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The Effectiveness of the Virginia Network for Women: A Mixed Methods Study

Stevara Haley Clark
Virginia Commonwealth University

Jenae' D. Harrington
Virginia Commonwealth University

Reshunda L. Mahone
Virginia Commonwealth University

Kristin L. Smith
Virginia Commonwealth University

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A capstone project submitted in partial fulfillment of the requirements for the degree of Doctor of Education in the Department of Educational Leadership at Virginia Commonwealth University.

By:

Stevara Haley Clark
Bachelor of Social Work - Virginia Commonwealth University
Master of Social Work - Virginia Commonwealth University

Jenaé D. Harrington
Bachelor of Arts - Hampton University
Master of Urban & Regional Planning - Virginia Commonwealth University

Reshunda L. Mahone
Bachelor of Science in Business Administration - University of Florida
Master of Business Administration - University of Central Florida

Kristin L. Smith
Bachelor of Music - Radford University
Master of Music - University of Florida

Chair: Tomika L. Ferguson, Ph.D.
Interim Assistant Dean for Student Affairs and Inclusive Excellence,
Co-Coordinator Ed.D. Program, and Assistant Professor

Virginia Commonwealth University
Richmond, VA

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Abstract

THE EFFECTIVENESS OF THE VIRGINIA NETWORK: A MIXED METHODS STUDY

By Stevara Haley Clark, Jenaé D. Harrington, Reshunda L. Mahone, and Kristin L. Smith

A capstone project submitted in partial fulfillment of the requirements for the degree of Doctor of Education in the Department of Educational Leadership at Virginia Commonwealth University

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Capstone Chair: Tomika L. Ferguson, Ph.D., Department of Educational Leadership

Over the last 50 years, higher education institutions across the country have experienced growth in enrollment and degree attainment by women. However, despite the increase in educational merit, the representation of women in administrative and leadership roles within higher education is still not equitable to that of men. The Women's Network, a non-profit subsidiary of the American Council on Education's Inclusive Excellence Group, aims to identify, develop, advance, and support women in higher education at the local, state, and national levels. The Virginia Network is a state constituency of the Women's Network that promotes women's leadership in higher education throughout the Commonwealth of Virginia. This exploratory mixed methods study explored the needs of women in the Commonwealth of Virginia and the ways in which the Virginia Network could support those needs. Using social justice leadership theory and process evaluation frameworks, qualitative and quantitative data were collected and analyzed to answer the study's research questions. Data was analyzed through thematic coding and statistical analysis. This study's findings inform how the Virginia Network can enhance current programming and develop new programming to addresses the needs and barriers identified and experienced by women across the Commonwealth.

Keywords: women, barriers, needs, leadership development, Virginia, higher education

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Chapter I: Introduction

The relationships between women, leadership, and higher education are historically complex (Hannum et al., 2015; Hoyt & Murphy, 2016; Johnson, 2017; Ortega-Liston & Rodriguez Soto, 2014). Women's educational opportunity has expanded since the late 1820s from all-female colleges and seminaries, to institutions of coeducation in 1837, and finally to the emergence of female administrators in higher education in the 1930s. Throughout these historical eras of progress, continued delayed entry into the collegiate environment and systemic barriers to leadership impacted the career trajectories of women in higher education. While women today are still less likely to hold senior leadership and faculty positions than their male counterparts, recent changes in society's perceptions of leadership have made the path for women's advancement slightly less burdensome (Carli & Eagly, 2016). Much of this change in perception has occurred in the last 50 years and is the result of increased leadership education for all individuals through professional networks and organizations for women (Beddow, 2018; Brue & Brue, 2018; Day et al., 2013; Derue & Ashford, 2010; Ely et al., 2011).

