the present study does not examine the psychology of the persistence of any prejudice against female leaders, two of their five filters, denial and posturing and intellectualizing, inform the present research. People exhibiting the denial filter claim that gender issues do not exist, that the organization is gender-neutral, and discussions of gender are dismissed as irrelevant time-wasters. People that exhibit posturing and intellectualizing boast that the organization actively recruits women, is supportive of gender equity, and recognizes the need for gender equity in education. The results of the present study may serve to reinforce these two filters. Its failure to reveal any differences in how members of the boards of trustees perceive women as compared to men in a presidential role could stifle continued efforts to encourage women to pursue the top educational leaders in general and in the North Carolina Community College System specifically.

Beginning in 1992, the NCCCS began to actively encourage and support diversification in its leadership ranks. Its commitment to diversification is reflected in section 1C SBCCC 200.97 of North Carolina’s State Board of Community Colleges Code which states, “The community colleges shall seek to employ women and minorities in administrative positions” (North Carolina). This policy along with the North Carolina Community College Leadership Program (NCCCLP) endeavors to actively support and recruit women leaders (Gorham, 2000). Additionally, there are other leadership development programs within the NCCCS, with many schools offering their own programs (Robison et al., 2010). Despite these efforts, women administrators within the NCCCS have cited the male dominated organizational culture as an obstacle or barrier to advancement (Gillet-Karam et al., 1997; Leatherwood & Williams, 2008; Lesslie, 1998),
referencing the same barriers such as gender inequities as many other women working in other types of institutions and at other educational levels (Gillett-Karam et al., 1997; Leatherwood & Williams, 2008; Lesslie, 1998). Because the results of the present study reveal no significant difference in the perceptions of female and male presidents, they could lend themselves to a belief among boards of trustees and other policy leaders that inequities no longer exist within the organizational culture of the NCCCS, possibly leading to the moderation of leadership diversification and mentorship efforts. However, caution must be exercised vis-à-vis this study; because while the results are not statistically significant they do not establish that women have attained parity with men in the way they are perceived as leaders. At best, the results of this study are inconclusive on that subject.

Research suggests community colleges are not any more gender equitable organizationally than other types of educational institutions (Cook & Kim, 2012) just because women hold more leadership positions in community colleges than they do in 4-year colleges and universities (Liu, 2007). Townsend and Twombly (2007) concluded that the equitable climate for both female students and faculty found in community colleges is due more to accident than design. Townsend (2006) argues, as a whole, community college leaders have not made concerted efforts to make their institutions more equitable and they appear to exhibit more gender equity by having more women leaders than their 4-year counterparts simply because there are more community colleges and, thus, more women working in them. Additionally, the flexibility of community college organization has prompted many women to consciously choose employment at community colleges rather than 4-year institutions (Wolf-Wendel et al., 2007); thus
adding to the reputation of these institutions as being more gender-equitable or women-friendly. Because they are not statistically significant, the results of the present study, which show no difference in board members’ perceptions of men and women community college presidents, are consistent with the gender-equitable reputation of community colleges. However, the data reveal a negative correlation between gender and the perceptions board members have of the woman president. So it could be argued that ultimately, despite the fact that community colleges have better numbers vis-à-vis gender equity than their 4-year counterparts, community colleges remain gendered organizations with traditional organizational structures which perpetuate the male hegemonic culture of leadership (Garza-Mitchell & Eddy, 2008).

**Methodology**

The present research involved a quantitative gender-blind study, utilizing a survey in which the participants rated the actions and behaviors of a community college president depicted in a fictional vignette on three subscales of the MLQ 5-X Short. A qualitative research design may seem better suited for research on perceptions and attitudes (Creswell, 2009). Types of qualitative research such as case studies and phenomenological studies and qualitative research techniques such as interviews and observations allow researchers to directly study, observe, and inquire about individuals’ perceptions of others (Ary et al., 2006). However, such forms of research are limiting in that they may not elicit candid responses or natural behaviors from study participants. Participants in qualitative studies might be sincere in their responses, but their true attitudes may lie in their subconscious and only surface in a quantitative study which allows more anonymity and, thus, freedom to respond more genuinely. Qualitative
studies are also susceptible to researcher bias in that the researcher might influence, intentionally or unintentionally, the responses or behaviors of the participants (Creswell, 2009). However, there are several researchers of perceptions of gender and educational leadership who have utilized quantitative methodologies effectively (Dennis & Kunkel, 2004; Embry et al., 2008; Griffin, 1992; Peachey & Burton, 2010; Powell et al., 2008; Tyler & McCullough, 2009; Wiggins & Coggins, 1986) to gather more objective data.

