2019

The Perception of Female Leadership: Impact of Gender and Leader's Qualification on Leader's Effectiveness

Ala’a Fahad Al-shakha

University of North Florida, n00970374@unf.edu

Follow this and additional works at: https://digitalcommons.unf.edu/etd

Part of the Educational Administration and Supervision Commons, Educational Leadership Commons, and the Higher Education Commons

Suggested Citation


This Doctoral Dissertation is brought to you for free and open access by the Student Scholarship at UNF Digital Commons. It has been accepted for inclusion in UNF Graduate Theses and Dissertations by an authorized administrator of UNF Digital Commons. For more information, please contact Digital Projects.

© 2019 All Rights Reserved
THE PERCEPTION OF FEMALE LEADERSHIP: IMPACT OF GENDER AND LEADER’S QUALIFICATION ON LEADER’S EFFECTIVENESS

by

Ala’a Fahad Alshakha

A dissertation submitted to the Department of Leadership, School Counseling & Sport Management in partial fulfillment of the requirements for the degree of Doctor of Education in Educational Leadership

UNIVERSITY OF NORTH FLORIDA

COLLEGE OF EDUCATION AND HUMAN SERVICES

July, 2019

Unpublished work c Ala’a Fahad Alshakha
The dissertation of Ala’a Fahad Alshakha is approved:

____________________________________  _______________
Dr. Amanda Pascale

____________________________________  _______________
Dr. David Hoppey

____________________________________  _______________
Dr. Daniel Dinsmore

____________________________________  _______________
Dr. JeffriAnne Wilder

Accepted for the Department of Leadership, School Counseling, and Sports Management:

____________________________________  _______________
Dr. Liz Gregg

Accepted for the College of Education and Human Services:

____________________________________  _______________
Dr. Diane Yendol-Hoppey

Accepted for the University:

____________________________________  _______________
Dr. John Kantner
Dean of the Graduate School
DEDICATION

This accomplishment is dedicated to my father Fahad, my mother Hussah, and all my supporters for their endless love. They are the reason behind my success, I would not be the person I am today without their support and encouragement.
ACKNOWLEDGMENTS

The road to success is not easy, but today, with the completion of my doctorate dissertation and being present in this room to defend it, I feel inspired and empowered. I can finally see the light at the end of the tunnel.

On this occasion, I would like to express my deepest appreciation and gratitude to those who assisted me during my academic journey, and pushed me towards becoming Dr. Ala’a. But first, I must thank God: Allah the Almighty. Thank you, my lord, for your blessings; and for the strength you gave me to achieve my goal and complete this dissertation. Certainly, without your blessings, this achievement would not have been possible.

Second, I would like to thank the Saudi government for offering me the opportunity to pursue my doctorate degree here at the University of North Florida. Studying at UNF helped me develop my personal, professional, intellectual, social, and communication skills. It enhanced my knowledge about leadership and improved my leadership potential.

Third, I would like to express my sincerest gratitude to my dissertation advisor, Dr. Amanda Pascale, for her unremitting support, her patience, her motivating comments, her professional mentorship, and her thorough insights and comprehensive knowledge throughout my dissertation period. My work would not have been accomplished without her guidance and encouragement.

Special thanks and appreciations are extended to my committee members: Dr. David Hoppey, Dr. Daniel Dinsmore, and Dr. JeffriAnne Wilder for their insightful comments incorporated in this dissertation. Also, I am gratefully indebted to Dr. Dinsmore for his assistance in the research methodology and his guidance throughout the research statistical analysis.
Finally, I want to express my profound gratitude to my parents, my family, and my friends for their consistent support and continuous encouragement to reach this end. I want to recognize, in particular, my brother Abdulmajeed, my partner during the period of my study. His patience, support, and love encouraged me to follow my passion and accomplish this success.

Thank you all.
TABLE OF CONTENTS

DEDICATION .......................................................................................................................... iii
ACKNOWLEDGMENTS ......................................................................................................... iii
TABLE OF CONTENTS ............................................................................................................ v
LIST OF TABLES .................................................................................................................... ix
LIST OF FIGURES .................................................................................................................. x
ABSTRACT .......................................................................................................................... xi
LIST OF ACRONYMS .......................................................................................................... xii
Chapter 1 : Introduction ..................................................................................................... 1
   Problem Statement ......................................................................................................... 1
   Study Purpose ............................................................................................................... 3
   Study Questions ............................................................................................................. 3
   Definition of Terms ....................................................................................................... 4
      An educational leader. ............................................................................................... 4
      Leadership .................................................................................................................. 4
      Leadership role ......................................................................................................... 4
      Leadership style ....................................................................................................... 4
      Leader’s qualification ............................................................................................... 4
      Leadership effectiveness ......................................................................................... 4
   Significance of the Study ............................................................................................. 5
Chapter 2 : Review of Literature ...................................................................................... 6
   Introduction .................................................................................................................... 6
An Overview of Female Leadership in Saudi Arabia Higher Education Institutions..... 7

Education and leadership in Saudi Arabian higher education institutions. ............. 8

Barriers prevent women from accessing leadership position in Saudi Arabia. ......... 9

Female Leadership Effectiveness................................................................. 19

An overview of leadership................................................................. 19

Leadership effectiveness................................................................. 20

Female leadership effectiveness in Saudi Arabian higher education................. 30

Conceptual Framework ........................................................................ 33

Summary of the Review of Literature....................................................... 35

Chapter 3 : Methods........................................................................... 36

Chapter Overview ............................................................................. 36

Research Questions and Hypothesis ..................................................... 36

Research Approach and Design .......................................................... 39

Population and Sample..................................................................... 40

Participants....................................................................................... 41

Data Collection Procedures.............................................................. 42

Instrument....................................................................................... 43

Specification of variables.................................................................. 44

Data Analysis .................................................................................. 49

Descriptive statistics........................................................................ 49
LIST OF TABLES

Table 3.1. Demographic Information. ................................................................. 45

Table 3.2. Perceived Female Leadership Effectiveness Scale. ......................... 47

Table 4.1. T. test Summary.................................................................................. 56

Table 4.2. Descriptive Statistic of the Path Analysis. ......................................... 57

Table 4.3. Correlation Matrix for the Study Variables....................................... 58

Table 4.4. Comparison of the Four Hypothesized Models Outfit......................... 64
LIST OF FIGURES

Figure 2.1. Conceptual Framework of the Study ............................................................. 34

Figure 3.1. Path of Simple Direct Model ......................................................................... 51

Figure 3.2. Path of Mediation Model ............................................................................... 52

Figure 3.3. Path of Moderation Model ............................................................................. 52

Figure 3.4. Path of Mediation Moderation Model ........................................................ 53

Figure 4.1. Simple Direct Model Outcome ................................................................. 59

Figure 4.2. Mediation Model Outcome ............................................................................ 60

Figure 4.3. Mediation Moderation Model Outcome ...................................................... 61

Figure 4.4. Mediation Moderation Model Outcome ...................................................... 63
ABSTRACT

This study examined how gender and years of working with a female leader influence the gendered perception of female leadership effectiveness in Saudi Arabian higher education institutions. This study compared male and female leaders’ perception of female leadership effectiveness as well as highlighted the relationship between leader’s gender, experience working with a female leader and perceived female leadership effectiveness. To answer the research questions, four hypothesized models were proposed (simple direct model, mediation model, moderation model, and mediation moderation model). Data was collected from administrated leaders, who hold a position in five public universes located in Riyadh, Saudi Arabia with approximately 554 male and female leaders. T. test and path analysis were conducted to test the hypothesized models. The results of path analysis indicated that the mediation model was the best fit model of the four hypothesized models. One significant path was identified between gender and perceived female leadership effectiveness in mediation moderation model, the worst model of the four hypothesized models. Also, a discussion of the key findings, the study limitations, and the suggested future areas of research were discussed.
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>LPI</td>
<td>Leadership Practices Inventory</td>
</tr>
<tr>
<td>KSU</td>
<td>King Saud University</td>
</tr>
<tr>
<td>IMBSU</td>
<td>Al-Imam Mohammed Ibn Saud Islamic University</td>
</tr>
<tr>
<td>KSAU-HS</td>
<td>King Saud Abdulaziz University for Health Sciences</td>
</tr>
<tr>
<td>SEU</td>
<td>Saudi Electronic University</td>
</tr>
<tr>
<td>PNU</td>
<td>Princess Nourah Bint Abdulrahman University</td>
</tr>
<tr>
<td>DSRO</td>
<td>Deanship of Scientific Research Office</td>
</tr>
<tr>
<td>IRB</td>
<td>Institutional Review Board</td>
</tr>
<tr>
<td>NFI</td>
<td>The Bentler–Bonett Normed Fit Index</td>
</tr>
<tr>
<td>RMSEA</td>
<td>The Root Mean Square Error of Approximation</td>
</tr>
<tr>
<td>ACI</td>
<td>The model Akaike Information Criterion</td>
</tr>
</tbody>
</table>
Chapter 1: Introduction

Problem Statement

The role of women in Saudi Arabian society is evolving. Recent studies have recognized that women play an essential role in the development and growth of Saudi society, pointing out that women in Saudi Arabia represent more than 50 percent of university graduates (Alkayed, 2015; Al-Ghamdi, 2016; Abalkhail, 2017). As a result, the Saudi government is actively seeking women involvement in the workforce. In 2016 the Saudi government’s plan titled Saudi Vision 2030 (called “Vision”) was introduced. This plan states that the Saudi government will invest in women’s rights and support them in developing their abilities. The Vision asserts that women should be included in all work facets. Additionally, the Vision calls for raising the proportion of women in the workforce from 22 percent to 30 percent (Vision 2030, 2016). In fact, since the Saudi government has started its movement to support women professionally, the opportunity for women to join the work force has steadily increased (Alkayed, 2015).

Even though Saudi women have started to gain employment and recognition as professionals, there are still some areas where women continue to be underrepresented. The rate of women working in leadership and administrative roles in Saudi Arabian higher educational institutions remain lower than expected (Jamjoom & Kelly, 2013; Alomair, 2015; Gonaim, 2016; Abalkhail, 2017). Additionally, while women represent more than half of students enrolled in undergraduate and graduate programs, the number of women in higher education administrative positions is less than eight percent (Al-Ahmadi, 2011; Al-Ankari, 2013; Al-Magableh & Otoum, 2014; Alotaibi, Cutting & Morgan, 2017; Abalkhail, 2017). Current studies illustrate that while
the enrollment, retention, and graduation rate of undergraduate and graduate programs are higher among females than males in Saudi Arabia, less than 40% of faculty members are women (Alohali & Al-Mehrej, 2012; Jamjoom & Kelly, 2013, Alomair, 2015). The majority of women employed by Saudi Arabian higher education institutions hold lower academic positions (Alomair, 2015). These facts highlight the need for understanding the state of female leadership in Saudi higher education, the factors that influence effective female leaders, and whether gender differences and leaders’ qualifications influence female leadership effectiveness in Saudi higher education institutions.

Few studies highlight the factors that influence the effectiveness of female leaders in Saudi higher education institutions (Alomair, 2015; Gonaim, 2016; Heredero, & Margalina, 2016). However, anecdotal evidence indicates that women at higher education institutions are still striving to develop their leadership skills, their leadership capacity and their effectiveness as leaders. They are striving to close the gender differences gap that limits their leadership opportunities in general, and specifically in higher education institutions (Alkayed, 2015; Al-Ghamdi, 2016; Hodges, 2016). Women are looking to participate in the decision making in their institutions. Many are interested in improving their leadership ability by becoming more knowledgeable in the leadership, and attending leadership development programs, which are often limited to male leaders (Alhmadi 2011; Heredero & Margalina, 2016; Abalkhail, 2017; Alotaibi et al 2017). In short, the number of women leaders in higher education is not what would be expected, given that women experience similar preparation and possess similar dispositions to leadership as men.
Study Purpose

The purpose of this study was to examine how gender and years of working with a female leader influence the gendered perception of female leadership effectiveness. This study specifically sought to understand the difference in the perception of male and female leaders in the Saudi public universities regarding the female leadership effectiveness. The study compared the perception of higher educational leaders toward female leadership effectiveness based on leaders’ gender and experience working with a female leader. Also, the current study highlighted the relationship between a leader’s gender, experience working with a female leader and perceived female leadership effectiveness. Understanding the relationships between the variables helped in identifying the effect of leaders’ gender and experience working with a female leader on perceived female leadership effectiveness. Leaders’ perceptions of female leadership effectiveness measured by the Kouzes and Posner (2003) Leadership Practices Inventory (LPI). Helms (2012) believed that highlighting different perspectives when evaluating educational leaders would provide leaders with their own leadership attributes, personnel familiar with the characteristics needed to lead successfully, and useful information regarding their job performance.

Study Questions

The following research questions and hypotheses guided the study investigation:

Q1: Are there differences in the perception of male and female leaders regarding female leadership effectiveness in Saudi Arabian higher education institutions?

Q2: Does a leader’s gender and experience working with a female leader impact the perceived female leadership effectiveness in Saudi Arabian higher education institutions?

The following four sub-questions were formed from the second research question:
Does a leader’s gender and experience working with a female leader have a direct effect on perceived female leadership effectiveness?

Does a leader’s gender mediate the relationship between the leader’s experience working with a female leader and perceived female leadership effectiveness?

Does a leader’s gender moderate the relationship between the leader’s experience working with a female leader and perceived female leadership effectiveness?

Does a leader’s gender simultaneously mediate and moderate the relationship between the leader’s experience working with a female leader and perceived female leadership effectiveness?

**Definition of Terms**

**An educational leader.** A male or female administrator who holds a leadership position, such as: dean, vice dean, department chair, vice chair or any academic unit manager, in one of the Saudi Arabian higher education institutions.

**Leadership.** The ability of an individual to impact the motivation or competence of other individuals in a group (Humphrey, 2012).

**Leadership role.** The process whereby an individual influences a group of individuals to achieve a common goal (Northouse, 2013).

**Leadership style.** The set of behaviors, which define the way decisions are made through the use of power and interaction with followers (Lashway, 1999).

**Leader’s qualification.** Leader’s qualification describes the degree, standards or criteria leaders obtain in addition to training, leading skills, experience, and knowledge (Porter, 2009).

**Leadership effectiveness.** Leadership effectiveness describes the degree to which leaders execute their responsibilities successfully (Porter, 2009). Effective leaders build ideology and
positive relationships within the organization; they challenge the process of leadership, inspire a shared vision, enable others to act, model the way, collaborate to achieve the organization goals, and encourage others to make a change (Herbst & Conradie, 2011).

**Significance of the Study**

This study aims to better understand female leadership in Saudi Arabian higher education institutions. The information gained in this study raises awareness to the perceptions of female leaders, their influence, and their capabilities. It will help to understand the current perception of female leadership in a moment that there is a significant increase of female leadership in different sectors in a traditionally male dominated work force. This understanding raises awareness of obstacles women face when it comes to the perceptions of their male and female colleagues. It also lends insight into what types of educational opportunities, leadership training, and qualifications, will allow more female leaders to emerge in higher education institutions in Saudi Arabia.

In previous decades in the Saudi society, many people and organizations did not support and appoint females in leadership roles because of traditional, stereotypical ideology (Alomair, 2015). However, Saudi women today are striving to become vital and effective participants in their society. Presently, the Saudi society is recognizing the importance of women in leadership positions; and it is implementing a change in educational, political and economic organizations to support this. This idea aligns with the Saudi Arabia Vision of 2030 which states “our real wealth lies in the ambition of our people and the potential of our younger generation include women” (Vision 2030, 2016). Ultimately, this study increases awareness of this initiative and examines whether male and female leaders generally share similar values and beliefs about female leadership effectiveness and capabilities.
Chapter 2: Review of Literature

Introduction

The purpose of this study was to examine how gender and years of working with a female leader influence the gendered perception of female leadership effectiveness. This study specifically sought to understand the difference in the perception of male and female leaders in the Saudi public universities regarding the female leadership effectiveness. The study compared the perception of higher educational leaders toward female leadership effectiveness based on a leader’s gender and experience working with a female leader. Also, the current study highlighted the relationship between a leader’s gender, experience working with a female leader, and perceived female leadership effectiveness. Understanding the relationships between the variables helped in identifying the effect of leaders’ gender and leaders’ experience working with a female leader on perceived female leadership effectiveness. Leader’s perception of female leadership effectiveness was measured by the Kouzes and Posner (2003) Leadership Practices Inventory (LPI). Helms (2012) believed that highlighting different perspectives when evaluating educational leaders would provide leaders with their own leadership attributes, personnel familiar with the characteristics needed to lead successfully, and useful information regarding their job performance.