One such organization is the American Council on Education's (ACE) Women's Network, a subsidiary unit established in 1977 under ACE and the Inclusive Excellence Group (formerly the Office of Women in Higher Education). The Women's Network was established to promote women's leadership and identify specific women across the nation qualified for executive leadership positions in colleges and universities (Holmgren, n.d.). Similar organizations were created to support women beyond traditional modalities that tended to emphasize masculine leadership characteristics, deeming feminine characteristics as inferior. As this study will explore, women cite exclusion from traditional vital networks and the inability to engage with other women about leadership development as hindrances to personal leadership

growth (Brue & Brue, 2016). Since its establishment, the ACE Women's Network has aimed to facilitate networking and development for women interested in pursuing leadership in higher education (ACE Women's Network, 2020a).

A portion of the Women's Network's mission is actualized through state network constituencies. Virginia was one of the original states to develop a network in 1977 as part of ACE's original National Identification Program (NIP) (Douglas & Pritchett, 2012; The Virginia Network, n.d.-b). Originally named the Virginia Identification Program, today's Virginia Network for Women in Higher Education (colloquially the "Virginia Network") operates as a 501(c)(3) non-profit organization led by a volunteer state chair and executive planning board (Douglas & Pritchett, 2012). The mission of the Virginia Network is to support women leaders in higher education at all levels. The Virginia Network has a goal to "create an educational, social, and political climate in which women, in all their diversity, can participate equally with men in setting public agendas" (The Virginia Network, n.d.-a, para. 1). It serves approximately 71 higher education institutions through Institutional Representatives, the Senior Leadership Seminar, and its annual state conference (The Virginia Network, n.d.-b). The purpose of this capstone project is to analyze the general needs of women working in higher education to identify opportunities for support and evaluate ways in which the Virginia Network does and can continue to support women's needs.

Problem Statement

In a consistently growing educational trend, women in the United States have earned more than 50% of all associates degrees since 1970, more than 50% of all bachelor's degrees since 1982, more than 50% of all master's degrees since 1987, and more than 50% of all doctoral degrees since 2006 (Johnson, 2017). However, the increase in educational attainment has not

translated to an equivalent increase in leadership roles held by women in higher education institutions. Statistical data generated over the last few years indicate that women account for only 37% of chief academic officer positions, 32% of full professor positions, and about 30% of college presidency positions (Johnson, 2017). Additionally, men are twice as likely as women to serve on public and independent institutional governing boards (Johnson, 2017).

This inequitable representation is evidence of the barriers and discrimination faced by women in the higher education workplace. Since the late 19th century, women's professional and leadership development programs have attempted to address barriers and provide support for women qualified for senior or executive level leadership positions (ACE, 2018; ACE, 2020b; Cook, 1998; Elliott, 2014; Holmgren, n.d.; Kolbe, 1919; Martin, 1920; Mather, 1995; Shavlik & Touchton, 1984; Teague & Bobby, 2014). The state networks embedded in the ACE Women's Network are such programs. Women today are more qualified than ever to hold prominent, professional leadership positions in higher education and are in dire need of support, guidance, and networking to break through barriers to realize their own career aspirations (Blackchen, 2015; Britton, 2017; Hannum et al., 2015; Johnson, 2017). With the pipeline of women enrolled in higher education institutions and the growth in graduation rates at all degree levels, a similar trajectory would be expected in the number of faculty, senior leaders, and presidents who are women. However, that similar trajectory is not found. This study, requested by the Virginia Network, aimed to evaluate the needs of women employed at the 113 Virginia degree-granting higher education institutions, and evaluate the support that Virginia Network provides in helping those women meet those needs.

Study Purpose and Research Questions

Although educational attainment for women is steadily increasing, representation in higher education leadership positions remains inequitable. It is anecdotally evident that strong support and development opportunities could aid women in seidcuring more leadership positions. The purpose of this study was to understand the needs of women in higher education roles across the Commonwealth of Virginia. This research capstone project also explored the ways by which the Virginia Network addresses the needs of women. The outcomes of this research will help the Virginia Network actualize its mission of recruiting and retaining women leaders in higher education across the Commonwealth. Two research questions will be addressed in this paper:

1. What are the needs of women in higher education across the Commonwealth?
2. In what ways does the Virginia Network address the needs of women in higher education?