Quantitative studies allow researchers to identify whether or not a problem exists, in this case gender inequity in educational leadership, which then can be used to prompt and inform qualitative studies to examine the issue more closely and in context (Ary et al., 2006; Creswell, 2009). This researcher sought to gather objective, quantifiable data regarding the perceptions that members of the boards of trustees have toward women and men community college presidents and a quantitative design was believed to be the best approach. This researcher was concerned that qualitative techniques such as interviews or observations, whether conducted by this researcher who is a woman, an objective woman not directly affiliated with this study, or a man, would not elicit objective answers. However, while a quantitative design was considered to be the better choice to garner objective results, it was understood that a quantitative design could not offer explanation or elaboration of why the participants rated the president as they did.

In addition to a quantitative design, this researcher chose to conduct a gender-blind study. According to Embry et al., (2008), stereotyping begins with knowledge of gender. If gender is not revealed as a variable then the influence, or lack thereof, of stereotyping should occur unconsciously, and intentional guarding against stereotyping, should not be a factor. The participants were not informed at the time of data collection
that the research involved the comparison of men and women. It was believed that this knowledge could influence their responses. Half the participants received the male version of the survey and half received the female version of the survey. The surveys were identical in all aspects other than the gender of the president, as identified through name and pronouns, depicted in the survey. While the results of this study were not statistically significant, the gender-blind nature of the survey is believed to have been effective in eliciting genuine responses. The fact that the female president was rated lower by the participants as a whole, by female participants as a whole, and by male participants as a whole, than the male president on all three subscales suggests that the participants did not feel pressure to give politically correct responses. It is believed that if participants had been informed of the gender-comparison nature of the study that ratings of the female president may have been inflated or ratings of the male president moderated. The fact that the woman was rated lower than the man on all three subscales was not a statistically significant difference seems to confirm the objectivity of the participants’ responses.

The survey instrument and vignette utilized in this study was adapted from one originally created by Powell et al. (2008) to study the effects of gender on the perceptions of leaders in the context of a financial services company. The Powell et al. (2008) study also utilized the MLQ 5X-Short to measure perceptions. The same instrument including the MLQ 5X-Short was later used by Welty Peachey and Burton (2010) to study the effects of gender on the perceptions of leaders in the context of a collegiate athletics department. In the first study, the woman leader exhibiting the transformational leadership style was rated more favorably than the man exhibiting the same leadership
style, especially by female raters (Powell et al., 2008). The second study had contrasting results. Welty Peachey and Burton (2010) found no statistically significant difference between the respondents’ perceptions of male and female athletic directors when exhibiting a transformational leadership style. Similarly, the present study found no statistically significant difference between the participants’ perceptions of the male and female community college presidents exhibiting a transformational leadership style.

**Recommendations for Future Research**

**Recommendation One**

The present study is the first of its kind to survey boards of trustees regarding their perceptions of women community college presidents as compared to men community college presidents. This one study does not provide sufficient information on the subject. Further research needs to be conducted on the effects of gender on the perceptions that members of boards of trustees or other educational governing bodies have toward educational leaders. Research often is conducted using subordinates of leaders (Isaac et al., 2010), leaders themselves (Eddy, 2008), or random people such as students as participants (Dennis & Kunkel, 2004; Embry et al., 2008; Powell et al., 2008; Tyler & McCullough, 2009). Very few studies on the effects of gender on the perceptions of chief executive educational leaders have used the people actually tasked with hiring those leaders.

**Recommendation Two**

The present study utilized a purely quantitative design. However, a mixed-methods design may be more effective in future research in garnering more definitive and/or explicative responses. For example, a survey similar to the one utilized herein
which added open-ended questions would allow participants to elaborate on why they rated the leader the way they did. Their responses could then be examined using qualitative techniques for the presence or absence of gendered language (Coleman, 2005; Eddy, 2003) or other characteristics that could help elucidate the quantitative results. Given the fact that the data of the present study show a more negative perception of women community college presidents as compared to men community college presidents, yet these results were not significant, qualitative data could have provided additional insight into the nature and scope of the individual participants’ perceptions.