This section focused on the current literature on the topic of female leadership in Saudi Arabian higher education, using major themes and subthemes that highlight the study research questions. The literature review focused also on the theoretical aspects of leadership from both the leader’s viewpoints and others who work with them. Pugh and Hickson (2007) and
Sergiovanni (2005) assert that leaders need to adopt certain behaviors in order to help others perform effectively in the workplace. Leaders need to take account of other peoples’ viewpoints and consider how others evaluate them if they seek leadership effectiveness. Finally, this literature review made connections between the current study and the existing researches, and demonstrated how the study contributes to the field female leadership effectiveness.

This literature review provided an overview of female leadership in Saudi higher education, leader’s qualification in Saud Arabia, and the meaning of leadership effectiveness in Saudi higher education institutions. Additionally, it discussed how leadership effectiveness has been defined and perceived in previous studies; these studies measured leaders’ qualifications and effectiveness of leadership to underline the similarities and differences of male and female leadership roles.

**An Overview of Female Leadership in Saudi Arabia Higher Education Institutions**

Although female leadership is one of the common researching topics wide world, very little is known about women leadership in Saudi Arabia, especially in the context of higher education (Abalkhail 2017; Alsubaie & Jones, 2017). Alsubaie and Jones (2017) assert that most of the literature regarding women and leadership in Saudi Arabia emerges from scholarship in the western contexts, or from non-academic articles that present a stereotypical image of Saudi women even as exotic (Hamdan 2005) or as a victim of oppression (Shannon, 2014). Yet, Saudi Arabian society is more complex than a single case study can capture. Within the Saudi conservative society, religion, culture norms, traditions, gender policies, modernism, and innovation are all engaged together (Gorney, 2016; Al-Rasheed & Azzam, 2012). Nowadays, Saudi women are redefining their role in the society; they have started removing boundaries that prevent their modernity and empowerment (Gorney 2016). Indeed, the Saudi society has
witnessed some remarkable improvements in women’s status in social, political, educational, and economic life over the past two decades (Alsubaie & Jones, 2017). Those improvements have been confronted with criticism from media activists and women’s rights defenders because of two reasons: (1) Saudi Arabia is one of the most gender segregated countries in the world, and (2) the need to be under male guardianship (mahram) in order to travel, work, or obtain medical treatment (Alsubaie & Jones, 2017). This challenges women who wish to pursue a leadership career as they must obtain permission from their male guardian (Forsythe, 2009). In addition to the laws, rules, and social practices women face in their day to day role, these regulations impacted their working practice and freedom of movement (Abalkhail 2017). Although research concerned with women and leadership in higher education in Saudi Arabia is limited, one goal of this review is to highlight the existing literature of the current state of Saudi Arabian women’s higher education leadership in Saudi Arabia.

**Education and leadership in Saudi Arabian higher education institutions.** Despite the limitations Saudi women face in general, female education has increased dramatically over the past few decades (Hamdan 2005). This has particularly been started since King Abdullah ascended the throne in 2005 (Pavan 2016). Thirty six universities across the country were established (Ministry of Education 2017) during his era. E-learning also gained popularity, especially among women unable to access mainstream higher education provision (Al Alhareth, AlDighrir, & AlAlhareth, 2013). Women have been permitted to study subjects such as law, engineering, and architecture (Meijer 2010); Saudi women used to be forbidden from studying these subjects because it was socially unacceptable for women to pursue certain careers (Mobaraki and Söderfeldt 2010). Over time, females earned the priority to gain scholarships and study abroad (Hamdan 2005). Today, women in Saudi Arabia represent more than 50 percent of
university graduates (Alkayed, 2015; Al-Ghamdi, 2016; Abalkhail, 2017). Current statistics from the Ministry of Education Statistics Center (2017) indicate the number of females undertaking a PhD in a western country is 51%. This figure equates to 41.91% of Saudi students who study for a PhD in a western country.

Although it is now widely agreed that Saudi women have made phenomenal advancements in education and society, women are in still underrepresented in workforce generally, and leadership positions specifically (Al-Ahmadi, 2011; Al-Kayed, 2015; Al Ghamdi, 2016; Alsubaie & Jones, 2017). This underrepresentation could relate to the cultural conventions where men and women are segregated in education and workplace (Hamdan 2005). Cultural and social factors do indeed play a role in the position of women; however, researchers point out that religion is also very influential in seeking to preserve women’s status and confirm their position as subordinate members of society (Al-Rasheed, 2013; Hodges, 2016). Some studies illustrated that the lack of female leadership and women leaders’ empowerment are significant factors for the low rate of women in leadership positions (Aldoubi, 2014; Al Ghamdi, 2016; Gonaim, 2016; Alotaibi et al. 2017). Saudi women need to be empowered in order to fully participate and contribute to the progression and modernization of the country.

**Barriers prevent women from accessing leadership position in Saudi Arabia.** The majority of studies in the context of Saudi women and leadership review the literature of studies conducted in Western cultures and adapt the barriers for women leaders in those societies. Only few studies looking at Saudi women leaders have highlighted the perspective of Saudi women themselves in a few disciplines (Al Munajjed, 2010; Al-Ahmadi, 2011; Aldoubi, 2014; Alotaibi et al., (2017). Thus, this section is an overview of barriers that prevent Saudi women from accessing leadership positions.
Most of the available literature focuses on the challenges, barriers, and obstacles faced by Saudi female leaders. A barrier is defined as a characteristic, event, or phenomenon that hinders or controls access to the advancement of individuals or groups, or both in an organization (Chliwniak, 1997). Researchers such as: Al-Ahmadi (2011); Alexander, Guta, & Poole, (2014); AlKayed, (2015); Alomair, (2015); Alsuwaida, (2016); Almaki, Silong, Idris, & Abdwahat, (2016); Alotaibi et al., (2017); and Abalkhail, (2017) have been able to identify actual or perceived barriers and obstacles to female advancement in Saudi higher education settings. Some barriers to accessing leadership positions that have been discussed in the content of Saudi higher education literature consist of the following: (a) culture norms, (b) gender differences, (c) lack of professional networks, and (d) lack of effective mentors. The remainder of this section is an overview of these barriers.

Al-Ahmadi (2011) is one of the few studies that examined the challenges and barriers of female advancement in the workplace by using the quantitative approach. Al-Ahmadi (2011) conducted a survey to identify the challenges facing female leaders in public institutions. It measured the leadership challenges faced by women from five lenses: structural, cultural, lack of empowerment, personal, and lack of resources. The findings of the study asserted that structural challenges are considered the most important leadership challenges in the public sector. The structural challenges reported by the participants were lack of flexibility, centralized decision-making processes, exclusion from strategic planning, and limited authority to make a decision. Moreover, the results showed the lack of resources regarding restricted financial authority, and inadequate buildings and facilities were ranked second among the leadership challenges. In addition, participants identified the lack of empowerment as a significant obstacle to female leadership in Saudi Arabia. Participants stated that the lack of mentoring opportunities offered to
Saudi female leaders and the absence of leadership development programs had resulted in the nonappearance of female leaders pursuing leadership positions in public and private organizations. Because of that, women hold these positions without building the necessary leadership skills or the appropriate competencies. The lack of training and mentoring programs lead to limited experiences and a lack of female role models, as well as unequal opportunities for leadership development (Abalkhailb, & Allana, 2014).

**Culture norms.** The first barrier that helps individuals understand the underrepresentation of women in leadership is the Saudi culture norms. In Arab societies in general not only in the Saudi society, men are superior and women are inferior (AlDoubi, 2014). This stereotype regarding male and female exists in the working force too. Regardless of women’s positions in the public and private sectors, women are considered inferior and subordinates to men, even if the male has fewer qualifications (Hamdan, 2005). This scenario is strongly replicated in Saudi Arabian leadership positions. Decision-making roles in most of the Saudi organizations are predominantly male (AlDoubi, 2014). Although qualified and educated women are available in Saudi Arabia, men are in charge of running all sectors in the country (Al-Ahmadi, 2011). In the Saudi higher education context, the highest leadership position a women can achieve is serving as a deputy to her male counterparts. This form of stereotype created by the cultural perception of women’s roles as assistants to men constrains their advancement and professional growth (AlMunajjed, 2010; Hamdan, 2005).

Another cultural obstacle women face in leadership is the Saudi philosophy toward male and female’s lifestyles. Both male and female in the Saudi culture agree that men have responsibilities and duties to protect women, supporting women financially, and be guardians for women (Gonaim, 2014); (Alkayed, 2015); (Alotaibi et al., 2017). Under male guardianship
policy (mahram), every woman must obtain permission from a male guardian—usually her husband or father, but possibly even her brother or son—to access education, to travel, work and to obtain medical treatment, to gain permits, and so on (Forsythe 2009, p. 396). This policy has been blocked since the new era of Saudi Arabia with the lead of Crown prince Mohammed bin Salman.

Another factor that limits women’s opportunities to serve in a leadership position in Saudi institutions is the gender segregation (Hamdan, 2005; Jamjoom and Kelly, 2013, Alkayed, 2015 & Alomair, 2015). This segregation prevents female leaders from communicating freely with others since they must be totally separated from men. Gender segregation in the workforce leads to fewer women having leadership roles. Organizations prefer to employ men, rather than incur additional costs associated with creating a segregated work environment for women. Furthermore, Jamjoom and Kelly (2013) argued that in gender-segregated campuses, conservative male academic leaders do not engage and communicate directly with female academics. Thus, female leaders have limited responsibilities and are excluded from decision-making processes. Finally, the restrictions placed on women’s movement within the country are another factor that has limited their leadership opportunities. Women have historically been prevented from driving or travelling without a male guardian; however, these restrictions are being scaled back (Alsuwaida, 2016).

**Gender differences.** The review of the literature presents gender differences as one of the existing barriers that cause the underrepresentation of women in leadership positions generally in Saudi Arabia, not only in higher education institutions. In many Arab countries including Saudi Arabia, the privileged position of family and gender roles is shaped by social and cultural norms,

Social structures and traditional values of Saudi society regarding gender division exist in the family and the public sphere (Al-Ahmadi, 2011). Men are superior and women are inferior in the Saudi society (AlDoubi, 2014). This is demonstrated in the male guardianship policy; women have to get their male guardian’s permission to work, travel and do other daily activities (Forsythe 2009). The superior and inferior stereotype of men and women influence the hierarchical status of the two genders in a society (AlDoubi, 2014). This status affects male perception regarding female ability to perform and practice well in the leadership role (Abalkhail, 2017). Leadership performance is higher if the leader was male and lower if the position was occupied by a female leader (AlDoubi, 2014). When women leaders try to exercise authority outside their gender stereotypes, they face negative reactions and lack support for their violation of gender stereotypes (Ridgeway, 2002; Ridgeway & Correll, 2004). Therefore, such stereotype limits women’s opportunity to pursue a leadership position.

Males did not appreciate the gender differences between men and women in many contexts, including leadership. For years it was common that some leaders in Saudi educational institutions lacked faith in women’s ability to lead (Al-Ahmadi, 2011). Some women lacked faith in themselves to lead too. The female style of leadership was viewed as ineffective because leadership often reflects male characteristics (Elmuti, Jia, & Davis, 2009; Tahiraj, 2010). When women were selected to leadership positions, they were expected to act, to lead, and to perform like men in order to be effective and in order to gain male leaders’ trust and appreciation (AlDoubi, 2014).
Furthermore, in Saudi society, men are assigned to take charge of women’s affairs, both in the household and in society at large (Almengash, 2019; Abalkhail, 2017; Alotaibi, et al 2017). These studies have shown that some Saudi male leaders have adopted this interpretation of custody over women in the household to female employees at work. Because of this, more men are assigned to leadership positions rather than their female counterparts. Also, wages for male employees are higher than wages for women. The wage ratio of female-to-male employees, who work in similar positions, is 73 percent, which is higher than the USA and UK ratio - 66 and 67 percent, respectively (Abalkhailb & Allana, 2014). Saudi society has depended on unequal pay since it has considered men to be the household breadwinners; women have never been seen to have this role. Hence, the recruitment, selection and promotion of women to top positions in Saudi higher education institutions are closely related to the rules of Saudi society, and not to personal leadership skills, traits, and qualifications.

Leadership studies conducted worldwide have revealed that there are differences among both genders when it comes to their perceived skills (Burke & Collins, 2001; Yarrish, Zula, & Davis, 2010). A meta-analysis of the relationship between gender and leadership skills found that men emerged as leaders more often than women in groups without a leader. However, it is more likely for women to emerge as social leaders than men (Eagly & Karau, 1991). A meta-analysis of 58 studies found that while gender plays a role in leadership perception and effectiveness, it plays a significant role on organizational setting and leadership skills. Eagly, Karau, and Makhijani (1995) concluded that men tend to fare better when leadership is defined in masculine terms, such as military settings, while women performed better when leadership is defined in less masculine terms, such as educational settings. On self-perception of leadership skills, Yarrish et al. (2010) concluded that there are significant differences in perceived leadership skills between
males and females. According to their study, females perceived cognitive and interpersonal/intrapersonal skills as more important than the male participants did.

In Saudi Content, Alexander et al. (2014) evaluated the effect of gender on perceived leadership skills among Saudi college students. Researchers conducted a nonexperimental quantitative approach to investigate the perception of 230 undergraduate male and female students in Saudi Arabia. The results of this investigation indicated that female students perceived that they work better in groups, understand each other, and communicate better with others. Female students perceived themselves as more social even though the society believes that their role is basic to maintaining the structure of the family (Hamdan, 2005). Also, female students did not perceive themselves to be better than males at decision making or overall leadership skills. Therefore, it is important to develop the self-esteem of female students so that they perceive themselves as able leaders who are employable and effective.

Al-baker et al. (2017) examined the perspective of Saudi university population regarding gender roles and how gender stereotypes in the Saudi society affect women’s opportunities in education, employment, and activity in the public sphere. A questionnaire was distributed among 4,455 male and female students to gather youth perception. The study results indicated that the students’ population was optimistic about improving gender equity in the Saudi society even when the conceptions of gender roles are seen as part of the country’s cultural identity. Al-baker et al. (2017) concluded that educating women offers the potential to greatly empower women in Saudi Arabia. Women’s aspirations to acquire additional qualifications and participate more fully in society reflect the new direction for women’s movement in Saudi Arabia.

In conclusion, to understand the low rate of women in leadership positions in Saudi higher education institutions, it is important to explore how leaders in both genders perceive
leadership. Thus, this study will highlight gender differences to understand how gender differences influence the development of leadership capacity, female employment opportunities and female leadership effectiveness. Another reason for exploring the perceptions of gender differences in leadership is that social roles assigned to women in Saudi society bear great significance on how male and female leaders perceive their skills (Alexander et al, 2014).

**Lack of professional development.** Limited access to professional development programs is considered one of the major barriers for Saudi women when they seek leadership positions and jobs opportunities. Researchers argue that the lack of professional networks is one of the barriers to women’s advancement to leadership positions worldwide not only in Saudi society (Schipani et al., 2008; Schueller-Weidekamm & Kautzky-Willer, 2012; AlDoubi 2014; Abalkhailb & Allana, 2014; Hilal, (2015). Professional development defines as a “constellation of developmental relationships that function in various ways but contribute to positive career outcomes” (Schipani et al., 2008, p. 16).

Saudi women have the same problem in lacking access to professional networks (AlDoubi, 2014). Saudi women are excluded from the large professional networks because most professional development programs are dominated by men since many higher education institutions in the country are segregated (AlMohamed, 2008). This segregation adds another barrier to female leaders; Saudi female leaders have difficulties proving themselves to their male superiors. For example, the dean of the female campus must get approval from the dean of the male campus in most of the major and critical decisions (AlDoubi 2014). These decision-making administrative processes take a long time, cost money, and consume energy. To overcome these barriers, a large number of changes need to be made such as equal access to all leadership,
training, and networking opportunities (Al-Tamimi, 2004; AlMunajjed, 2010; Abalkhailb & Allana, 2014; AlDoubi 2014).

**Lack of effective mentors.** Lack of effective mentors for women who seek or serve in a leadership or decision-making positions is one of the obstacles Saudi female leaders face. In many qualitative and quantitative studies (Al-Tamimi, 2004; Munoz, 2010; Schueller-Weidekamm & Kautzky Willer, 2012), female leaders who achieved leadership positions in business, education, health, or politic organizations frequently expressed their disappointment over the lack of mentoring. These women emphasized that they have to develop their own leadership practices and navigate their own way to top leadership positions.