Significance

This study contributes to the literature an exploration of the professional landscape of women in the Commonwealth of Virginia, the barriers faced by women in academia, and how the Virginia Network can support the needs of women in the areas of professional and leadership development. The Virginia Network executes its mission based on three primary priorities (Douglas & Pritchett, 2012; The Virginia Network, n.d.-a): supporting an established network of Institutional Representative campus volunteers (who play a pivotal role by serving as resources and visible contacts on their campuses); hosting an annual conference and a tri-annual Women of Color Conference; and convening the Senior Leadership Seminar, a leadership development program for women (The Virginia Network, n.d.-a).

Women throughout higher education in Virginia were interviewed and surveyed to assess needs and to evaluate their knowledge of the Virginia Network and its programming. The findings from the survey have been analyzed and will be reported to the Women's Network with recommendations to guide programmatic revisions. In addition to serving the needs of the Virginia Network and assessing its priority programs, results could also help higher education institutions develop and evaluate supplemental programming for the support of women leaders.

Theoretical Framework

This study was informed by two frameworks: social justice leadership theory and process evaluation. Social justice leadership, as a theory, centers on the collective need to reduce marginalization faced by oppressed groups (Theoharis, 2007; Wang, 2018). With the Virginia Network's goal of creating a climate that values diversity, an intentional exploration of leadership development programming that prioritizes social justice is critical (Furman, 2012). For the purpose of this study, social justice leadership theory provided an emphasis on the researchers' intentional focus on intersections of inclusion, celebrations of difference, and career achievement. Process evaluation is an approach to assessment that guided researchers in determining whether a social program improves outcomes for its target population (Rossi, Lipsey, & Henry, 2019). It also provided the study's framework for evaluating the Virginia Network's ability to address and provide support for the needs of and social issues facing women leaders in higher education.

Study Methodology and Methods

An exploratory sequential mixed method study was conducted to understand the needs of women in higher education roles across the Commonwealth of Virginia and the ways the Virginia Network addresses those needs. This specific type of mixed methods study emphasizes

the initial collection of qualitative data, which is then analyzed and used to inform a second, quantitative phase of the study (Creswell & Creswell, 2018; Creswell & Plano Clark, 2011). The qualitative data was collected from interviews with women at varying stages of their careers in higher education: idealistic achievement, pragmatic endurance, and reinventive contribution (O'Neil & Bilimoria, 2005). These career stages are defined in the subsequent operational definitions section. The qualitative interview data was analyzed and used to inform the development of quantitative survey questions. The research team distributed the survey to women at higher education institutions in the Commonwealth of Virginia through online communication and with the encouragement of snowball sampling. Resulting data was statistically analyzed and coded for themes to provide summative support to further explain the qualitative research findings.

Operational Definitions

The following terms and definitions are related to women in higher education and this research study. This section provides context as to how each term was used and applied.

- **Chilly Climate** was a phrase introduced by Hall and Sandler in 1982 and describes the disparity between men and women in higher education (Britton, 2017; Hall & Sandler, 1982). The concept explores the isolation and lack of representation women may experience in higher-level roles within the institution (Britton, 2017).
- **Glass Ceiling** is a common colloquialism for the invisible or artificial barrier that prevents women from advancing into or obtaining leadership positions (Blackchen, 2015).
- **Idealistic Achievement** is the first career stage defined by O'Neil and Bilimoria (2005).

> Women in this phase are most likely to see themselves in charge of their careers and will doubtless be proactive in taking strategic steps to ensure their career progress (internal career locus). They are achievement-oriented and motivated to succeed and see their careers as opportunities to make a difference and as paths to personal happiness and fulfillment (p. 182).