Studies using a purely qualitative design would be useful as well. In the early stages of the present study, the researcher’s college was undergoing a presidential search. This presidential search would have offered a prime opportunity to conduct a qualitative case study of the presidential search process, examining it through the lens of gender perceptions. While the timing and logistics of her own college’s presidential search made it impractical for this researcher, future researchers might consider a case study as a viable research opportunity.

**Recommendation Three**

While the present study has focused on the gender gap among community college presidents, similar studies should be conducted on the gender gap, and other characteristics, among members of boards of trustees. Generally, community college boards of trustees are comprised primarily of older (over 50) white males. The American Association of Community Colleges (AACC) and the Association of Community College Trustees (ACCT) have jointly asserted that, “Presidents and trustees should mirror the populations on our campuses…” (AACC/ACCT, 2008). It has been established that
community college presidents, generally speaking, do not mirror the demographic characteristics of the populations they serve. Ehrenberg (2010) suggests that until board membership reaches a critical mass of female members, the gender disparity among the presidents they hire will persist. Similar arguments could be made for other characteristics such as race/ethnicity and age. Further research into the composition of boards of trustees needs to be conducted and examined for any implications on hiring practices.

**Recommendation Four**

Research needs to be conducted in regards to the hiring practices of community college boards of trustees in general. Dennis M. Barden, senior vice president of an executive search firm specializing in executive leadership searches for positions in academe and other professional fields, has written many commentaries for the *Chronicle of Higher Education* on the topic of hiring. While his columns all do not specifically address gender inequity in educational leadership, they do include and are informed by it. One aspect of hiring that Barden has focused on in his commentaries is the concept of “fit” (2007a; 2007b). The concept of “fit” covers those intangible qualities that boards of trustees, and others, look for when making hiring decisions. It cannot be quantified and often cannot even be explained. Barden (2007a) argues, “fit is soft, subjective, intuitive, and very, very personal” (para. 6). While the concept of “fit” may be useful and legitimate in selecting the right candidate, it can also be used to surreptitiously discriminate against certain individuals, including women. Women are especially vulnerable to being disqualified for not having the right “fit” for an institution when she is applying for a leadership position because, as research by Coleman (2003) and others
has shown, leadership is equated with men. Thus, women enter the hiring process at a
disadvantage. They, by virtue of their gender, do not “fit” the position. Because “fit” is
the perception board members have of any applicant (Barden, 2007b), it is important to
examine the perceptions and opinions of boards of trustees to determine if they hold any
prejudices for or against any particular group that might influence their decisions based
on “fit.”

Furthermore, according to Barden (2006a), women face other intangible obstacles
related to “fit” such as wardrobe considerations. Women are judged for their clothing
and accessory choices and even their make-up. Men face no such judgments, largely
because with a suit they have more limited and less varied wardrobe options and
generally do not wear make-up. Women must take their wardrobe and make-up into
conscious consideration when going on an interview; and they still run the risk of not
getting it right. The questions needing examination are; how do these intangibles affect
the hiring practices of boards of trustees; how do they affect a candidate’s “fit”? Only
through additional research can these questions be addressed.

Summary and Conclusions

The purpose of this study was to compare the effects of gender on the perceptions
that members of the boards of trustees of North Carolina community colleges have of
community college presidents per the extra effort (EE), effectiveness (EFF), and
satisfaction (SAT) subscales of the Multifactor Leadership Questionnaire form 5X Short
(MLQ - 5X Short) (Avolio and Bass, 2004). By examining the perceptions held by the
members of community college boards of trustees, this study adds to the body of research
and knowledge regarding gender and educational leadership and helps inform the causes of the continued gender imbalance among community colleges’ top leadership positions.

Women lag behind men in obtaining leadership positions in many professions (Catalyst, 2007; Krefting, 2003). Education is no different (Coleman, 2005; Cook & Kim, 2012). The percentage of female educational leaders is disproportional to the number of women working in education (Brown, 2005). Women hold more leadership positions in community colleges than they do in four-year colleges and universities (Bragg, 2009; Liu, 2007). However, they still are not proportionally represented in positions of leadership even in community colleges (Drake, 2008). Research has shown that women possess as effective leadership skills as men (Eagly, 2007; Eagly et al., 2003; Garcia-Retamero & Lopez-Zafr, 2006). However, there is a gap in the research. One related aspect of women and leadership that is lacking from the current literature is an analysis of the perceptions of those who hire leaders, especially in the field of education. This study endeavored to address that gap.