However, the situation in Saudi higher education institution is complicated. Saudi female leaders can interact with female mentors only. This condition contributes to the lack of larger networking discussed in the previous section. Female mentors provide valuable information; however, most of the time this information can be applicable in a female setting only (Schipani et al., 2008). This type of mentoring does not transfer to the larger setting that is dominated by men. Only when there is greater interaction and appreciation of what both genders bring to the table will there be movement toward professional equity and equality (Carli & Eagly, 2012).

Abalkhailb and Allana (2014) studied the perception of 28 female managers regarding the effect of mentoring and networking on female career development in Saudi Arabia. The study findings illustrated that mentoring and networking play an essential role on women’s career development. Although mentoring and networking are important in female career development, there is a lack of mentoring programs for women managers in Saudi Arabia. Mentoring programs were limited in their access to men only. The study asserted that women in Saudi Arabia need to have male guardians to join the workforce. This made the biggest impact on women career
choices and successes. Finally, Women in Saudi Arabia work in different sections or branches attached to men’s institutions. Therefore, segregation of genders in the workplace is another factor that limits the support of male leaders on female career advancement.

In conclusion, the barriers female leaders face in Saudi Arabian higher education institutions could be perceived at structural, individual, and organizational levels:

At a structural level, one of the reasons behind the underrepresentation of women in leadership position is that labor inequalities are prevalent in Saudi Arabia. According to Almunajjed (2010), the rate of women’s participation in the workforce is one of the lowest in the region. Almunajjed (2010) asserted that the number of people who join the workforce in Saudi Arabia reached 8.2 million people; however, only about 15 percent of the nationals in the labor force were women. One of the reasons behind the low representation of women employment in Saudi Arabia was the lack of options for the majority of Saudi women. A Saudi woman who is interested in joining the workforce has to choose to join the field of education or health (Alotaibi et al., 2017). Recently, Saudi women have been barred from certain professions, such as engineering, politics and architecture (Alotaibi et al., 2017).

At an individual level, most female leaders agree that the lack of leadership development programs, limited leadership responsibilities, lack of decision-making, limited experience, and lack of training in leadership roles significantly prevent female leaders from serving in leadership roles at Saudi higher education institutions. Abalkhailb and Allana (2014) conducted a qualitative study of women managers’ perceptions of mentoring and networking in Saudi Arabia and the UK. Twenty-eight managers from Saudi Arabia and 16 managers from the UK reported that there is a lack of mentoring programs for women managers and that mentoring programs only included male role models.
At an organizational level, Abalkhail (2017) and Alotaibi, et al (2017) examined female leadership in higher education and found an underrepresentation of female leaders. These studies found that besides gender segregation, other obstacles challenged Saudi women, such as lack of confidence, lack of support, lack of training, social discrimination, and difficulty balancing the demands of family and work. Although men were overrepresented in leadership roles and higher academic ranks, the interviewed female leaders stated that they were ready to participate effectively and fully in the Saudi Society. They expressed a passion to improve their skills and to pursue higher leadership positions.

**Female Leadership Effectiveness**

*An overview of leadership.* The concept of leadership is an essential concept for human development these days (Gonaim, 2016). Recently, leadership has become one of the global researching topics because of its effect on an organization success and effectiveness (Preedy, Bennett & Wise, 2012). Despite the fact that leadership is one of the major topics in a lot of scholars, there is no agreement on the definition of leadership or a specific way to measure leadership effectively. Even though the meaning of leadership does not depend on one definition, most of the definitions highlight the action or the role a leader plays when tasks and responsibilities have been practiced. Most scholars agree that leadership represents the leader’s behavior and disagree about the ways leaders need to behave.

By reviewing the literature, it is evident that leadership is an ambiguous concept in definition and measurement because of the difficulty in identifying the effects of leadership (Lakomski, 2005, Gonaim, 2014). Leadership is not one act, or person or thought. It has various conceptualizations and motives. Leadership is defined as the act of accountability that demonstrates responsibility in order to create change within the organizational outcome through
vision, goals and objective (Porter, 2009). Furthermore, leadership over human beings is exercised when a person with certain motives and purposes mobilizes -institutionally, politically or psychologically; this person tries to arouse, engage and satisfy the motives of other people or followers (Burns, 1978). Leadership is the process of non-coercive social influence in which a leader guides the activities and members of a group toward shared objectives and goals in an organization (Bryman, 2017). It is any attempt to influence the behavior of another individual or group (Hersey, 1984).

In addition, leadership is described as an interpersonal process that emphasizes relationships, collaboration, and empowerment while at the same time recognizes the need for utilizing power and control (Couchonnal, 2005). It is the process of influencing a group of individuals to achieve a common goal (Northouse, 2013). Leadership is the process of persuasion by which an individual (or leadership team) induces a group to pursue objectives held by the leader or shared by the leader and his or her followers (Gardner, 1990). Therefore, leadership represents building vision, values, commitment, the working environment, as well as promoting activity to help accomplish future organizational goals. Leadership means to collaborate with other members in the organization to promote the organization's vision and goals; to increase the organizational outcomes; and to implement positive change within the organization's culture.

**Leadership effectiveness.** Understanding and defining the concept of leadership leads to understanding the meaning of leadership effectiveness and who the effective leader is. Effective leadership is a leadership behavior that produces movement in the long-term best interests of the group (Kotter, 2011). Leadership effectiveness describes the degree to which leaders execute their responsibilities successfully. Effective leaders build ideology and positive relationships within the organization that may influence their practices and quality of leadership (Porter,
In other words, effective leaders implement the organization’s vision and goals, build positive relationships with team members, and collaborate with colleagues to improve outcomes.

The purpose of this section of the literature review is to present theories and qualities of effective leadership, requirements of leadership effectiveness, and how others perceived these leaders’ behaviors. Sergiovanni (2005) believed that leadership helps people understand, manage, and even live with problems. According to Pugh and Hickson (2007), leaders mostly adapt their behavior by taking into consideration of other people in the organization and how individuals perceive their leadership behavior.

The review of literature identified several factors and characteristics that influence leadership effectiveness in educational organization settings. It is important to understand that leadership in educational institutions is similar to leadership in any other institutions (Marzano, Waters & McNulty, 2005). Leadership is the important element in the organization’s success. In the education context, educational leaders consider the key factor in any organizational accomplishment and success. Great educational leaders are those who demonstrate effectively (Helms, 2012).

Bryman (2017) reviewed the literature concerned with leadership effectiveness in higher education at the departmental level. The literature highlighted the publications leadership effectiveness in higher education in UK, USA and Australia. The result of his literature review identified 13 forms of leader behaviors that are associated with departmental effectiveness. Have a clear sense of direction and strategic vision; communicate well with others and encourage open communication; be trustworthy and create a positive atmosphere; and act as a role model and have credibility are the most aspects of leader behavior were identified in the leadership literature associated with leaders’ effectiveness.
Spears (2010) examined a set of critical important characteristics of the effective servant leader. Effective servant leaders seek to involve their individuals in decision making and enhance the growth of their workers while improving the quality of their organizations. Thus, ethical and caring behaviors are fundamental for leaders who adapt servant leadership style. Servant leadership focuses on the power of communication and the value of developing great relationship with others. Therefore, listening, empathy, healing, awareness, persuasion, conceptualization, foresight, stewardship, commitment to the growth of people, and building community are substantial characteristics for servant effective leadership.

A recent surveyed study examined leadership effectiveness behavior based on the perception of leaders and their followers. Kouzes and Posner (2010) asked participants to select the important seven characteristics out of 20 that they admired most in leaders. Over 60% of the responses were reported that honest, forward-looking, inspiring, and competent were the most important characteristics for effective leaders (Kouzes & Posner, 2010).

From the observer viewpoint, Leech and Fulton (2002) surveyed 646 teachers from 26 secondary schools in a large urban school district. Participants were asked to complete the Kouzes and Posner LPI in order to identify their perceptions of their principals’ leadership practices. Teachers were asked to measure the five important features for effective leaders, which were: model the way, inspire a shared vision, challenge the process, enable others to act, and encourage the heart. The study’s result showed that enabling others to act and encouraging the heart were the two most common leadership behaviors among the five.

The current study will focus on the theoretical aspects of effective leadership from the perspective of both male and female higher educational leaders. The factors of effective leaders in this study will be limited to Kouzes and Posner’s (2002) five practices of effective leadership,
which are: (a) model the way, (b) inspire a shared vision, (c) challenge the process, (d) enable others to act (e) encourage the heart. These five practices of exemplary effective leaders serve as the framework for the Leadership Practices Inventory (LPI) survey. The coming section will highlight in detail these five practices.

*Model the way.* Kouzes and Posner (2010) state that leading by example is one of the fundamental truths about effective leadership. Effective leaders need to be role models when they practice their leadership. Kouzes and Posner (2010) stated that the subordinates expect their leaders to be their role models. Followers anticipate that leaders have to demonstrate their behavior, direct them when they perform wrong, and explain what they expect of them (Kouzes & Posner, 2010; Covey, 2004). In other words, leaders need to establish principles about the manner in which people should be treated and the way goals should be accomplished by setting an example for others to follow. In addition, effective leaders need to build confidence, trust, and integrity in others (Kouzes & Posner, 2010). Leaders need to admit followers’ mistakes; guide them when they are unsure of where to go or how to get there; and create small wins while working on achieving the organization’s large objectives. All these practices give people reasons to trust their leaders and work efficiently to make accomplishments.

Leadership is defined as the process of persuasion by which an individual (or leadership team) induces a group to pursue objectives held by the leader or shared by the leader and his or her followers (Gardner, 1990); meaning an important behavior for an effective leader is to influence others to act on a certain way and inspire them to make confident decisions. Many studies determine that being a role model is important for the educational leaders in order to influence others (Reeves, 2002; Leithwood & Riehl, 2003; Leithwood et al., 2004; and Buhler,
Additionally, credibility and trustworthiness are important functions for effective educational leaders. Kouzes and Posner (2010) reported that trustworthiness is an essential element of credibility. “Trust is the emotional glue which binds followers and leaders together” (Bennis & Nanus, 2003, p. 142). Leaders become role models for their individuals when they are trustworthy (Helms, 2012). As well, organizations with high amounts of trust and good relationships are more likely to succeed and achieve their goals (Kouzes & Posner, 2010).

Finally, determining that the amount of influence leaders had on their followers directly correlated to the level of trust followers had in their leader (Kouzes & Posner, 2010). Once a leader is viewed as a trustworthy person, individuals in the organization will appreciate the aspiration for their leader and accept their positive influence in their lives (Helms, 2012). Leithwood and Riehl (2003) determined that it was hard to identify the necessary leadership traits but they agreed that influencing is one of the important functions for effective leadership.

**Inspire a shared vision.** One of the important characteristics for effective leaders is their ability to make differences and think out of the box. Those leaders have the ability to envision the future of the organization and create a unique image of how their organization will be in the future; they create the organization’s vision. Thus, it is important for effective educational leaders to create an inspiring vision that exhibits the vision, mission, and values of the educational organization. This inspiring vision is necessary to form the direction of the organization as well as encourage people’s actions within the organization (Helms, 2012). The organization’s vision should describe where the organization is now, where it will be in future, and how to get there. Also, the organization’s vision would empower individuals to perform the
best they can and do the great things as they could. Kotter (1996) asserts that an organizational vision helps individuals do what they feel is right; it allows them to get back to their leaders when they are unsure about their decisions as well.

The organization’s vision is not just a set of directions or stating the organization’s goals. However, the vision should explain the organization’s values, proposes, beliefs, goals and what leaders expect from individuals in order to make progress (Helms, 2012). Schlechty (2005) asserts that a clear vision should answer a set of questions which are: who are we as individuals?, what accomplishments will make us most proud?, what do we want to be like five years from now?, what do we propose to accomplish (p. 152). Without answering these questions leaders will not be able to accomplish what they want or achieve their goals.

In addition, creating an organization mission means setting required directions for effective educational leaders to work and develop their educational organization’s outcome (Leithwood & Riehl, 2003). Effective educational leaders should embrace an applicable mission through an innovative action plan. The action plan should help in achieving personal and organizational goals. The action plan will be created as a shard project, implementing the whole teams’ thoughts, ideas, and views. Finally, it is important for leaders and their members to understand the organization’s goals, and be on the same page to better support each other and develop everyone’s input; this will ultimately lead achieving the desired output and implementing the organization’s vision and mission.

**Challenge the process.** The role of the leader in any leadership position is searching for opportunities to make changes; improve the organization outcomes; and look for innovative solutions to solve problems. Throughout these processes, leaders take risks; they may succeed while they implement a change and they may fail. Kouzes and Posner (2002) state that an
effective leader has to take risks; although, risk often means failure. Even when leaders make mistakes, they accept their failure because they believe mistakes and failure are a learning opportunity. Leaders do not learn very much from their achievements; however, they learn from past mistakes and failures that are often made when taking risks (Brubaker & Coble, 2005). Through their studies and research of principals, Kouzes and Posner (2002) agree about the importance of mistakes and failures to become successful and make progress. They assert that people learn if they do things they have never done before; those who only do what they already know will never learn anything new.

Only effective leaders accept challenges and choose to challenge their staff by fostering serious discussions about the organization problems. Kouzes and Posner (2010) believe that challenges help leaders know who they really are as well as who they want to become. Effective leaders inspire others to go in directions they would not otherwise go (Covey, 2004). Effective leaders create a climate where others feel comfortable to question the process, to share their opinion, and to be innovative (Kouzes & Posner, 2002). Effective leaders have courage to encourage others to take risks (Buhler, 2008). They have the ability to lead others to new destinations; a destination they desire. Bennis and Nanus (2003) believe that leaders’ ability to be visionary and capable of pointing to a destination “amid the technologically driven turbulence of the next few decades is likely to become the indispensable litmus test of twenty-first century leadership” (p. 215).

On the other hand, resistance to change occurs if the purpose of change is not clear, if others believe that it is not necessary to make a change, or if others believe that change could make negative effects on themselves or their organizations (Bennis & Nanus, 2003). Therefore, effective leaders should identify the need of the change and highlight the possible outcomes if
change were implemented. Reeves (2002) stated that the effective leader deals with the resistance to change, accepts that not all people will agree with the change, has a plan to deal with resistance and moves on. An effective leader will always explain the rationale of the decision because not every decision a leader makes will be popular or accepted.

**Enable others to act.** Covey (2004) stresses that the actual leadership will take place when a leader brings a sense of confidence and trust within the organization’s culture. It means that a leader has the ability to drive the people to pathfinding, alignment, empowerment, and inspire them to perform the best they can. Effective leaders foster collaboration and build mutual respect within the organization when they have the ability to appreciate other people’s thoughts and ideas; adopt other values, needs, and goals; and develop strong relationships (Kouzes and Pozner, 2002). Thus, effective leadership is determined by the leaders’ abilities to develop great relationships between individuals in the organization; build trust and confidence within people; drive a great level of appreciation within the group; and enable others to get extraordinary things done on a regular basis. Therefore, researchers found that “the key to successful performance is the heart and spirit infused into relationships among people, their efforts to serve all students, and a shared sense of responsibility for learning” (Peterson & Deal, 2002, p. 7). These aspects significantly enhance and improve the effectiveness of any leader.

Furthermore, an effective leader encourages a positive climate and a supportive culture (Bolman & Deal 2013). The organization’s culture should be built upon respect, trust and encouragement. Good leaders believe that the suitable environment to achieve a great accomplishment depends on developing great relationship, respecting and supporting each other; valuing diversity and different perspective; and having open communication (Covey, 2004). Leaders work in creating an environment where individuals are motivated through
 Additionally, leaders fulfill a positive culture that should be built upon positive personnel relations, motivation, and the appreciation of one another. Ultimately, leadership in a culture of change will be judged as effective or ineffective not by “who are you as a leader, but by what leadership a leader produces in others” (Fullan, 2011, p. 137).

Effective leaders need to investigate individuals’ development which leads to the development of the organization. Bolman and Deal (2013) illustrate that individuals are the heart of the organization. Therefore, it is important to embrace the human development theory in order to improve peoples’ performance through mentoring and developmental programs. Moreover, it is important to create a culture built upon respect, trust and encouragement. The organization’s culture affects its individuals. In the main time, the organization as a whole is affected by the interactions of the individuals. Thus, creating an environment where individuals are motivated through rewards/recognition and challenged to participate in the organization’s progress are significant practices of effective leaders.