- **Institutional Representatives** (IRs) are responsible for ensuring that information about the Women's Network and their state's network is available at their institutions. In addition, they are responsible for actively advocating for women's professional development and leadership advancement at their institutions (ACE Women's Network, 2016).
- **Intersectionality** is a term and lens coined by Kimberle Crenshaw (1989) to address multi-layered forms of discrimination and expose many of the gaps in traditional feminist and anti-racist dialogues.
- A **Labyrinth** describes the converging and diverging paths that are typically nonlinear and impact women in their quests for career advancement (Sanchez-Hucles & Davis, 2010).
- A **Leadership Pathway** describes the journey toward career advancement that is often not a direct route within higher education. The path toward leadership is more of a labyrinth with a maze-like complexity (Ortega-Liston & Rodriguez Soto, 2014).
- **Leadership Roles** are those positions that have the responsibilities of "strategic and academic planning, academic entrepreneurship, data-driven decision-making, revenue generation, and creating professional and academic pathways for learners" (Webber, 2016, pp. 64-65).

- **Mentorship** is a relationship between a mentor (someone with experiential and professional credibility who provides knowledge, skill development, guidance in decision making, and advice) to a mentee (a person who desires growth in competency and confidence) (Commodore et al., 2016).
- **Needs** have been defined by the researchers as identified actions or items for reaching an aspirational role, to be effective in a current role and can be personal, professional, or both.
- The **Pipeline Myth** is an assumption that too few women in the leadership progression are qualified to hold senior positions in the academy (Johnson, 2017).
- **Pragmatic Endurance** is the second career stage defined by O'Neil and Bilimoria (2005). The authors state that "women in this phase are pragmatic about their careers and are operating in production mode, doing what it takes to get it done. They have a high relational context and are managing multiple responsibilities both personally and professionally" (p. 183).
- **Professional Development** refers to training, conferences, and educational tools that provide opportunities to grow and gain additional knowledge and skills.
- **Reinventive Contribution** is the third career stage defined by O'Neil and Bilimoria (2005). In this stage, women:

    > Are focused on contributing to their organizations, their families, and their communities. They are most likely to attribute personal and professional others as having had input into the direction of their careers and are likely to reflect a stable, planned career path (p. 184).

- A **Senior Leader** is a chief officer within a higher education institution, such as the president, vice president, provost, senior vice president, or any position reporting directly to the president who is responsible for the fulfillment of organizational goals, strategic planning, and organizational decision-making.
- **Sponsorship** is a type of relationship between a mentor and mentee where the mentor advocates for and creates opportunity for the mentee. Sponsors have notable social and professional capital that can be leveraged on behalf of the mentee (Commodore et al., 2016).
- A **Woman Leader** describes a person who identifies as a woman and has the ability or desire to display the following characteristics: has a commitment to honoring the intersections of social identities, has participative and collaborative leadership styles, is ethical and equitable, and is inspiring and visionary (Cheung & Halpern, 2010).

Organization of the Study

This study is organized into five chapters. This chapter, Chapter I, offers an introduction to the study and its significance. Chapter II provides a synthesized literature review of the historic and current landscape of women in higher education, leadership programming for women in higher education, and exploration of organizations that address leadership development needs for women. Chapter III highlights the methods used for data collection and analysis, an in-depth discussion of the study's frameworks, and a description of the research population. Chapter IV provides the results of descriptive and inferential analyses as well as the findings of the textual analysis. The final chapter, Chapter V, includes a discussion of the research findings, the study's limitations, and recommendations for the Virginia Network.

Chapter II: Literature Review

Since the 1920s, women have taken significant advantage of educational opportunities within higher education through increased enrollment and degree attainment (Parker, 2015). Yet, women are not reflected in senior leadership roles at the same rate as men. To combat this issue, leadership development programs are critical as they expand knowledge, insight, and skills necessary for advancement. These programs also provide women with support to address needs and overcome barriers. National organizations, such as the American Council on Education's (ACE) Women's Network, have identified this advancement challenge and created leadership programming to address these barriers. This literature review outlines leadership programming for women in higher education and describes how these programs were developed to actively combat the barriers faced by women in regard to their career advancement in higher education.