Two theories on gender and leadership informed the present research. According to the role congruity theory of prejudice toward female leaders (Eagly & Karau, 2002) leadership is a male role and therefore leads to negative perceptions of and resistance to women who attempt to fill leadership roles. Research based on role congruity theory has shown that the perceptions of women, especially of those in leadership roles, remain largely negative (Garcia-Retamero & Lopez-Zafr, 2006; Heilman et al., 2004; Isaac et al., 2010; Ritter & Yoder, 2004; Simon & Hoyt, 2008; Wittmer, 2001). Coleman (2003) asserts that women are underrepresented in leadership positions because of the inherent male orthodoxy of leadership and that this male orthodoxy of leadership perpetuates a
masculine, or macho, vision of leadership style. This orthodoxy holds true even for the field of education which, if not viewed more as a female profession, is more gender-balanced as a whole. This dominant male culture seems to persist despite efforts by educational institutions to be more gender-balanced in their leadership. Eddy and Cox (2008) found similar issues in community colleges within the United States. They argue that community colleges are gendered organizations that operate through an organizational structure and hierarchy based on male norms.

This study was guided by two research questions: 1) Are there differences in the perceptions the members of community college boards of trustees hold about community college presidents by the gender of the president per the EE, EFF, and SAT subscales of the MLQ - 5X Short; 2) Are there differences in the perceptions the members of community college boards of trustees hold about community college presidents by the gender of the president and the gender of the members of community college boards of trustees per the EE, EFF, and SAT subscales of the MLQ - 5X Short? One hundred forty-seven surveys were distributed among 12 boards of trustees. Ninety-four surveys were returned. Data were analyzed using two MANOVAs, one for each research question, and two sets of three ANOVAs, one set for each research question. Results revealed that while both male and female participants rated the female president lower than the male president on all three subscales, the differences were not statistically significant resulting in a failure to reject the null hypotheses.

Lack of statistical significance in the present study revealing no difference between the perceptions of the members of the boards of trustees toward female presidents as compared with male presidents and no correlation between gender and these
perceptions makes these results consistent with research asserting that gender politics is softer at community colleges (Bragg, 2009; Hagedorn & Laden, 2002; Liu, 2007). In 1992, the NCCCS began to actively encourage and support diversification in its leadership ranks. Its commitment to diversification is reflected in section 1C SBCCC 200.97 of North Carolina’s State Board of Community Colleges Code (North Carolina). This policy along with the North Carolina Community College Leadership Program (NCCCLP) endeavors to actively support and recruit women leaders (Gorham, 2000). Additionally, there are other leadership development programs within the NCCCS, with many schools offering their own programs (Robison et al., 2010). The results of this study suggest these efforts are working.

However, while the results were not statistically significant, the data for both research questions show a negative trend for perceptions of the female president and her gender. The means for the testing scales revealed in Table 2 show lower ratings for the female president as compared to the male president on all three subscales for participants as a whole. The means for research question one as reflected in Table 6 show the female president was rated lower than the male president on all three subscales when examining participants as a whole. The means for research question two, as shown in Table 9, reveal that both the male and female participants rated the male president higher than the female president on all three subscales. While these results were not significant enough to reject the null hypotheses, they do show a negative trend for the female president and how she is rated and thus perceived as a president by both men and women trustees. This data is consistent with the role congruity theory of prejudice toward female leaders (Eagly & Karau, 2002) which argues leadership is a male role and therefore leads to
negative perceptions of and resistance to women who attempt to fill leadership roles and the theory of the male orthodoxy of leadership which asserts that women are underrepresented in leadership positions because of the traditional and dominant patriarchal culture of leadership which perpetuates a masculine, or macho, vision of leadership style (Coleman, 2003).