*Encourage the heart.* When leaders and their staff in an organization collaborate together and do hard works, they definitely will accomplish extraordinary outcomes. In order to keep accomplishment, determination and successfulness alive, leaders need to recognize contributions individuals make; “recognizing, developing and celebrating the distinctive skills of each individual will become critically important to organizational survival” (Bennis & Nanus, 2003, p. 214). Reeves (2002) and Lezotte (2004) agree that personal contact, recognition, and appreciation are important characteristics for effective leaders to increase followers’ commitment and accomplishments.
In every working team, the efforts of members need to be appreciated and the accomplishments of individuals have to be celebrated. Effective leaders share in the rewards of their efforts, so leaders celebrate accomplishments. When accomplishments are recognized and efforts are valued as part of the organization’s culture, the staff will all be more motivated to work hard and support change (Peterson & Deal, 2002). Individual’s appreciation could be achieved through rewards and celebration.

It is obvious that changes require a long time to be achieved. Zec and Shurrab (2014) assert that in most cases projects that aim to bring a huge transformation in any organizational culture takes up to 18 months or even more to be accomplished. Therefore, it is important to create short-term goals and celebrate these wins to continue in the change process. Also, this process highlights the organization’s achievements and motivates the team to keep going on the same path to achieve long term goals. Kotter (2011) enforced the importance of celebration; he stated that without short-term goals that need to be reached and celebrated, the change initiatives will not be achieved.

Effective leaders celebrate small wins when they make any accomplishment and do not postpone celebrations till they achieve the large goals (Reeves, 2002). Leaders believe that rewards are important to drive individuals’ motivations and promote active behaviors (Pink, 2009). An employee’s performance and motivation will be increased if the leader has the ability to pay personal attention to the employees’ achievement and his/her personal progress (McColl-Kennedy & Anderson, 2002). Kouzes and Posner (2002) assert that “most people rate ‘having a caring boss’ even higher than they value money or fringe benefits” (p. 317). Thus, the leader’s attention will reduce the employee’s frustration and increase individual’s enthusiasm, which leads to an increase in the employee’s performance (McColl-Kennedy & Anderson, 2002).
Good leaders communicate with their followers, direct them, encourage them to do the best, and inform them when their performances are not satisfactory. Whitaker (2003) emphasized the importance of developing great relationships within the organization’s people. It is important for effective leaders to develop great relationships, respect, and support for their people; value the diversity and differences between individuals; and have open communication. Hoerr (2009) believed it is necessary for the leaders to provide positive comments to their individuals in order to build a supportive relationship. Also, individuals accept negative feedback from their good leaders when they have great relationships and when they trust their leaders. Leaders influence positive behaviors when they encourage the heart (Kouzes & Posner, 2002) because leaders influence their group members directly and indirectly with their positive affect (Sweeney, 2010).

**Female leadership effectiveness in Saudi Arabian higher education.** As women start to gain greater positions and recognition as professionals in educational organizations, female leadership effectiveness in higher education becomes one of the significant topics discussed worldwide (Porter, 2009; Mathis, 2010; Lewis, 2012, Samier, 2015; S. Hamzah, A. Hamzah, Othman, & Devi, 2016; Abalkhail, 2017). Despite the global progress in female advancement in higher education, women are still underrepresented in Saudi higher education (Jamjoom & Kelly, 2013; Gonaim, 2014; Alomair, 2015). Although women represent more than half of the total enrollment in Saudi higher education institutions, women occupy less than eight percent of Saudi higher education administrative positions (Al-Ahmadi, 2011; Al-Ohali & Al-Mehrej, 2012; Jamjoom & Kelly, 2013; Al Ankari, 2013; Al-Magableh & Otoum, 2014; Alomair, 2015). These studies also illustrate that while the enrollment, retention, and graduation rate of undergraduate and graduate programs are higher among females than males in Saudi higher education institutions, less than 40% of faculty members are women, with the majority holding lower
positions than their male counterparts. Thus, it is significant to understand the current state of female leadership in general to understand the factors that influence the effectiveness of female leadership in Saudi Arabian higher education institutions specifically.

The majority of literature examining female leadership effectiveness has been conducted in western cultures. Few studies looking at Saudi women leaders have been directed from the perspective of Saudi women themselves in a few disciplines (AlMunajjed, 2010; Al Tamimi, 2004; Sadi & Al-Ghazali, 2010; Vidyasagar & Rea, 2004). The remainder of this section is an overview of female leadership effectiveness in Saudi Arabia generally. A small portion of these studies specifically looked at Saudi women leaders in educational institutions.

Saudi studies assert that Saudi women increasingly pursue graduate and postgraduate degrees and succeed in their profession (Hamdan, 2005; Varshney, 2015). However, limited scholars have been found in the content of Saudi higher education highlighting female leadership and the factors that influence the effectiveness of female leaders in leadership positions (Alomair, 2015; Alotaibi, et al 2017; Abalkhail, 2017). These studies focus on leadership characteristics that help female leaders practice their profession efficiently. These studies have illustrated that training, experience, clear vision, skills, and education of female leaders lead to better outcomes and practices (Heredero & Margalina, 2016; Stefani, 2014; Abalkhail & Allana, 2014).

Heredero and Margalina (2016) used a quantitative approach to gain an understanding of factors that promote success for female leaders in Saudi educational institutions. The study conducted semi-structured interviews with 37 female leaders in different educational institutions to investigate their perception on what factors influence successful female leadership in Saudi Arabia’s educational institutions. The study found that successful female leaders achieve
organizational goals more efficiently and effectively. Also, it found that they have a positive impact on the success of organizations. According to this study, the factors that promote the success of female leaders are education, skills, experience, society, culture and knowledge.

Stefani (2014) illustrated the need for improving leadership effectiveness for all female leaders in public universities in Saudi Arabia. According to Stefani (2014) improving the leadership effectiveness for Saudi female leaders means developing their leadership capacity through knowledge and training. Stefani (2014) highlighted the outcome of a developmental training program for female leaders to enhance their leadership effectiveness. The program lasted for six months in one of the largest Saudi universities with approximately 40,000 female students, 12,000 female employees, and over 20 colleges. During the training period, Stefani (2014) adopted an effective approach for leadership development. Kouzes and Posner’s (2012) theoretical framework of the transformational leadership model was applied; the model allowed participants to develop and practice their leadership capacity through inspiring leadership strategies such as mentoring and coaching, empowerment, establishing trust, and transparency.

Furthermore, Stefani (2014) addressed the challenges female leaders face in Saudi universities. The challenges were: (1) leaders’ misunderstandings of the core quality of effective leaders, (2) the complex hierarchal structure of Saudi universities that maintains bureaucracy and centralization and prevents flexibility in leaders’ roles, and (3) an unclear vision and poorly defined strategic plan. The program results emphasized that collaboration; inspiration; clear vision; and flexibility become essential factors in leadership effectiveness and leadership development. Stefani (2014) found that sustaining leadership effectiveness requires female leaders to lead by example, implement a value-driven leadership approach, engage with others, inspire, encourage, and recognize performances. This project illustrated that leader’s
qualifications were developed by training, experience, and practicing; these leadership capacities improve the effectiveness of female leadership in Saudi higher educational institutions.

Conceptual Framework

The recent conceptual framework of the study evolved from the contributions of earlier research that investigated factors which may impact the effectiveness of female leadership in higher education settings. Barbuto, Fritz, Matkin, and Marx (2007) included the constructs of gender, education, and age into their diffusion model about leadership behavior. Barbuto et al. (2007) found gender as an independent variable that would not affect the transactional and the transformational behavior of leaders; however, there were differences in the perception of male and female leaders regarding the effectiveness of other gender leadership behaviors. As well, the study illustrated that there was an interaction between gender and leaders’ level of education; this interaction impacts leaders’ behavior of leadership. Although the study did not illustrate any impact of a leader’s life experience on their leadership behavior, researchers use the life experience variable to help explain the interaction effects of education and gender, and of education and age.

Of the studies that perceived the effectiveness of male and female leaders, male leaders were more likely to be effective in their leadership role than their female colleagues. Male leaders perform better on agentic leader prototype dimensions such as strength, masculinity, tyranny; however, there were no differences in the expectation of male and female leaders for being intelligent or charismatic (Johnson, Murphy, Zewdie, & Reichard, 2008). Al-Shuaiby, (2009) asserted that significant differences were found between male and female academic leaders in their perceptions of the directing approaches of leadership effectiveness and the supporting approaches to leadership effectiveness. Male leaders were found more effective in
leadership directing approaches and less effective in leadership supporting approaches as compared to those of their female counterparts. However, a study examining the effects of leader’s gender on the perceived effectiveness found that female leaders were perceived as being more effective than male leaders when rated by their organizations’ members. This higher perceived effectiveness evaluation was not only seen at the overall level of leadership effectiveness but within each of the five leadership practices as well (model, inspire, challenge, enable, and encourage) (Wolfe, 2017).

Several studies investigated the factors that influence leadership effectiveness using gender as a moderator (Avolio, Mhatre, Norman, & Lester, 2009; Wang, Chiang, Tsai, Lin, & Cheng, 2013; Paustian-Underdahl, Walker & Woehr, 2014). It is found that using gender interventions as a moderator variable on leadership behaviors, different results across male and female leaders occurred. Yet, when each gender rated themselves, there was no significant effect of gender on leadership effectiveness whereas women rated themselves more effective than men.

The current study examined how leader’s gender and years of experience working with a female leader impacts the gender perception of female leadership effectiveness in Saudi higher education institutions, the conceptual framework of this study will represent as follow:

*Figure 2.1. Conceptual Framework of the Study*
Summary of the Review of Literature

This literature review analyzed the factors influencing female leadership in Saudi Arabian higher education institutions. It highlighted the demonstrated influence of gender differences, leadership styles, and leadership qualification on the effectiveness of female leadership in Saudi society. It also represented an overview of women’s leadership challenges, obstacles, and their current level in Saudi higher education institutions.
Chapter 3: Methods

Chapter Overview

In this chapter I present the method and procedures undertaken to conduct the current study. This study identified the perception of Saudi Arabian higher educational leaders toward female leadership effectiveness in Saudi public universities located in Riyadh, Saudi Arabia. The study investigated the path relationships between the two independent variables (leader’s gender and experience working with a female leader) and one dependent variable (perceived female leadership effectiveness).

This chapter begins with a brief restating of the study purpose and the research questions. It also provides background and justification of the research design used for studying the impact of leader’s gender and experience working with a female leader on perceived Saudi female leadership effectiveness. Data procedures including population, sample and participants selection are presented along with the data collection instrument and evidence of validity and reliability. Finally, data analysis procedures are detailed followed by presentation of ethical considerations and measures taken to protect participants’ rights.

Research Questions and Hypothesis

The purpose of this study was to examine how gender and years of working with a female leader influences the gendered perception of female leadership effectiveness. This study specifically sought to understand the difference in the perception of male and female leaders in Saudi public universities regarding female leadership effectiveness. The study also compared the perception of higher educational leaders toward female leadership effectiveness based on a
leader’s gender and leaders’ experience working with female leaders. The study highlighted the relationship between leader’s gender, experience working with a female leader, and perceived female leadership effectiveness. Understanding the relationship between variables helps in identifying the effect of a leader’s gender and experiences working with a female leader on perceived female leadership effectiveness. Leader’s perception of female leadership effectiveness was measured by the Kouzes and Posner (2003) Leadership Practices Inventory (LPI).

The following research questions and hypotheses guided the study investigation:

Q1: Are there differences in the perception of male and female leaders regarding female leadership effectiveness in Saudi Arabian higher education institutions?

Q2: Does a leader’s gender and experience working with a female leader impact the perceived female leadership effectiveness in Saudi Arabian higher education institutions?

The following four sub-questions were formed from the second research question:

- Does a leader’s gender and experience working with a female leader have a direct effect on perceived female leadership effectiveness?
- Does a leader’s gender mediate the relationship between the leader’s experience working with a female leader and perceived female leadership effectiveness?
- Does a leader’s gender moderate the relationship between the leader’s experience working with a female leader and perceived female leadership effectiveness?
- Does a leader’s gender simultaneously mediate and moderate the relationship between the leader’s experience working with a female leader and perceived female leadership effectiveness?

The null hypothesis for the first question was:
H0: there is no difference in the perception of male and female leaders regarding female leadership effectiveness in Saudi Arabian higher education institutions.

To answer the other research questions, the predictor variables provided four hypothesized models. In the first model, the simple direct model, it was hypothesized that there would be relationships between a leader’s gender, experience working with a female leader, and perceived female leadership effectiveness. In other words, a leader’s gender and years of working with a female leader will predict the perception of female leadership effectiveness.

In the second model, the mediation model, it was hypothesized that a leader’s gender is a mediator variable between experience working with a female leader and perceived female leadership effectiveness. This means there is an indirect effect of years of working with a female leader on perceived female leadership effectiveness through a leader’s gender.

In the third model, the moderation model, it was hypothesized that a leader’s gender is a moderator variable between experience working with a female leader and perceived female leadership effectiveness. This means that the interaction between years of working with a female leader and the leader’s gender will predict the perceived female leadership effectiveness.

Finally, in the fourth model, the mediation moderation model, it was hypothesized that a leader’s gender and experience working with a female leader will predict the perception of female leadership effectiveness. A leader’s gender and years of working with a female leader will have a direct effect on perceived female leadership effectiveness, the dependent variable. Also, a leader’s gender in this model becomes a mediator variable in one path and a moderator variable in another path.
**Research Approach and Design**

The current study was a non-experimental, correlational, quantitative approach to “investigate and describe the problem statement and examine the relationship among the study variables” (Muijs, 2011, p.1). Appropriate for this approach, data was collected by a questionnaire instrument to understand the research problem (Yegidis, Weinbach, & Myers, 2011) and investigate the relationships between variables occurring in the setting (Oppenheim, 1992).

A quantitative approach was selected to investigate the research problem as the researcher developed a hypothesis about the relationship of two or more variables (Creswell, 2014). Quantitative researchers emphasize information that is represented by numbers, scores of measuring attributes, or comparing the mean between groups to get a wide picture of a study problem. A quantitative approach is appropriate since the goal of the current study was investigating whether gender and years of working with a female leader influences the perception of female leadership effectiveness.

This study incorporated a correlational data analysis to determine the relationships between the dependent and independent variables. In quantitative studies, data is collected by using the survey method to measure study variables. According to Tourangeau, Rips and Rasinski (2000), surveys and questionnaires are one of the most common methods used to collect data. The survey method gathers quantitative data on a particular subject and obtains information needed directly from individuals (Fink & Kosecoff, 1998; Dillman, 2000). Further, a survey method provides a variety of information from one or more groups of people (Leedy & Ormrod, 2005; McMillan & Schumacher, 2006). Survey designs ask participants questions to provide their attitudes, opinions, values and beliefs on the subject matter in a more concealed manner.
(Tourangeau et al, 2000). In the current study, the Leadership Practices Inventory questionnaire was used to examine the relationship between gender and years of working with a female leader (the independent variables), and perceived female leadership effectiveness (the dependent variable).

**Population and Sample**

The study instrument was administered at four coeducational public universities and one public single gender university located in Riyadh, the capital of Saudi Arabia. Coeducational (i.e., mixed gender education) describes the system of education in which both male and female students attend the same institution (McKenzie, Prochaska, Sallis & Lamaster, 2004). In Saudi Arabia, although both genders attend the same institutions, male and female students are segregated on campuses and in classes. The four coeducational universities that participated in this study were: (1) King Saud University (KSU), (2) Al-Imam Mohammed Ibn Saud Islamic University (IMBSU), (3) King Saud Abdulaziz University for Health Sciences (KSAU-HS), and (4) Saudi Electronic University (SEU). The only single gender university included in the study was Princess Nourah Bint Abdulrahman University (PNU), the largest public female university in the world, with over 60,000 female students in 34 colleges (Ministry of Education, 2016).

The targeted population for the current study was male and female administrators who hold a leadership position in the selected public universities. Participants were all administrators of these universities who lead or manage a college, department, or any academic unit. Thus, administrators in the position of college dean, vice dean, department chair, vice chair, academic unit director, and office director were invited to participate in the study. Participating leaders were ranked as lecturer, assistant professor, associate professor, or full professor. The researcher opted to exclude presidents and vice presidents of the selected universities from participating in
the current study for the following reasons: (1) presidents and vice presidents of the selected universities represent 1.8% of the total study sample size since each selected university has one president and one vice president, with total of 10 presidents and vice presidents; it was therefore determined that inclusion of this small group would not affect the outcome of the study, (2) all presidents and vice presidents of the selected universities are male except the president and vice president of PNU, who are female; therefore, inclusion of this group could compromise the anonymity of the respondents. Based on the most current statistics provided by the Saudi Ministry of Education (2016), there are approximately 554 male and female administrators who meet the participant sample criteria.