History of Women in Higher Education

The first American higher education institution, Harvard College, was founded in 1636 and excluded women from attending (Tiao, 2006). Scholars have suggested that the American system was adopted from a European model designed by men to promote academic rigor in religious education among men only (Altbach, 1999; Geiger, 1999; Tiao, 2006). For nearly 200 years, women were excluded from the American higher education system (Parker, 2015; Tiao, 2006). This system reinforced a patriarchal culture that deemed women intellectually incapable of advanced education and that women were generally inferior to men. During the late 1820s, educational opportunity shifted as women were introduced to the classroom through common or public schools (Tiao, 2006). Women further engaged in higher education through a small number of all-female colleges and seminaries and served as missionaries while men pursued other business opportunities (Tiao, 2006).

Coeducation was introduced in 1837 at Oberlin College in Ohio, a private college, when four women were allowed to enroll (Parker, 2015). Between 1839 and 1870, the Seven Sisters, a group of private women's colleges, were founded to solve the inequitable educational experiences of women (Parker, 2015). The Seven Sisters institutions were Mount Holyoke College, Vassar College, Smith College, Radcliffe College, Bryn Mawr College, Wellesley College, and Barnard College (Parker, 2015). These private, liberal arts colleges were especially important because they competed with men's Ivy League schools of that time in regard to revenue generation and academic rigor. These schools also recruited and retained a large number of women faculty and administrators. This portion of the nineteenth century was historic for women in higher education as a total of 50 women's colleges were founded between 1836 and 1875 (Geiger, 1999; Nidiffer, 2003; Parker 2015). Alumnae returned to serve as professors, deans, and administrators, which accelerated the integration of women into faculty and administrative roles. However, during that same time, women remained excluded from holding faculty positions at men's colleges (Parker, 2015). As women's academic persistence as students, faculty, and administrators continued, a significant shift began to occur.

Between 1870 and 1890, undergraduate enrollment of women on college campuses increased from 21% to 47%, which led to the development of the first administrative role designed explicitly for women (Parker, 2015). The presence of female students was not well-received by male college presidents and leaders; therefore, deans of women were expected to maintain segregation and attend to the holistic needs of female students only (Nidiffer, 2002; Schwartz, 1997; Tiao, 2006). This role, the dean of women, was a multifaceted position that held teaching as the primary responsibility, but also provided female students with direct access to communicate with a member of the university administration. In 1903, the National Association

of Deans of Women (NADW) was established by 17 administrators seeking a community to discuss issues relevant to their professional roles (Parker, 2015). During the initial meeting, the attendees discussed significant topics in the field, such as women's self-governance, housing, intercollegiate athletics, and leadership opportunities for women (Parker, 2015). Members also passed a resolution to end gender segregation in higher education; however, their influence did not extend beyond the NADW (Parker, 2015). Many female administrators were eager to pursue graduate studies to increase their knowledge in the field of higher education and attended schools such as Columbia University's Teachers College, founded in 1887, which was the first graduate school of education and produced some of the strongest women researchers and practitioners in the early 1900s (Parker 2015; Schwartz 1997).

The 1930s marked an influx of female administrators and students (Parker, 2015). Women's roles in the academy continued to progress during war times (Parker, 2015). As men left higher education to fight in World War II, access for women increased. Although a substantial increase in enrollment of undergraduate women occurred during this time, these significant gains were short-lived. As men returned from war in the 1950s, women's roles in education as students, professors, and deans were overshadowed by returning veterans. In the months immediately following World War II, women accounted for 60% of the individuals released from jobs and were 75% more likely to be terminated from their positions than men (Parker, 2015; Schwartz, 1997). Moreover, the dean of women role was either eliminated completely or deemed inferior to the newly established dean of students role, which was typically held by men. The change in the dean of women role marked a detrimental decline in the visibility and access for women administrators, who now no longer had direct access to college presidents.

The vulnerability of women's roles in higher education prompted a series of legislative changes in the 1960s and 1970s (Parker, 2015). The Civil Rights Act of 1964 prohibited employment discrimination based on race, color, sex, religion, and national origin, but did not extend to educational institutions and their educational activities (Parker, 2015). In 1965, Executive Order 11246 was issued to prohibit federal contractors from discriminating based on sex, which initiated a national campaign against sex discrimination in education (Sandler, 2000). As a result, the Women's Equity Action League (WEAL), established and incorporated in 1968, "filed a class-action suit against all colleges and universities in the United States claiming academy-wide discrimination" (Sandler, 2000, p. 10).