The present study is the first of its kind to survey boards of trustees regarding the effects of gender on their perceptions of community college presidents. The results of this single study are not sufficient to draw any definitive conclusions on the subject. In the meantime, the gender disparity persists. A recent report published by the American Council on Education reveals that while the number of women college presidents increased nationally to 26%, women represent about a third of all community college presidents (Cook & Kim, 2012). In the North Carolina Community College System the percentage of women presidents has increased to 31% in 2012, which is in reverse proportion to the student population and the gender composition of the faculty and staff. Women account for roughly two-thirds of the student population (American Association of Community Colleges, n. d.a) and two-thirds of faculty and staff within the North Carolina Community College System (NCCCS, 2008). Furthermore, due to the impending retirements of a generation of presidents, colleges and universities are facing a crisis in leadership (Ekman, 2010; Kirwan, 2008; Renick 2008; Skinner, 2010), as are community colleges (Campbell et al., 2010; Hassan et al., 2010; Vaughan, 2004; Vaughan & Weisman, 2003; Weisman & Vaughan, 2007). The looming wave of presidential retirements coupled with the higher turnover rate among presidents in general equals potential opportunity for women who aspire to the community college
It would be beneficial if boards of trustees would take advantage of the growing number of women in the leadership pipeline as they seek to replace their presidents. Community college campuses have a very diverse student population and presidents as well as trustees should reflect this diversity (AACC/ACCT, 2008; Townsend, 2006). By giving women more consideration as leaders, boards of trustees would have a larger and more diverse leadership pool from which to choose future presidents (Kirwan, 2008). While the present study adds to the discourse on the gender disparity among community college presidents, additional research needs to be conducted on this topic with this population in a continued effort to explain the causes of the ongoing gender gap and help advance the cause of gender equity.
REFERENCES


Lester, J., & Lukas, S. (2008, Summer). The actors behind the curtain: Representation of women faculty in community college institutional decision making. *New Directions for Community Colleges, 2008*(142), 57-68.


APPENDIX A: INSTRUMENT PERMISSION

Cindy Dean

From: Gary Powell
Sent: Thursday, January 12, 2012 6:46 PM
To: Cindy Dean: Gary Powell
Cc: RE: Leader evaluations: a new female advantage

Hi Cindy,

Your study sounds interesting. Here are the four surveys that we used as well as the PDF file for the article. You have our permission to adapt and use them in whatever way you wish. Coding for the MLQ scales is published somewhere; I can dig up my notes if you need them. Good luck with your research.

Best wishes,
Gary

Gary N. Powell
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Director, School of Business PhD Program
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Personal web page: http://www.business.uconn.edu/cms/p461/u131/mc/r
PhD program web page: http://www.business.uconn.edu/cms/p195
MGMT Department web page: http://www.business.uconn.edu/cms/p211

From: Cindy Dean
Sent: Monday, January 09, 2012 8:37 PM
To: Gary Powell
Subject: Leader evaluations: a new female advantage

Good evening Dr. Powell,

As a doctoral student I am interested in researching gender and educational leadership for my dissertation. Specifically, I want to do a quantitative study whereby I examine the perceptions of the members of the boards of trustees of American community colleges vis-à-vis gender. Boards of trustees are the hiring bodies for their institutions’ chief executive officer. I want to examine the board members’ perceptions of female leaders versus their perceptions of male female leaders to determine if there are any significant differences. I have chosen a quantitative study because I believe it is the best way to get candid responses.

I have read your article, “Leader evaluations: A new female advantage” (2008), co-authored by Anthony Butterfield and Kathryn Bartol, and am interested in your survey instrument. If I may I would like to adapt your leadership vignettes for my purposes. While you were specifically examining leadership styles and gender, I am only interested in comparing the raters’ perceptions of male and female leaders. I plan to use the two leadership styles (transformational and transactional) as a kind of control. Also, where your survey had four forms, I would like to add two more to mine.
Specifically, I would like to add a vignette for each leadership style wherein the gender of the leader is unspecified; again to act as a control.

Of course I would change the context of each of the vignettes to a community college situation. My questions for you are, 1) may I use your survey; 2) can you provide any additional information regarding your use of this survey; and 3) do you have any advice or suggestions for me given what I've told you?

I've attached a working sample of the vignettes I've adapted. Please feel free to critique them.

Thank you for your time.