Participants

Cooper and Schindler (2006) note that the proportional selected participants need to represent the overall study population. In this study, the overall population was all male and female administrators who hold a leadership position in the selected public universities, in Riyadh, Saudi Arabia with approximately 554 administrators (Ministry of Education, 2016). The total population of the study breaks down to 67 deans, 154 vice deans, 235 department chairs and 97 vice chairs (Ministry of Education, 2016). Selected leaders were asked to complete the Leadership Practices Inventory Questionnaire.

A sample of male and female administrators at the participating universities who hold leadership positions were recruited for participation via emails sent by the Deanship of Scientific Research Office (DSRO) from each participating university. The target response rate for this study was 100 useable returned questionnaires with representation from both male and female administrators in a professional leadership position. This target was based on a sample required for the statistical techniques used with data analysis (i.e., t-test and path analysis). A total of 277
submissions were received. Thirty two participants declined to participate in the study by clicking no after reading the consent form whereas 114 participants agreed to participate in the study by clicking yes in the consent form. Although over 100 participants chose to participate in the study, 101 participants did not answer any of the survey questions, and 13 participants only answered the first set of the survey questions. Thus, a total of 146 submissions were removed from the data analysis due to missing data. The remaining 131 submissions were included in the data analysis, which met the target participation rate for the study.

**Data Collection Procedures**

The study protocol was reviewed and determined exempt by the University of North Florida IRB. Approval letters were obtained from the selected universities in order to complete the data collection procedure. The Deanship of Scientific Research Office (DSRO) of each participating university was contacted prior to the start of the data collection period and asked to provide an approval letter to conduct the study in the university settings. By obtaining these approval letters, DSRO confirmed their willingness and ability to collaborate with the researcher in the data collection procedure and agreed to distribute the recruitment email to all male and female administrators who hold a leadership position in the selected universities. After approval letters were received, a recruitment email was sent to the DSRO for distribution to potential participants. The recruitment email included an introduction that described the purpose of the study; objectives and goals associated with the data collection; instructions for completing the survey; the confidentiality policy; estimated survey completion time; response deadline; the significance of participation; the researcher contact information; and a link to the online questionnaire. A one-time reminder email was sent to the DSRO for distribution to administrators with leadership positions three weeks after the initial recruitment email.
Participants were asked to complete the questionnaire within three weeks of receiving the initial and follow up emails; however, submissions were accepted until the target participation rate was complete. Participants completed the questionnaire online; thus, participants remained anonymous throughout the data collection process.

**Instrument**

The questionnaire used to measure the perception of male and female leaders toward female leadership effectiveness in Saudi Arabian higher education institutions was modified from the existing Leadership Practices Inventory observer assessment (Kouzes & Posner, 2003). The LPI assessment modification included reworded statements to better align with the study’s purpose. For instance, “Female leaders actively listen to diverse points of view”. Also, questions to collect participants’ demographic information were added, such as “What is your gender?” and “How long have you been working with a female leader?.” The LPI observer contains a total of 30 items that provide feedback on an individual’s leadership behavior and effectiveness. The demographic information contains seven questions that allowed the researcher to compare differences among participants and describe the study sample. The selected questionnaire met two key criteria: (1) instrument items met reasonable validity and reliability standards, and (2) the instrument items are short and are practical to administer in terms of the amount of time required to complete the questionnaire.

The modified questionnaire used in this study had a total of 37 items; participants completed the questionnaire in an average of twenty minutes. Although the reliability and validity of the LPI scale have been established in a previous study (Kouzes & Posner, 2003), the reliability and validity of the LPI scale using the current study’s sample was also tested. Testing the validity and reliability of the study sample was particularly important because the current
study was conducted in the Saudi Arabian higher education context. The validity and reliability of the modified scales were evaluated by performing factor analysis and calculating Cronbach alpha values as will be explained later in detail.

**Specification of variables.** The independent variables (i.e. gender and years of working with a female leader) were measured in the demographic section of the survey. The dependent variable represented a leader’s perception of female leadership effectiveness in Saudi Arabian higher education institutions, measured by the LPI scale. The LPI is an assessment which measures leadership competencies by highlighting five behaviors of leadership effectiveness; these practices are model the way, inspire a shared vision, challenge the process, enable others to act, and encourage the heart (Kouzes & Posner, 2003).

**Variable 1: Gender.** This variable described participants’ gender whether they were a male or female leader; the first independent variable. Participants were 67 (51%) female and male 64 (49%) with approximately an equal distribution between the sample size (Table 3.1).

**Variable 2: Years of working with a female leader.** Years of working with a female leader described the second independent variable. Participants were asked to indicate if they ever worked with a female leader in the higher educational context. Participants who worked with a female leader were asked to provide their total years of working with a female leader. A 6-point ordinal scale was used for the analysis. The scale ranked the participant’s level of interaction with a female leader, beginning with (1) never worked with a female leader, (2) less than 1 year working with a female leader, (3) 1 – 4 years working with a female leader, (4) 5 – 10 years working with a female leader, (5) 11 – 15 years working with a female leader, and (6) more than 15 years working with a female leader. The distribution of participants across years of working
with a female leader was ranged between 5 (4%) and 53 (40%) participants at each level (Table 3.1).

Table 3.1.

Demographic Information

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>64</td>
<td>48.9%</td>
<td>48.9%</td>
</tr>
<tr>
<td>Female</td>
<td>67</td>
<td>51.1%</td>
<td>100%</td>
</tr>
<tr>
<td>Years of working with a female leader</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>never worked with a female leader</td>
<td>27</td>
<td>20.6%</td>
<td>20.6%</td>
</tr>
<tr>
<td>Less than 1 year</td>
<td>15</td>
<td>11.5%</td>
<td>32.1%</td>
</tr>
<tr>
<td>1 – 4 years</td>
<td>53</td>
<td>40.5%</td>
<td>72.6%</td>
</tr>
<tr>
<td>5 – 10 years</td>
<td>19</td>
<td>14.5%</td>
<td>87.1%</td>
</tr>
<tr>
<td>11 – 15 years</td>
<td>5</td>
<td>3.8%</td>
<td>90.8%</td>
</tr>
<tr>
<td>More than 15 years</td>
<td>12</td>
<td>9.2%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Variable 3: Perceived female leadership effectiveness. This variable described leaders’ perceptions of female leadership effectiveness. Participants were asked to indicate their level of agreement with the five behaviors of leadership effectiveness presented in the LPI observer scale. The modified LPI scale uses the seven-point Likert scale: (1) Strongly disagree; (2) Disagree; (3) Somewhat disagree; (4) Neither agrees nor disagrees; (5) Somewhat agree; (6) Agree; (7) Strongly agree. Although the LPI uses a scale from 1-10 which gives the participants a wider range of options to choose from, this broader range could confuse participants or delay responses. Therefore, it was decided to limit the range of options to 1-7.

The LPI observer scale was used to determine the perceived female leadership effectiveness in Saudi Arabian higher education institutions. The LPI observer scale contains 30
statements of leadership behavior representing five main practices for effective leaders: (1) model the way, (2) inspire a shared vision, (3) challenge the process, (4) enable others to act, and (5) encourage the heart (Kouzes & Posner, 2003, p. 10). The LPI statements were modified so the statement would relate to female leadership effectiveness in Saudi Arabian higher education institutions. The phrase “Female leaders” was used in the beginning of each item; for instance, “Female leaders praise people for a job well done.”

Validation studies completed by Kouzes and Posner (2003) and other researchers over a 15-year period confirmed strong reliability and validity of the LPI (Helms, 2012). Although reliability and validity of the LPI scale have been established in previous studies (Kouzes & Posner, 2003; Helms, 2012; Posner, 2016), reliability and validity of the LPI scale using the current study’s sample were calculated as well. The value of the Cronbach alpha coefficients for the total scale items was high at .96. Additionally, Cronbach alpha coefficients for the set of items measuring each of the five practices of leadership effectiveness reported as (1) model the way: 0.91; (2) inspire a shared vision: 0.92; (3) challenge the process: 0.91; (4) enable others to act: 0.92; and (5) encourage the heart: 0.92. A Cronbach alpha coefficient of .70 or higher is considered acceptable in most social science research settings (Hancock & Mueller, 2001).

The validity of the LPI instrument was evaluated, using the extremist comparison method and the item-total correlations approach (Al Ghamdi, 2016). The extremist comparison item-total approach indicated that the current instrument had good discriminate validity, while the correlation approach indicated good convergent validity since most of the items correlations were above 0.53.

A total of 30 statements were included in the perceived female leadership effectiveness scale. The factor loadings for all 30 items ranged between .53 and .84 which explained 72% of
the study variance (Table 3.2). The factor loading of the scale items showed strong association to the underlying latent variable (perceived female leadership effectiveness) since all the items factor loading were greater than .50 (Hancock & Mueller, 2010). These values indicated acceptable construct reliability. Construct reliability of the perceived female leadership effectiveness was supported with a high Cronbach alpha coefficients at .96. Based on the scale’s factor loading and the Cronbach alpha coefficients values, the current study scale was validated.

Table 3.2.

Perceived Female Leadership Effectiveness Scale

<table>
<thead>
<tr>
<th>Scale Items</th>
<th>Factor Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>PFLE1 Female leaders set a personal example of what is expected</td>
<td>.71</td>
</tr>
<tr>
<td>PELE2 Female leaders talk about future trends that will influence how work gets done</td>
<td>.72</td>
</tr>
<tr>
<td>PELE3 Female leaders seek out challenging opportunities that test the skills and abilities</td>
<td>.62</td>
</tr>
<tr>
<td>PELE4 Female leaders develop cooperative relationships among the people they work with</td>
<td>.61</td>
</tr>
<tr>
<td>PELE5 Female leaders praise people for a job well done</td>
<td>.72</td>
</tr>
<tr>
<td>PELE6 Female leaders spend time and energy making certain that people they work with adhere to the principles and standards they have to agree on.</td>
<td>.74</td>
</tr>
<tr>
<td>PELE7 Female leaders describe a compelling image of what their future could be like</td>
<td>.76</td>
</tr>
<tr>
<td>PELE8 Female leaders challenge people to try out new and innovative ways to do their work</td>
<td>.76</td>
</tr>
<tr>
<td>PELE9 Female leaders actively listen to diverse points of view</td>
<td>.79</td>
</tr>
<tr>
<td>PELE10 Female leaders make it a point to let people know about their confidence in others abilities</td>
<td>.78</td>
</tr>
<tr>
<td>PELE11 Female leaders follow through on the promises and commitments that</td>
<td>.73</td>
</tr>
</tbody>
</table>
they make

PELE12  Female leaders appeal to others to share an exciting dream of the future .61

PELE13  Female leaders search outside the formal boundaries of their organization for innovative ways to improve what they do .73

PELE14  Female leaders treat others with dignity and respect .71

PELE15  Female leaders make sure that people are creatively rewarded for their contributions to the success of their projects .74

PELE16  Female leaders ask for feedback on how their actions affect other people’s performance .72

PELE17  Female leaders show others how their long-term interests can be realized by enlisting in a common vision .76

PELE18  Female leaders ask “what can we learn?” when things don’t go as expected .75

PELE19  Female leaders support the decisions that people make on their own .67

PELE20  Female leaders publicly recognize people who exemplify commitment to shared values .68

PELE21  Female leaders build consensus around a common set of values for running out organizations .76

PELE22  Female leaders paint the “big picture” of what they aspire to accomplish .74

PELE23  Female leaders make certain that they set achievable goals, make concrete plans, and establish measurable milestones for the projects and programs they work on .75

PELE24  Female leaders give people a great deal of freedom and choice in deciding how to do their work .73

PELE25  Female leaders find ways to celebrate accomplishments .55

PELE26  Female leaders are clear about their philosophy of leadership .69

PELE27  Female leaders speak with genuine conviction about the higher meaning and purpose of their work .76

PELE28  Female leaders experiment and take risks, even when there are chances of failure .53
Female leaders ensure that people grow in their jobs by learning new skills and developing themselves. PELE29

Female leaders give the members of the team lots of appreciation and support for their contributions. PELE30

Note. PFLE = Perceived female leadership effectiveness

Data Analysis

After collecting data from male and female administrators in the participating universities in Riyadh, a variety of analyses were conducted to examine the study variables. The data analyses included descriptive statistics of the data, reliability estimations, factor analysis, t-test analysis and path analysis. The details of the analyses and the statistical techniques utilized in analyzing and reporting the data will be described in the following sections. The statistical software program (SPSS) was used for descriptive statistics, reliability analysis, and t-test analysis. Structural equation programming (EQS) was used to conduct path analyses.

Descriptive statistics. Descriptive statistics were conducted to analyze the participants’ characteristics. Descriptive statistics included the number of participants who completed the questionnaire, means, standard deviations, skewness, and kurtosis of all variables.

Reliability analysis. The reliability estimation was calculated to determine the Cronbach’s alpha for the dependent factor – perceived female leadership effectiveness. According to Pedhazur and Schmelkin (1991), reliability was used to check the homogeneity of items that measure the study variables.

Factor analysis. Factor analysis was calculated to test the validity of all the scale items. Although the LPI items have already been tested for validity, it was decided to test the validity of the LPI items utilizing the current study sample since the current study will use only the observer phase of the LPI. According to Pedhazur and Schmelkin (1991), the factor analysis is useful tool to study the internal structure of a set of items. Factor analysis is “a family of analytical
techniques designed to identify factors, or dimensions, that underlie the relations among a set of observed variables that are the indicators (measures, items) presumed to reflect the construct (i.e., the factor)” (Pedhazur & Schmelkin, 1991, p. 66).

Furthermore, factor analysis according Pedhazur and Schmelkin (1991) is a data reduction technique that eliminates redundancy from a set of correlated variables. Thus, factor analysis helps in identifying underlying constructs as well as developing a small set of factors from a big group of related factors. Also, factor analysis helps in determining which of the items meaningfully correlate with the examined factor. The higher the factor loading between the item and the factor, the greater the relationship will be. For the purposes of this study, it was decided to consider only factor loadings > .70. A loading of .70 and above is considered meaningful (Pedhazur & Schmelkin, 1991).

**T. test analysis.** A T. test was conducted in this study to determine whether there were differences in the perception of male and female leaders regarding female leadership effectiveness in Saudi Arabian higher education institutions. This test compared the mean of male and female leaders who perceived female leadership effectiveness to reject the null hypothesis (there are no differences in the perception of male and female leaders toward female leadership effectiveness in Saudi Arabian higher education).

**Path analysis.** Path analysis was utilized in this study to examine the effect of the independent variables on the dependent variable in four different hypothesized models. Path analysis was used to evaluate causal models by examining the relationships between a dependent variable and two or more independent variables. In this study, path analysis was conducted using the software package EQS in order to estimate path coefficients and the model fit of each hypothesized model. The estimation of magnitude and significance of connections between
variables in the hypothesized models was also determined. Path analysis was conducted autonomously to test each of the hypothesized models and compare these models to identify the best model fit of the data.

**Simple direct model.** The first path analysis evaluated the first hypothesized model, which indicated that a leader’s gender and experience working with a female leader (the independent variables) had a direct effect on perceived female leadership effectiveness (figure 3.1).

![Figure 3.1. Path of Simple Direct Model](image)

**Mediation model.** The second path analysis evaluated the second hypothesized model, which indicated that a leader’s gender was a mediator variable between experience working with a female leader and perceived female leadership effectiveness (figure 3.2). This means that through gender, there was an indirect effect of experience working with a female leader on perceived female leadership effectiveness.
Moderation model. The third path analysis evaluated the third hypothesized model, which indicated that a leader’s gender was a moderator variable between experience working with a female leader and perceived female leadership effectiveness (figure 3.3). This means there was an interaction between experience working with a female leader and a leader’s gender, and this interaction predicted perceived female leadership effectiveness.
Mediation moderation model. The last path analysis evaluated the fourth hypothesized model, which indicated that a leader’s gender and experience working with a female leader had a direct effect on perceived female leadership effectiveness—path 1 and path 2, respectively. Furthermore, it hypothesized that a leader’s gender was a mediator variable in one path (path 3) and a moderator variable in another path (path 4) (figure 3.4).