Respectfully,

Cindy

Cynthia L. Dean

No virus found in this message.
Checked by AVG - www.avg.com
Version: 2012.0.1913 / Virus Database: 2114/4902 - Release Date: 03/29/12
To whom it may concern,

This letter is to grant permission for the above named person to use the following copyright material:

Instrument: *Multifactor Leadership Questionnaire*

Authors: *Bruce Avolio and Bernard Bass*

Copyright: *1995 by Bruce Avolio and Bernard Bass*

for his/her thesis research.

Five sample items from this instrument may be reproduced for inclusion in a proposal, thesis, or dissertation.

The entire instrument may not be included or reproduced at any time in any other published material.

Sincerely,

Robert Most  
Mind Garden, Inc.  
www.mindgarden.com
APPENDIX B: SURVEY INSTRUMENTS

Leadership Survey

**Instructions:** This instrument asks you to rate the behavior of a manager in a particular situation.

Read the leadership situation below then describe the president’s behavior using the attached Leadership Questionnaire.

**Leadership Situation**
After several years of [declining enrollment], the Board of [Trustees] of [Springfield Community College] hired Dr. [Joan/John] Barkley as its president. [Dr. Barkley] has long been recognized by friends, family, and [professional] acquaintances as a highly optimistic individual. Generally speaking, those who spend any period of time with [her/him] become infected by [her/his] optimistic vision. As one [colleague] remarked:

> Whenever you’re around [Dr. Barkley] you can’t help but feel good. [She/He] pays close attention to your personal needs for achievement and growth. Moreover, [Dr. Barkley] encourages you to be innovative and creative in your work: [she/he] says that you should never rely on the “tried and true” and always approach old problems in new ways. As a result, [Dr. Barkley] makes you feel like you can accomplish anything.

Others report that they have never worked for a [college] so devoted to its leader and [her/his] vision. For example, prior to [Dr. Barkley] taking over [Springfield Community College], most administrators were confused and hoping that the [enrollment] crisis would somehow “work its way out.” Since [Dr. Barkley] took over the [college], however, people have become inspired about what the future will bring. [SCC] still faces serious problems, but the [senior staff] has rallied around [Dr. Barkley’s] radically different and inspirational vision.

One area where [Dr. Barkley] has been particularly successful is in calming the tattered nerves of the [board of trustees]. During a recent meeting with the [board], [Dr. Barkley] demonstrated [her/his] excellent communication skills. One [particularly important board member] related the experience as follows:

> Just before the meeting was about to start, the mood was extremely dour, explosive I might add. So then in comes Joan (John), calmly and confidently walking up to the podium. By the end of [her/his] 45-minute address we were all mesmerized. Now, as I think about the meeting, we didn’t get the answers that we wanted, but most people are excited about the direction in which [Joan/John] wants to take the [college].
Leadership Questionnaire

What follows is a list of items that may be used to describe the behavior of a manager. Each item describes a specific kind of behavior, but does not ask you to judge whether the behavior is desirable or undesirable. Although some items may appear similar, they express differences that are important in the description of leadership. Each item should be considered as a separate description. This is not a test of ability or consistency in making answers. Its only purpose is to make it possible for you to describe, as accurately as you can, the behavior of the manager depicted in the previous leadership situation.

PLEASE ANSWER ALL ITEMS.

INSTRUCTIONS
Read each item carefully.

Estimate how frequently the manager in the leadership situation engages in the behavior described by the item.

Decide whether the manager (4) frequently, if not always, (3) fairly often, (2) sometimes, (1) once in a while, or (0) not at all acts as described by the item.

Draw a circle around one of the five numbers following the item to show the answer you have selected.

RATER FORM

<table>
<thead>
<tr>
<th></th>
<th>Not at all</th>
<th>Once in a while</th>
<th>Sometimes</th>
<th>Fairly often</th>
<th>Frequently, if not always</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

The [president] in the story, [Joan/John] Barkley, …(Circle one number for each item):

1. Acts in ways that builds subordinates’ respect
   0 1 2 3 4

2. Is effective in meeting subordinates’ job-related needs
   0 1 2 3 4

3. Uses methods of leadership that are satisfying
   0 1 2 3 4

4. Gets subordinates to do more than they expected to do
   0 1 2 3 4

5. Is effective in representing subordinates to higher authority
   0 1 2 3 4

6.
The [president] in the story, [Joan/John] Barkley, …(Circle one number for each item):

<table>
<thead>
<tr>
<th>Not at all</th>
<th>Once in a while</th>
<th>Sometimes</th>
<th>Fairly often</th>
<th>Frequently, if not always</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

Note: Per Mind Garden’s (publisher) instructions, no more than five items from the MLQ-5X Short© are permitted to be reproduced for inclusion in a proposal, thesis, or dissertation. However, this survey will include a total of 10 items when distributed to participants. The researcher has obtained a license from Mind Garden to use this survey in her research.

Now for some background information about you, please write in or check the appropriate answer:

Age Range:  20–29 ___ 30–39 ___ 40–49 ___ 50–59 ___ 60–69 ___ 70–79 ___ 80 & up ___

Sex: M ___ F ___

How long have you served as a community college trustee? _______ yrs. OR _______ mos.

As a member of a community college board of trustees have you had experience hiring a college president? ___ (Y / N)

Race/Ethnicity: African American ___ Asian/Pacific Islander ___ Caucasian ___
Latino ___ Multi-racial ___ Native American ___
APPENDIX C: PARTICIPANT INVITATION

Dear President [insert president’s name here]:

My name is Cindy Dean and as a doctoral candidate in Liberty University’s graduate education program I am conducting research on the perceptions the members of community college boards of trustees have of a fictional community college president’s leadership abilities. Since the boards of trustees are tasked with the recruitment, hiring, and termination of the president, their participation is essential to my study.

Because of its size as the third largest community college system in the nation and its convenience to me (I work at Stanly Community College) I have chosen the NCCCS as my framing population. Thus, I would like to respectfully request the participation of [insert school name here] board of trustees.

I understand you will want to consult with your board before volunteering on their behalf. If they do agree to participate I would like to send all the surveys to you or your designee in one packet to be administered all at once, ideally at a regularly scheduled board meeting. This way once all surveys have been completed they may be collected together and returned to me via a self-addressed, postage-prepaid envelope, which I will include in the packet.

The surveys will include a brief vignette depicting the leadership skills and behavior of a fictional community college president. Participants will read the vignette then rate the president on ten items, each of which provides a few brief statements followed by a Likert-type rating scale. Participants will rate the president’s behavior and effectiveness on each item according to a scale ranging from 0 (Not at all) to 7 (frequently, if not always). Completion of the survey should not take much time, approximately 10 - 20 minutes, including distribution and collection.

If you or your board members have any questions or would like additional information prior to deciding whether or not to participate, please don’t hesitate to contact me.

Thank you for your consideration and I look forward to hearing from you.

Warm Regards,

Cindy Dean
[contact information removed for publication]
APPENDIX D: POST-EXPERIMENT DEBRIEFING STATEMENT

Post-experiment Debriefing Statement

[Effects of Gender on] North Carolina Community College Boards of Trustees’ Perceptions of Community College Presidents

(Research in partial fulfillment of the requirements for the degree doctor of education)

Cynthia I. Dean
Liberty University
School of Education

Debriefing Statement:

Thank you for your participation in the research study on the perceptions of community college boards of trustees toward community college presidents. During this research you were asked to read a vignette depicting a fictional community college president and then complete an evaluation of that president’s leadership abilities and effectiveness. While you were told that this was a study on perceptions you were not informed that it was a study regarding the effects of gender on those perceptions. This deception of omission was necessary to ensure that your responses were as frank and unbiased as possible. Two forms of the survey were distributed to participants; one depicting a male president and the other depicting a female president. The results of the surveys (see attached) were compared on the basis of the gender of the vignette’s fictional president as well as the gender of the participants.

As affirmed in the consent form, the records of this study will be kept private. In any sort of report we might publish, we will not include any information that will make it possible to identify a subject. Research records will be stored securely and only researchers will have access to the records.

The participants’ privacy will be protected in several ways. First, the surveys were completed anonymously and do not contain any personal identifiers. Second, the completed surveys are being kept in a locked filing cabinet accessible only by Cynthia I. Dean, the principal investigator. Third, the data which was transferred to a computer for analysis is password protected, accessible only by Cynthia I. Dean, the principal investigator. Finally, results reported in the final manuscript will not include any personal identifiers of individual participants nor will it include any identifiers to specific participating colleges.

Contact Information:
Thank you again for your participation. If you have any questions, you may contact Cynthia Dean at [contact information removed for publication]; or Dr. Donna Joy, the dissertation committee chair at [contact information removed for publication].