![Path of Mediation Moderation Model](image)

Figure 3.4. Path of Mediation Moderation Model

**Ethical Considerations**

Important ethical guidelines followed while conducting the current study:

1- The identity of the participants was not revealed. There was not a written mention in the questionnaire of participants’ names or any other indicators that could identify the participants. Only general demographic information was collected.

2- No harm was done to participants physically, emotionally, or in any other way, shape or form. The collected data was used for study purposes only.

3- Institutional Review Board (IRB) approval was obtained before collecting data.
Chapter Summary

In Chapter 3, the population of the study and the details of the participants were discussed. The procedure to collect data and the instruments utilized for data collection were explained. Further, a detailed description of the different analyses conducted in the study was provided.
Chapter 4: Results

The purpose of this study was to examine how gender and years of working with a female leader influence the gendered perception of female leadership effectiveness in Saudi Arabian higher education institutions. The results of this study demonstrated the direct and indirect effects of gender and years of experience working with a female leader toward the perception of female leadership effectiveness in Saudi public universities located in Riyadh, Saudi Arabia. This chapter provided the results of the t-test analysis to determine the differences in the perception of male and female leaders regarding female leadership effectiveness in Saudi Arabian higher education institutions as well as the final path analysis to select the best fit of the hypothesized models.

T. test Analysis

To answer the first research question, whether there are differences in the perception of male and female leaders regarding female leadership effectiveness in Saudi Arabian higher education institutions, an independent sample t-test was conducted to assess if differences exist on perceived female leadership effectiveness by gender. The assumptions of normality and homogeneity of variance were checked. Data was normally distributed. Levene’s Test for the Equality of Error Variances at \( p = .34 \), which was > .05, asserted that the homogeneity of variance in both groups (male and female leaders) had equal error variances. The p-value equaled 0.15; therefore, the difference between the means of male and female leaders was not a significant statistical difference from zero at the 5% level of significance. Based on the findings, the null hypothesis, there is no difference in the perception of male and female leaders regarding
perceived female leadership effectiveness in Saudi Arabian higher education (H0), was accepted

\[ p = .15 > .05 \] (Table 4.3).

Table 4.1.

T. test Summary

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std. deviation</th>
<th>F</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>64</td>
<td></td>
<td>-.013</td>
<td>.88</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>67</td>
<td></td>
<td>.12</td>
<td>1.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Levene’s test</td>
<td></td>
<td></td>
<td>.90</td>
<td></td>
<td>.34</td>
<td></td>
</tr>
<tr>
<td>T-test</td>
<td></td>
<td></td>
<td>-1.4</td>
<td></td>
<td>.15</td>
<td></td>
</tr>
</tbody>
</table>

Path Analysis

In addition to the descriptive statistics- explained in chapter three - and the T. test analysis of variables, a path analysis was performed to test if the hypothesized models explained the effect of gender and participants’ experience working with a female leader on the perception of female leadership effectiveness in Saudi Arabian higher education institutions. Path analysis was used to analyze the data for hypothesized models fit. A computer program that analyzes linear structural equation systems, (EQS; Bentler, 1995) was used to conduct the path analysis. The Bentler–Bonett Normed Fit Index (NFI), the Root Mean Square Error of Approximation (RMSEA), and the model Akaike Information Criterion (AIC) were utilized to evaluate the goodness of model fit. It has been argued when comparing models and selecting the best model fit to take into account the statistical goodness of fit, which presented by NFI and RMSEA as well as the number of parameters that have to be estimated to achieve that degree of fit (the AIC value) (Bentler, 1995). These indices were suggested by Bentler (1995) to be appropriate indicators to achieve the best degree of model fit for hypothesized models.
Descriptive Statistics of the Path Analysis

The review of the path analysis descriptive statistics showed the overall means and the standard deviations of the study variables, the dependent variable (perceived female leadership effectiveness) and the predictor variables (gender and years of working with a female leader). Mean and standard deviation for the perceived female leadership effectiveness were -0.00 and 1.00, respectively. For gender, the mean was 1.51 with a standard deviation of .50. The mean of experience working with a female leader was 2.34 with a standard deviation of 1.16. The interaction between gender and experience working with a female leader had a mean of 3.50 and standard deviation of 2.04 (Table 4.1).

Table 4.2.

<table>
<thead>
<tr>
<th>Variable</th>
<th>GEN</th>
<th>EXP</th>
<th>PFLE</th>
<th>GEN*EXP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>1.51</td>
<td>2.34</td>
<td>-0.00</td>
<td>3.50</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>0.50</td>
<td>1.16</td>
<td>1.00</td>
<td>2.04</td>
</tr>
<tr>
<td>Skewness</td>
<td>-0.05</td>
<td>0.69</td>
<td>-0.90</td>
<td>1.06</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>-1.99</td>
<td>-0.10</td>
<td>0.15</td>
<td>1.14</td>
</tr>
</tbody>
</table>

Note. GEN = a leader’s gender; EXP= years of working with a female leader; PFLE= perceived female leadership effectiveness; and GEN*EXP= the interaction effect between leader’s gender and experience working with a female leader

Correlation analysis results were presented in Table 4.3 for leader’s gender, experience working with a female leader, perceived female leadership effectiveness, and the interaction between gender and experience working with a female leader. Gender was found to be positively related to perceived female leadership effectiveness and negatively associated with experience working with a female leader. Leader’s experience working with a female leader was found to be positively related to gender and perceived female leadership effectiveness.
Table 4.3.

Correlation Matrix for the Study Variables

<table>
<thead>
<tr>
<th></th>
<th>GEN</th>
<th>EXP</th>
<th>PFLE</th>
<th>GEN*EXP</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEN</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EXP</td>
<td>0.08</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PFLE</td>
<td>0.20</td>
<td>0.12</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>GEN*EXP</td>
<td>0.00</td>
<td>0.00</td>
<td>-0.14</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Note. GEN = a leader’s gender; EXP= a leader year of experience; PFLE= perceived female leadership effectiveness; and GEN*EXP= the interaction effect between leader’s gender and experience working with a female leader.

Analysis of simple direct model. The result of simple direct model indicated that the model was under identified – meaning that the independence chi-square is less than the degrees of freedom. Thus, the fit indices could not be calculated except for the Normed Fit Index (NFI) which was .72 - less than the minimum threshold of .90 for a well-fitted model. The RMSEA of 0.00 considered the estimated error in the population and how well the model represented the general population. The RMSEA value illustrated that the model holds an acceptable approximation of errors in the population. The R-squared value for the associated standardized solutions was .017 which indicated a large degree of variance and covariance in the endogenous variables left unexplained by the model, which likely contributed to the poor fit. The fit indices indicated that the data was not a good fit to the hypothesized simple direct model (Raykov & Marcoulides, 2006). The model AIC was -1.16; the model that produces the minimum AIC value could be considered as the most useful model. The AIC of this model will be compared to other hypothesized coming models. The path coefficients showed that the path between a leader’s experience and perceived female leadership effectiveness was not significant at .02, nor for a leader’s gender at .13 (Figure 4.1).
Overall, the fit indices indicated a weak hypothesized simple direct model since the hypothesized model did not represent the data well. In addition, the hypothesized simple direct model indicated that perceived female leadership effectiveness cannot be predicted by a leader’s gender and experience working with a female leader since no significant paths were found between these variables.

**Analysis of mediation model.** The result of mediation model indicated that the model was under identified – meaning that the independence chi-square is less than the degrees of freedom. Thus, the fit indices could not be calculated except for the NFI which was .98 – which exceeded the minimum threshold of .90 for a well-fitted model. The RMSEA of 0.00 considered the estimated error in the population and how well the model represented the general population. The RMSEA value illustrated that the model holds an acceptable approximation of errors in the population. The R-squared value for the associated standardized solutions was .022, which indicated a large degree of variance and covariance in the endogenous variables left unexplained by the model. The fit indices indicated that the data was a good fit to the hypothesized mediation model (Raykov & Marcoulides, 2006). The model AIC was -1.95; the AIC of this model will be compared to other hypothesized coming models. Although the hypothesized mediation model fit
the data well, (NFI=.98, RMSEA= 0.00, and AIC= -1.95), no direct or indirect significant path was identified between the variables. The path coefficients showed that the path between a leader experience working with a female leader and the leader’s gender was not significant at -0.08. Moreover, there was not a significant path between the leader’s gender and perceived female leadership effectiveness at .13 (Figure 4.2).

Overall, the fit indices indicated that the hypothesized mediation model was the well fitted model since the model represented the data well. Although the hypothesized mediation model was a good fit, this hypothesized model indicated that gender was not a mediator variable between experience working with a female leader and perceived female leadership effectiveness - no significant pathways were found between these variables. Perceived female leadership effectiveness cannot be predicted by a leader’s gender and experience working with a female leader.

![Mediation Model Outcome](image)

\textit{Figure 4.2. Mediation Model Outcome}

\textbf{Analysis of moderation model.} The result of moderation model indicated that the model was under identified – meaning that the independence chi-square is less than the degrees of freedom. Thus, the fit indices could not be calculated except for the NFI which was .01 - much
less than the minimum threshold of .90 for a well-fitted model. The RMSEA of .95 considered
the estimated error in the population and how well the model represented the general population.
The RMSEA in the moderation model exceeded the recommended value of .05. The R-squared
value for the associated standardized solutions was .033, which indicated a large degree of
variance and covariance in the endogenous variables left unexplained by the model. The fit
indices indicated that the data was a poor fit to the hypothesized moderation model. The model
AIC was 116.31; thus, the moderation model was not a useful hypothesized model compared to
other hypothesized models. The path coefficients within the model illustrated that neither
pathways between experience working with a female leader, the interaction between leader’s
gender and experience, and perceived female leadership effectiveness were significant at - 0.11
and .15, respectively (Figure 4.3).

![Moderation Model Outcome](image)

*Figure 4.3. Moderation Model Outcome*

Overall, the fit indices indicated a weak hypothesized moderation model since the model
failed to represent the data well. Also, the hypothesized moderation model indicated that gender
was not a moderator variable between experience working with a female leader and perceived
female leadership effectiveness - no significant pathways were found between these variables.
Perceived female leadership effectiveness cannot be predicted by gender and experience working with a female leader.

**Analysis of mediation moderation model.** The result of mediation moderation model indicated that the model was under identified – meaning that the independence chi-square is less than the degrees of freedom. Thus, the fit indices could not be calculated except for the NFI which was .01 - much less than the minimum threshold of .90 for a well-fitted model. The RMSEA of 1.13 considered the estimated error in the population and how well the model represented the general population. The RMSEA in the mediation moderation model exceeded the recommended value of .05. The R-squared value for the associated standardized solutions was .081, which indicated a large degree of variance and covariance in the endogenous variables left unexplained by the model. The fit indices indicated that the data was not a good fit to the hypothesized mediation moderation model (Raykov & Marcoulides, 2006). The model AIC was 329.42 and produced the worst AIC value between the four hypothesized models. Despite the overall poor model fit, a significant pathway was identified between a leader’s gender and perceived female leadership effectiveness at .21; this path was the only significant path within the four hypothesized models. The pathways within the model illustrated that neither of the paths between experience working with a female leader and the interaction between a leader’s gender and experience (the independent variables), and perceived female leadership effectiveness were significant at .14 and -0.14, respectively. The pathway between experience working with a female leader and the leader’s gender was also not significant at -0.08 (Figure 4.4).
Overall, the fit indices indicated a weak hypothesized mediation moderation model since the model failed to represent the data well. Although the hypothesized mediation moderation was the worst fitted model, a significant pathway was identified between gender and perceived female leadership effectiveness ($\beta = .21, p < .05$). No other significant pathways were found between other variables (Figure 4.4).

**Comparing hypothesized models.** After analyzing each of the hypothesized models, a comparison between the four hypothesized models was conducted for the best model fit. The fit indices (NFI and ACI) indicated that simple direct model and the mediation model had roughly similar NFI and ACI values (Table 4.3). However, the mediation model produced the minimum AIC -1.95 between the four hypothesized models. Therefore, the mediation model was the best fitted model. On the other hand, the moderation model and mediation moderation model produced the worst fit indices (NFI and ACI) between the four hypothesized models (Table 4.3). Although the mediation moderation model produced the worst AIC 329.42 of the four hypothesized models, a significant pathway was identified between gender and perceived female leadership effectiveness ($\beta = .21, p < .05$).
Table 4.4.

*Comparison of the Four Hypothesized Models Outfit*

<table>
<thead>
<tr>
<th>Model</th>
<th>NFI</th>
<th>RMSEA</th>
<th>Total R2</th>
<th>AIC</th>
<th>Significant path</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simple direct model</td>
<td>0.72</td>
<td>0.00</td>
<td>0.017</td>
<td>-1.16</td>
<td>None</td>
</tr>
<tr>
<td>Mediation model</td>
<td>0.98</td>
<td>0.00</td>
<td>0.022</td>
<td>-1.95</td>
<td>None</td>
</tr>
<tr>
<td>Moderation model</td>
<td>0.01</td>
<td>0.95</td>
<td>0.033</td>
<td>116.31</td>
<td>None</td>
</tr>
<tr>
<td>Mediation moderation model</td>
<td>0.01</td>
<td>1.13</td>
<td>0.081</td>
<td>329.42</td>
<td>Gender to Perceived female leadership effectiveness</td>
</tr>
</tbody>
</table>

*Note.* Significant path between variables when \( p < .05 \)

**Chapter Summary**

The results from the t-test analysis indicated that there were no differences in the perception of male and female leaders regarding the perceived female leadership effectiveness in Saudi Arabian higher education. Moreover, the results from path analysis indicated that the mediation model was the best fit model of the four hypothesized models. One significant path was identified between gender and perceived female leadership effectiveness in the mediation moderation model, the worst model of the four hypothesized models. The following chapter will discuss these findings and provide some practical implications and the limitations of the current findings. Also, chapter five will suggest future areas of research and revision to the current model based on relevant theoretical and empirical literature.
Chapter 5: Discussion and Implications

The current study examined how gender and years of working with a female leader influence the gendered perception of female leadership effectiveness in Saudi Arabian higher education institutions. Administrators, who hold a leadership position, were asked to share their perceptions about female leadership effectiveness in the participating universities. Perceived female leadership effectiveness was analyzed based on the leader’s gender and leader experience working with a female leader.

Chapter four outlined the findings related to the research questions and the analyses of the four hypothesized models. Creswell (2014) indicated that the discussion of quantitative research involves “why or why not the results were significant, drawing on past literature and theory, and/ or persuasive logic that might explain the results” (p. 178). Therefore, this chapter addresses the important findings and discusses these findings contextualized with implications for policy and practice. Also, the chapter addresses the limitations of the current study and discusses directions for further research in Saudi Arabian higher education contexts.

Discussion of the Key Findings

Analysis of the data yielded two key findings that have important implications for educational leaders. These two findings should be examined together to understand their impact. The first of these findings was that model 2, the mediation model, was overall the best fit of the data; however, no significant pathways were found in the best fit model. In contrast, model 4, the mediation moderation model, was the worst fit of the data, but did contain a significant pathway between gender and perceived female leadership efficacy. Making sense of these seemingly
contradictory findings is challenging and can perhaps be best understood in context with previous literature and contextual understandings of Saudi Arabian culture in comparison to western culture.

First, it is important to note that there is little literature on the topic of leadership generally in Saudi Arabia, even less on female leadership, and a paucity of literature on female leadership effectiveness in higher education. Jamjoom and Kelly (2013); Smith and Abouammoh (2013); Alomair (2015); and Heredero and Margalina (2016) stated there were limited academic publications regarding women’s leadership, female leadership outcomes, and female administrators in Saudi Arabian higher education institutions. In western culture, however, leadership as a body of scholarship is prevalent. Recall that this study utilized the LPI inventory of leadership effectiveness as the measure of the dependent variable, perceived female leadership effectiveness. The items on this scale have been validated, but from a western perspective. One interpretation of a well fitted model without significant pathways is that the model was misspecified, meaning the model was missing important independent variables or contained irrelevant independent variables related to the dependent variable. It is possible that some of the variables included in the analysis, while not necessarily irrelevant in western culture, were in fact relevant in the Saudi Arabian cultural context. Supporting this idea is the background literature regarding female leaders in Saudi Arabia as compared to western contexts.

AlDoubi (2014) conducted a qualitative study by interviewing six Saudi female leaders holding a leadership position in Saudi Arabian higher education institutions. One of the findings in this study was that female leaders in Saudi Arabian higher education institutions pursue a leadership position after they have attained their doctoral degree regardless of their experience, skills and characteristics as a leader. Saudi Arabian higher education institutions have segregated
campuses, one campus for male and another one for female. As a result of this segregation, female campuses need female leaders to fill their leadership positions. Consequently, female leaders access leadership positions in higher education institutions regardless of the years of their experience or the length of time in their institutions. Segregation in the higher education system, social role, and gender stereotype were important factors that allow female leaders to access a leadership position regardless of their previous experience or their professional development opportunities. This is not true in western contexts, where experience and professional development opportunities, in addition to formalized educational degree attainment are the requisite for leadership positions in higher education settings.

Moreover, even among women who do have qualifications and experience for leadership typical of western standards, opportunity for leadership selection is low. Abalkhail (2017) in a qualitative study aimed to understand the perceptions of female leaders in Saudi higher education institutions regarding the factors preventing them from pursuing a leadership position. Female leaders who participated in the study revealed that women’s chances to occupy a leadership position were low even if they have efficient leadership qualification, a high level of education, and long years of experience. Also, the study concluded that female leaders do not achieve equitable representation in leadership positions when compared to male leaders. The administration of Saudi universities prefers to select male leaders for positions of power and excludes female leaders from decision-making positions. According to AlMohamed (2008), male leaders dominated the senior positions in the public sector in general, including higher education institutions. The overrepresentation of males in these positions means that often the decision-making authority is limited to men. In higher education contexts, female leaders are required to receive approval from their male colleagues regarding critical and major decisions, which costs
time and effort (Alsubaihi, 2016). Al-Tamimi (2004) and AlMunajjed (2010) stated that female deans and female department chairs on female campuses receive approval from male colleagues on most essential and important decisions.

Taken together and in context, Saudi culture could explain why experience working with female leaders does not affect the perception of the effectiveness of female leaders in Saudi Arabian higher education institutions.

Al-Ahmadi (2011), Al-Kayed (2015), and Alsubaihi (2016) highlighted challenges facing female leaders in Saudi Arabia. These studies collectively found female leaders in Saudi Arabian higher education institutions were underrepresented compared to male leaders. Limited experience and lack of professional development prevent Saudi women from being effective leaders who have the authority to make decisions. These studies also highlighted the importance of seeking professional development, the fruitfulness of professional experiences, and the significance of developing leadership skills and abilities in seeking higher leadership opportunities.

Analyzing the mediation moderation model identified another interesting finding. The fit indices of the mediation moderation model indicated that the mediation moderation model was the worst hypothesized model between the four models NFI= .01, RMSEA= 1.13, and AIC= -329.42). Despite the overall poor model fit, a significant pathway was identified between a leader’s gender and perceived female leadership effectiveness ($\beta = .21, p < .05$). However, no other significant paths were found between experience working with a female leader and perceived female leadership effectiveness. The analysis of the mediation moderation model indicated that gender is a mediator and a moderator variable in predicting the perceived female
leadership effectiveness in Saudi Arabian higher education institutions. There are several possible explanations for obtaining these outcomes.

One possible explanation for having a significant pathway between gender and perceived female leadership effectiveness in the worst fitted model (the mediation moderation model) that does not occur in the best fitted model (the mediation model) is that gender works as a mediator variable on perceived female leadership effectiveness. Gender mediates the relationship between experience and female leadership effectiveness. However, the relationship between experience and perceived female leadership effectiveness was not significant; therefore, the influence of the mediator variable is also not significant.

Another possible explanation for the above mentioned finding is that gender occurs as a mediator variable on perceived female leadership effectiveness but it does not mediate the relationship between experience and female leadership effectiveness. In other words, gender is a mediator variable on perceived female leadership effectiveness when there are other variables (not highlighted in the current study) that influence the perception of female leadership effectiveness.

A final possible explanation is that gender moderates the relationship between experience and perceived female leadership effectiveness when there is a third variable influencing the perception of female leadership and affects the strength of the relationship between experience and perceived female leadership effectiveness in a Saudi Arabian context. In other words, gender is a moderator variable on perceived female leadership effectiveness when there are interactions between several variables that influence the perception of female leadership effectiveness in Saudi Arabia.
Gender is a moderator variable when there is a third variable influencing the perception of female leadership could be the rational explanation for the current study finding. By reviewing the literature in the Saudi Arabian context, evidence asserted that the social factors of Saudi society and its traditional values play a vital role in shaping gender perceptions in general, not only in the higher education context. The cultural value system, combined with Islam, shapes the characteristics of Saudi society; these characteristics influence women’s careers (Abalkhail & Allana, 2014; Abalkhail, 2017). In the leadership context, AlDoubi (2014) stated that the situation of female leaders who seek leadership opportunities is similar to women worldwide, but perhaps it could be even more challenging due to the social and cultural norms of Saudi society.

**Study Limitations**

The findings of this study have provided a general perception of Saudi female leadership effectiveness in Saudi Arabian higher education institutions, which might inspire researchers to conduct further researches on female leadership effectiveness in similar contexts. However, there are several limitations with the results of this study that should be considered.

One important limitation of the study is that the data were collected from a small sample of male and female administrators who hold leadership positions in the public universities located in Riyadh, the capital of Saudi Arabia. Due to the limited period of time for the study completion, a total of only 131 leaders from five of the public Saudi universities participated in the current study. These universities were (1) King Saud University, (2) Al-Imam Mohammed Ibn Saud Islamic University, (3) King Saud Abdulaziz University for Health Sciences, (4) Saudi Electronic University, and (5) Princess Nourah Bint Abdulrahman University. All of these universities were located in one region of Saudi Arabia. The findings of this study cannot be generalized to other universities or higher education institutions in other regions of Saudi Arabia.
since the study was conducted with a small sample size. Although the sample population met the minimum standards, a larger sample would potentially improve model fit and increase the validity and reliability of the study findings (Byrne, 2006).

Additional limitations are the large degree of multicollinearity and issues with model misspecification which make the hypothesized models insufficient for understanding the factors that influence perceived female leadership effectiveness in Saudi Arabian higher education institutions. Although several factors related to leadership effectiveness were identified in the literature review of this study, the current study focused on the impact of gender and years of experience working with a female leader on perceived female leadership effectiveness. Factors such as level of education, leadership professional development, and leadership position were part of the study is collected data. Due to the difficulties in comparing the hypothesized models, these factors have not been included in the proposed models and were excluded from the data analysis. In addition, it is important to highlight the social and cultural aspects when investigating the gendered perception of female leadership effectiveness in a conservative society. This unidentified factor may have influenced the outcome of the current study.

An important limitation of the study is the lack of literature on the topic of female leadership in Saudi Arabia generally and female leadership effectiveness in higher education particularly. Jamjoom and Kelly (2013); Smith and Abouammoh (2013); Alomair (2015); and Heredero ans Margalina (2016) stated there were limited academic publications regarding women’s leadership, female leadership outcomes and female administrators in Saudi Arabian higher education institutions. Due to the literature limitations, western literatures have been considered, especially in measuring female leadership effectiveness. Using western literatures
without considering the uniqueness of Saudi society and Saudi cultural norms and traditions may have affected the current study results.

The Leadership Practices Inventory questionnaire, which was used as a tool in the current study, is prone to social desirability bias. Social desirability occurs when participants report their answers in a way that make them more socially acceptable than would be their true answers (Lavrakas, 2008). In the current study, male and female leaders used the LPI questionnaire to measure gendered perceptions toward female leadership effectiveness in Saudi higher education institutions. Since the LPI questionnaire measures the behaviors or attitudes of a person himself or others, there is a possibility that female leaders reported their answers in a way that represents a satisfactory image of themselves and their female peers to avoid receiving negative or undesirable evaluations. Thus, social desirability bias, which is classified as one of the respondent-related sources of error, could be another important limitation of the current study.

Finally, using path analysis to analyze the study data and compare the hypothesized models limits the interpretation of the statistical analysis. No errors occurring in the measurement of observed variables is an assumption of path analysis (Raykov & Marcoulides, 2006). However, using surveys to measure participants’ perceptions is known to produce errors, especially when measuring behaviors, characteristics, or practices, such as model the way and inspire a shared vision (Fink, 2003). Although path analysis was not the best statistical analysis to study the impact of gender and years of experience working with a female leader on perceived female leadership effectiveness, using path analysis to compare the hypothesized models supports the literature about the identified relations in Saudi Arabian higher education contexts.
Implications and Future Research

The two key findings of this study were (1) the experience working with a female leader does not have a significant impact on perceived female leadership effectiveness whereas (2) gender, social, and cultural aspects of Saudi society have significantly impacted perception towards female leadership effectiveness and have important implications for educational leaders in Saudi Arabian higher education institutions. Since leadership effectiveness contributes to the ability of a female leader to pursue a leadership position, participate in decision making, actively come up with new ideas to solve problems, and enhance leadership practices, the findings of this study could be beneficial along with considering the researcher’s recommendations. These recommendations could improve the situation of women leaders in Saudi Arabian higher education institutions.

The study results emphasize that it is now critical to consider how to enhance female leadership effectiveness in Saudi Arabian higher education institutions. It is recommended for female leaders to enhance their leadership attitudes and capacity. The practical implication of this recommendation is encouraging women in leadership positions to join professional development programs that will improve their leadership skills and practices. Joining leadership development programs will teach female leaders how to implement a strategic plan, increase their self-efficacy, and develop their leadership potential.

It is also recommended to acknowledge female leaders' rights in Saudi universities. Women who hold a leadership position in higher education institutions need to participate in making essential decisions and be responsible for their actions and their decisions. In doing so, it is important for female leaders to have the recognition and autonomy to lead women’s campuses since male and female campuses are completely segregated. Although this acknowledgement
would require government legislation to change the current policy of male leaders running female campuses, this recommendation would be beneficial for female leaders in Saudi Arabian higher education institutions.

Also, it is recommended that female leaders achieve equitable representation in leadership positions as male leaders do. The current state of female leaders shows overrepresentation of male leaders in Saudi higher education institutions. This means the authority of decision-making is limited to male leaders. Female leaders are required to receive approval from their male colleagues regarding critical and essential decisions. Thus, re-evaluating the current institutional policies of leadership positions in Saudi higher education institutions and the application of legislation is necessary. Evaluating and reforming the hiring process for leadership positions by considering a candidate’s educational, professional, and intellectual skills rather than a candidate’s gender will be the first step in changing institutional culture, especially regarding the distribution of power and decision making.

Finally, the findings of this study suggest that there is a need for an initiative to change some of the social and cultural views held about women’s roles in Saudi society. Female leaders have to be involved in pursuing that change through (a) educating a new female generation about women’s empowerment and how to make their voices heard, (b) seeking applicable governmental legislation that will allow women to fully participate in society, (c) demanding true involvement in decision-making, (d) and recognizing the importance of human development to access the workforce generally and leadership positions particularly. This recommendation is aligned with Saudi Vision 2030, which calls for enhancing women’s full participation in society and raising the proportion of women in the workforce from 22 percent to 30 percent (Vision 2030, 2016).
Several recommendations for implementing future research could be extracted from the study findings. The current study focused on examining Saudi Arabian perceptions of female leadership. Specifically, it examined how gender and years of working with a female leader influence the gendered perception of female leadership effectiveness in Saudi Arabian public universities located in Riyadh. Since other factors, such as level of education, professional development, and leadership positions, were excluded from the analysis, using these variables in future investigations would be worthwhile in understanding perceived female leadership effectiveness.

In addition, it is important to highlight the social and cultural aspects when investigating the gendered perception of female leadership effectiveness in a conservative society. Thus, further research studying the social and cultural aspects of Saudi society is needed to understand the uniqueness of Saudi society and how these aspects impact female leadership effectiveness.

This study was quantitative in nature. Conducting a qualitative study to explore the perceptions of higher educational leaders toward female leadership effectiveness in depth is needed. Asking a small number of higher educational leaders about their perceptions of female leadership effectiveness to discuss in details how their gender and years of experience influence their perceptions of female leadership effectiveness will provide insights about female leadership effectiveness and factors Saudi female leaders are exposed to in their work environments.

Other studies examining the perceptions of different generations such as faculty, students, and leaders at Saudi universities and comparing their perceptions could offer a comprehensive understanding of the state of female leadership effectiveness in Saudi Arabian higher education institutions.
Conducting studies utilizing a larger sample size across public and private universities from different regions of Saudi Arabia and comparing leaders’ perceptions toward female leadership effectiveness in both private and public sectors could expand the available body of knowledge about the topic of female leadership effectiveness. It could offer further understanding of leadership effectiveness in higher education as well.

Conducting studies that compare and contrast female leadership effectiveness in Saudi Arabia and female leadership effectiveness in the western world could highlight the similarities and the differences between the two groups. In addition, it could highlight the global common themes of female leadership efficacy. Additionally, conducting a study that compares leadership effectiveness in the only female university in Saudi Arabia, Princess - Nourah Bint Abdulrahman University, and other co-educational universities across the nation is recommended too. All leadership positions in PNU are occupied by female leaders; PNU is the only Saudi Arabian university that has a female principle. Thus, the action of practicing leadership by leading people toward achieving goals, setting a clear vision, motivating and influencing others, and making decisions is made by women (AlGhamdi, 2016). This situation does not exist in Saudi Arabian co-educational universities. Although women are permitted to occupy a position of vice dean or vice chair in co-educational universities, they cannot independently make decisions about their campuses which are isolated from the male ones (AlGhamdi, 2016). Male leaders communicate orders to female leaders who lead women’s campuses (AlGhamdi, 2016). This shows the pervasiveness of the domination of male leadership in all co-educational institutions in Saudi Arabia.

Finally, conducting a study seeking the perception of leaders who have studied abroad is recommended. Male and female leaders who earned their degrees from other countries have
acquired different perceptions of leadership effectiveness than what they might have at home. Leaders who studied abroad ultimately bring new knowledge and perspectives that emerged from their experience worldwide. Their perceptions could change or improve the common perception of leadership generally and female leadership efficacy specifically.

Conclusion

The introductory work described in this dissertation provides a foundation for investigating Saudi Arabian perceptions of female leadership in higher educational institutions and how gender and years of working with a female leader influence the gendered perception of female leadership effectiveness. Although people and organizations do not support and appoint females in leadership roles because of traditional, stereotypical ideas of women in Saudi Arabia (Alomair, 2015), Saudi women nowadays are striving to become vital and effective participants in their society. Thus, the findings of the current study are drawing a better understanding of the current state of female leadership not only in Saudi Arabian higher education institutions but in other sectors as well of a traditionally male dominated work force. The information gained in this study raises awareness of female leadership, how male and female leaders perceive the effectiveness of women leaders in higher education, and how they evaluate female leadership efficacy practices. Moreover, the findings of the current study could raise awareness of obstacles women face when it comes to the perceptions of their male and female colleagues. It also lends insight into what types of educational opportunities, leadership training, and qualifications will allow more female leaders to emerge in higher education institutions in Saudi Arabia. Finally, this study could lead to the much needed more needed work toward developing the evidence base of female leadership in Saudi society.
References
Al-Magableh, M. & Otoum, A. (2014). The administrative empowerment and its relationship with the innovative behavior among the head / coordinators of the academic department


Larchmont, NY: Eye on Education.


http://www.slideshare.net/hafezshurrab1/the-eight-step-model-of-change-a-case-study-on-ericsson
Appendix A: IRB Approval Letter

MEMORANDUM

DATE: October 19, 2018

TO: Ms. Alaa Alshakha

VIA: Dr. Amanda Pascale
Leadership, School Counseling & Sports Management

FROM: Dr. Jennifer Wesely, Chairperson
On behalf of the UNF Institutional Review Board

RE: Review of New Project by the UNF Institutional Review Board
IRB#1240543-4: “The perceptions of female leadership: Impact of gender and leaders qualification on leaders effectiveness.”

This is to advise you that your project, “The perceptions of female leadership: Impact of gender and leaders qualification on leaders effectiveness.” underwent “Expedited” Categories 4 & 7 review on behalf of the UNF Institutional Review Board. Your reviewer recommended approval without further modifications.

A waiver of signed informed consent was requested and approved for this research based on the criteria in 45 CFR 46.117(e). You may use the electronic consent procedures for participants as outlined in your approved documents. Only the approved versions of the consent information should be used during this research. All participants must receive a stamped and dated copy of the approved informed consent document when possible.

This approval applies to your project in the form and content as submitted to the IRB for review. Any variations or modifications to the approved procedures or documents must be cleared with the IRB prior to implementing such changes. For example, if you plan to make changes to your stamped and dated informed consent form, it will be necessary to submit a copy of the revised form via an amendment so that it can be reviewed and approved prior to use. Once approved, a new stamp and date will be included on the revised consent form so that it can be used. To submit an amendment, please complete an Amendment Request Document and submit it along with any updated documents affected by the changes via a new package in IRBNet. Any unanticipated problems involving risk and any occurrence of serious harm to subjects and others shall be reported by completing this Event Report Form and sending it promptly to the IRB within 3 business days.

Your study has been approved as of 10/19/2018. When you are ready to close your project, please complete a Closing Report Form. Please note that it will be necessary to create a new package in IRBNet in order to submit amendments, status reports, or closing reports in the future. All applicable records relating to this research shall be retained for at least 3 years after completion of the research.
CITI Course Completion Reports are valid for 3 years. The CITI training for renewal will become available 90 days before the current CITI training expires. Please renew your CITI training when necessary and ensure that all key personnel maintain current CITI training. Individuals can access CITI by following this link: http://www.citiprogram.org/. Should you have questions regarding your project or any other IRB issues, please contact the research integrity unit of the Office of Research and Sponsored Programs by emailing IRB@unf.edu or calling (904) 620-2455.

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within UNF's records. All records shall be accessible for inspection and copying by authorized representatives of the department or agency at reasonable times and in a reasonable manner.
Appendix B: Participated Universities' Approval Letters

Ref No: KSU-HE-18-159

أمّهاء الباحثة/ أ.د. تالتية communicates للهيئة الإنسانية لأخلاقيات البحث على الكائنات الحية في جلستها

الثانية عشرة لرئيس اللجان بالله في المواضع التي تكون أداة البحث مقتصرة على الاستبان.

نيدكم بموافقة اللجان الدائمة لأخلاقيات البحث العلمي على إجراء البحث الموضوع بالجدول أدناه على أن تكون

بداية المهمة البحثية 21 محرم 1440ه الموافق 1 أكتوبر 2018م وتنتهي في 24 ربيع الثاني 1440ه الموافق

31 ديسمبر 2018م:

<table>
<thead>
<tr>
<th>الاسم الباحث</th>
<th>التصور العام حول القيادة النسائية</th>
<th>الموافقة</th>
</tr>
</thead>
<tbody>
<tr>
<td>أ.د. تالتية</td>
<td>&quot;تأثير كل من الجنس وسمات القائد على فاعلية القائد&quot;</td>
<td>1</td>
</tr>
</tbody>
</table>

و عليه تنزل من الجهات المعنية بالجامعة تسهيل مهمة البحث.

وكشفا بتقبل وأمر الاحترام،

عميد البحث العلمي

نائب رئيس اللجان الدائمة لأخلاقيات البحث العلمي

أ.د خالد بن إبراهيم الحميزي

[Signature]
إعادة إلى من يهمه الأمر

سلام عليكم ورحمة الله وبركاته.. أما بعد;

فأشار إلى رغبة الدارسة بكلية التعليم والخدمات الإنسانية بجامعة شمل فلوريدا الطالبة / آلاء بنت هيد الشافح في إجراء دراسة بعنوان "وجهات النظر حول القيادة النسائية: تأثير رجل من الجنس وسماة القائد على فاعلية القائد".

"The Perceptions of Female Leadership: Impact of Gender and Leader's Qualifications on Leader's Effectiveness"

وذلك لإنجاز مطالبات الحصول على درجة الدكتوراه في تخصص القيادة التربوية في التعليم العالي ولذلك خلال الفترة من 1 أكتوبر 2018 الموافق 1 محرم 1440هـ إلى 31 ديسمبر 2018 الموافق 24 ربيع الثاني 1440هـ.

ونظراً لأن موضوع البحث يتطلب إجراء دراسة ميدانية والحصول على بيانات علمية لذا أمل تسهيل مهمتها لتطبيق أداة الدراسة وتزويدها بالبيانات اللازمة.

وقد أعطيت هذه الإفادة بناء على طلبها لتقديمها إلى الملحقية الثقافية السعودية في أمريكا.

وسلام عليكم ورحمة الله وبركاته.

المشرف على وحدة دعم الباحثين

بعمادة البحث العلمي

د. خالد بن محمد الرفاع

١٤٣٩/١٢/٢٣
١٤٣٩/١٢/٢٤
السلام عليكم ورحمة الله وبركاته... وبعد:

إشارة إلى موافقة معينة مديرة الجامعة على ضوابط تعيين أدوات جمع البيانات للباحثين المرفوعين بالخطاب رقم 4239 وتاريخ 15/3/1436 هـ، وبناء على توصية لجنة فحص أدوات جمع البيانات للطلبات المقدمة إليها ومنها طلبكم المقدم بعنوان التصور العام حول القيادة النسائية السعودية: تأثير كل من الجنس وسمات القائد على فاعلية القائد النموذجي.

أفيدكم بصدور الموافقة على توصية اللجنة، وباكمالكم البدء بالعمل.

تأمل منكم تزويدها الجامعة لاحقاً بنسخة من البحث وتأييده منشورها، على هذه الدراسة.

وتقبلوا خالص التحية والتقدير،

عميد البحث العلمي

د. أدبي محمد الحمود

www.seu.edu.sa

T: +966 11 2613500   F: +966 11 2613578   P. O. Box: 93499 - Riyadh: 11673
Perception of Female Leadership in Saudi Universities

Institutional Review Board
IRB Registration Number with KACST, KSA: 1H-01-R-059

September 30, 2018
IRB Log Number: 18-0237
Project Title: Perceptions of Saudi Female Leadership: Impact of Gender and Leader's Qualifications on Leader's Effectiveness
Category of Approval: EXEMPT

Dear Alaa Alshakha,

Thank you for submitting your proposal to the PNU Institutional Review Board. Your proposal was evaluated considering the national regulations that govern the protection of human subjects. The IRB has determined that your proposed project poses no more than minimal risk to the participants. Therefore, your proposal has been deemed EXEMPT from IRB review. Please note that this approval is from the research ethics perspective only. You will still need to get permission from the head of the department in PNU or an external institution to commence data collection.

Please note that the research must be conducted according to the proposal submitted to the PNU IRB. If changes to the approved protocol occur, a revised protocol must be reviewed and approved by the IRB before implementation. For any proposed changes in your research protocol, please submit a Request for Modification form to the PNU IRB. Please be aware that changes to the research protocol may prevent the research from qualifying for exempt review and require submission of a new IRB application or other materials to the PNU IRB. In addition, if an unexpected situation or adverse event happens during your investigation, please notify the PNU IRB as soon as possible. If notified, we will ask for a complete explanation of the event and your response.

Please be advised that regulations require that you submit a progress report on your research every 6 months. Please refer to the protocol number denoted above in all communication or correspondence related to your application and this approval. You are also required to submit any manuscript resulting from this research for approval by IRB before submission to journals for publication.

We wish you well as you proceed with the study. Should you have additional questions or require clarification of the contents of this letter, please contact me.

Sincerely Yours,

Dr. Ebtisam AlMadi
Chairman, Institutional Review Board (IRB)
Princess Nourah bin Abdulrahman University, Riyadh, KSA
Tel: +966 11 824 0861
E-mail: irb@pnu.edu.sa

Date: 30 SEP 2018

Note: The date is written in Arabic, 1439H, which corresponds to 2018 in the Gregorian calendar.
Appendix C: Deanship of Scientific Office Email

Deanship of Scientific Research in Public Universities in Riyadh, Saudi Arabia,

My name is Ala’a Alshakha. I am a doctoral candidate in Educational leadership, Collage of Education and Human Services, University of North Florida. For my doctoral dissertation, I’m conducting a study on leader’s perceptions toward female leadership effectiveness in Saudi Arabian Higher education institutions. I am looking for male and female administrators, who hold leadership positions, to take part in this study. In order to examine how gender and leader qualification influence the gendered perception of female leadership effectiveness in Saudi Arabian Higher education institutions, I would like the study participants to complete a two part online survey with a total of 37 statements. I am anticipating that participation in this study take approximately 20-30 minutes. Participation in the study is completely voluntary and participants will not be compensated for their time. I do not foresee any risks for taking part in the study. However, I am anticipating that study results will be beneficial in determining whether male and female leaders generally share similar values and beliefs about female leadership effectiveness and capabilities. Also, findings of this study will highlight the obstacles female leaders will face when it comes to the perceptions of their male colleagues. It will also lend insight into what types of educational opportunities, leadership training, and qualifications, will allow more female leaders to emerge in higher education institutions in Saudi Arabia.

With this email, I am requesting your assistance in recruiting participants to engage on this study. I would like you to email the provided study participation information to all your administrators who hold a position of College Dean, Vice Dean, Department Chair, and Vice Chairs.

If you have any questions or concerns about this study, please contact me (Redacted) or my chair advisor, Dr. Pascale (Amanda.pascale@unf.edu / 904-620-5530).

Thank you very much for your assistance.
Sincerely,

Ala’a Alshakha
Doctoral Candidate, Educational Leadership
Collage of Education and Human Services
University of North Florida
Survey Consent Form
University of North Florida
Jacksonville, FL 32246
Title of Study: The Perceptions of Female Leadership: Impact of Gender and Leaders Qualification on Leaders Effectiveness

Hi my name is Ala’a Alshakha, doctoral candidate in Educational Leadership, College of Education and Human Services, University of North Florida. You have been randomly selected to participate in a study titled “The Perceptions of Female Leadership: Impact of Gender and Leaders Qualification on Leaders Effectiveness.” The purpose of this study is to examine how gender and leader qualification influence the gendered perception of female leadership effectiveness in Saudi Arabian Higher education institutions. This study will compares the perception of higher educational leaders toward female leadership effectiveness based on leaders’ gender, level of education, years of experiences, and the enrolment in leadership development programs. Also, it will highlight the relationship between leaders’ gender, leaders’ qualifications and the perceived female leadership effectiveness.

The study data will be collected from administrated leaders, who hold a position of College Dean, Vice Dean, Department Chair, and Vice Chairs in the public universities in Riyadh, Saudi Arabia. You are invited to participate in this study and asked to complete a two-part online survey, which will take approximately 20-30 minutes. First, you will be instructed to share your perception of female leadership effectiveness in Saudi public universities by
providing your level of agreement about the five practices of leadership effectiveness. These practices are:

1- Model the way
2- Inspire a shared vision
3- Challenge the process
4- Enable others to act
5- Encourage the heart

Then, you will be asked to share your general demographic information such as: gender, level of education, years of experience, current leadership position, and previous enrolment on leadership development programs.

Your responses will be completely anonymous and your shared information will be kept confidential and securely protected all the time. When you complete the survey, you will be informed electronically about the completion. As the survey are completed and submitted, only authorized personnel -the researcher, the chair adviser, and University of North Florida Institutional Review Board (IRB) - will have access to your responses. There will be no personally identifiable information collected.

Although there are no direct benefits or compensation for taking part in this study, others may benefit from information I am collecting from the study results. Additionally, there are no foreseeable risks for taking part in this study. Participation is voluntary and there are no penalties for deciding not to participate, skipping questions, or withdrawing your participation.

If you have any questions or concerns about this study or if you experience any distress while completing the survey, please contact me (Redacted) or my chair advisor, Dr. Pascale (Amanda.pascale@unf.edu / 904-620-5530).

If you have questions about your rights as a participant, you may contact University of North Florida’s Institutional Review Board Chairperson by calling (904) 620-2498 or by emailing irb@unf.edu.
Thank you for your consideration.

Sincerely,

Ala’a Alshakha  
Phone: Redacted  
Email: Redacted

Dr. Amanda Pascale  
Phone: (904) 620-5530  
Email: Amanda.pascale@unf.edu

By selecting “Yes” option below you acknowledge that you have given consent to be a subject of this research and you are in a leadership position.

Do you wish to participate in this study?

☐ Yes, I want to participate  
☐ No, I do not want to participate

Your participation is an immense help to us, and we greatly appreciate your help.

Directions:

Section I: Your Perception of Female Leadership Effectiveness

Please read each question carefully then indicate the level of your agreement about the five behaviors of leadership effectiveness using the following scale: (1) Strongly disagree; (2) Disagree; (3) Somewhat disagree; (4) Neither agrees nor disagrees; (5) Somewhat agree; (6) Agree; (7) Strongly agree.

Remember, all of your responses will remain anonymous and confidential. Your name will not be associated with any of your answers.
Note: The five main practices for effective leadership represented by: model the way, inspire a shared vision, challenge the process, enable others to act, and encourage the heart. (Kouzes & Posner, 2003)

<p>| | | | | | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Female leaders set a personal example of what is expected.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Female leaders talk about future trends that will influence how work gets done.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Female leaders seek out challenging opportunities that test the skills and abilities.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Female leaders develop cooperative relationships among the people they work with.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Female leaders praise people for a job well done.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Female leaders spend time and energy making certain that people they work with adhere to the principles and standards they have to agree on.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Female leaders describe a compelling image of what their future could be like.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Female leaders challenge people to try out new and innovative ways to do their work.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Female leaders actively listen to diverse points of view.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Female leaders make it a point to let people know</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
about their confidence in others' abilities.

<p>| | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>Female leaders follow through on the promises and commitments that they make.</td>
<td>تلتزم المرأة القائدة بوعودها وتعهداتها.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Female leaders appeal to others to share an exciting dream of the future.</td>
<td>تناشد المرأة القائدة اتخاذ خطط وبرامجة متميزة.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Female leaders search outside the formal boundaries of their organization for innovative ways to improve what they do.</td>
<td>تبحث المرأة القائدة عن طرق تطوير وتحسين ما يقوم به.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Female leaders treat others with dignity and respect.</td>
<td>تعامل المرأة القائدة مع الآخرين بكرامة واحترام.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Female leaders make sure that people are creatively rewarded for their contributions to the success of their projects.</td>
<td>تتأكد المرأة القائدة من تكريم نظيرuraaاص upon his efforts for the success of his projects.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Female leaders ask for feedback on how their actions affect other people's performance.</td>
<td>تطلب المرأة القائدة ملاحظات وملاحظات حول كيفية تأثير أعمالها على أداء الآخرين.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Female leaders show others how their long-term interests can be realized by enlisting in a common vision.</td>
<td>تظهر المرأة القائدة للآخرين كيف يمكن أن يتم تحقيق اهتماماتهم طويلة المدى من خلال المشاركة في رؤية مشتركة.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Female leaders ask “what can we learn?” when things don’t go as expected.</td>
<td>تسأل المرأة القائدة “ما الذي يمكن أن نتعلم?” عندما لا تمر أشياء كما متوقع.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Female leaders support the decisions that people make on their own.</td>
<td>تدعم المرأة القائدة القرارات التي يتخذها الآخرون самостоятельно.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Female leaders publicly recognize people who exemplify commitment to shared values.</td>
<td>تقدم المرأة القائدة لتكريم الشجعان الذين يظهرون إصرارهم على القيم المشتركة.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Female leaders build consensus around a</td>
<td>بناء على نجاح المرأة القائدة جمعية حول مبادئ مشتركة.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Female leaders paint the “big picture” of what they aspire to accomplish.

Female leaders make certain that they set achievable goals, make concrete plans, and establish measurable milestones for the projects and programs they work on.

Female leaders give people a great deal of freedom and choice in deciding how to do their work.

Female leaders find ways to celebrate accomplishments.

Female leaders are clear about their philosophy of leadership.

Female leaders speak with genuine conviction about the higher meaning and purpose of their work.

Female leaders experiment and take risks, even when there are chances of failure.

Female leaders ensure that people grow in their jobs by learning new skills and developing themselves.

Female leaders give the members of the team lots of appreciation and support for their contributions.
**Section II: Demographic information**

31 What is your gender?
- Male
- Female

32 Have you ever worked with a female leader?
- Yes
- No

33 How long have you been working with a female leader?
- Less than 1 year
- 1-4 years
- 5-10 years
- 11-15 years
- More than 15 years

34 What is your current leadership position?
- College Dean
- Vice Dean
- Department Chair
- Vice Chairs
- Others, please specify

35 How long have you been working in your current leadership position?
- Less than 1 year
- 1-4 years
- 5-10 years
- 11-15 years
- More than 15 years

36 What is your level of education?
- Bachelor
- Master
- PhD

37 Have you ever joined a leadership development program?
- Yes
- No