Eventually, Title IX of the Education Amendments of 1972 was passed and women in higher education gained additional protections by law (Nidiffer, 2003; Parker, 2005; Sandler, 2000). Title IX prohibited discrimination on the basis of sex in any educational program that was a recipient of federal funding (Sandler, 2000). While legislative progress did not eliminate discrimination altogether, women were now able to formally file complaints against acts of discrimination. The face of higher education began to change and opportunities for women grew exponentially in the 1980s (Hannum et al., 2015). Over time, women began to outnumber men in undergraduate and graduate studies. The number of women holding faculty, staff, and administrative positions has continued to steadily increase; however, the difference in the number of leadership roles held by men in comparison to women remains significant (Smith, 2017).

Enrollment of Women Students

Since 1979, women have accounted for more than 50% of enrolled students in higher education institutions each fall semester (Hannum et al., 2015; National Center for Education

Statistics, 2019c). At the graduate level, the enrollment of women grew from 40% in 1976 to almost 60% in 2018 (National Center for Education Statistics, 2019d; Smith, 2017). In addition to the steady increase in enrollment, women have graduated with more than 60% of all associates degrees since 1996, more than 50% of all baccalaureate degrees since 1982, and have earned approximately 60% of all master's degrees since 2005 (National Center for Education Statistics, 2020a). Since 2006, women have earned more than half of all doctoral degrees (Johnson, 2017; National Center for Education Statistics, 2020a). These increasing trends also include growth in professional degrees earned by women. Women accounted for almost 52% of *all* degrees conferred in professional fields (i.e. medicine, pharmacy, law) in the 2017-2018 academic year (National Center for Education Statistics, 2020b).

While women have made tremendous strides in degree earnings, exceptions still remain. Women earn 25% less doctoral degrees in physical sciences, engineering, and mathematics than men (Cabay et al., 2018). Overall, women are enrolling in and graduating from colleges and universities at a higher rate than men and are considered the new gendered majority in the higher education student body (Smith, 2017). Based on these trends, the landscape for women in society and among leadership roles should reflect the same growth trajectory - yet it does not.

A Case for Equitable Representation in Leadership Roles

While the increasing enrollment trend for women demonstrates progress and opportunity within higher education, more work is needed to make women's representation within academia more equitable. Women continue to account for a majority of college students, yet less than 30% of college president roles are held by women (Johnson, 2017). In 1993, women held approximately 33% of full-time faculty positions; that percentage grew to 47% by 2018 (National Center for Education Statistics, 2019a; Smith, 2017). With respect to academic titles,

the Association to Advance Collegiate Schools of Business (AACSB) determined that 25.4% of deans, 33.7% of associate deans, and 26.2% of department chairs were women in 2018 (Bartels, 2018). Academic departments that have not seen any growth in the representation of women faculty include science, technology, engineering, and mathematics (STEM) (Smith, 2017). There is little to no representation of women in faculty, department chair, or dean roles in STEM fields (Smith, 2017). Completion of a doctoral degree is a strong determinant of professional progression in STEM fields and attrition rates for advanced degrees in these fields are significantly higher for women (Smith, 2017). Women also disproportionately exit careers in STEM fields during life transitions, such as childbearing and marriage, which can be attributed to the lack of institutional structural support for family leave, flexible work schedules, and childcare (Cabay et al., 2018). Perceived and experienced lack of career/life balance negatively impacts diverse perspectives and available role models for other women.

The level of unequitable representation can vary throughout the academy. As Blackchen (2015) notes, “women are more likely to serve as deans, associate deans, directors, vice presidents, and provosts at public institutions as opposed to private institutions” (p. 2). In addition, women hold about 40% of the senior leadership positions within higher education overall (Smith, 2017). While the number of women college presidents has increased since from 23% in 1986 to nearly 30% in 2017, this slope of increase is less than that of enrollment and graduation trends for women (Hannum et al., 2015; Johnson, 2017).

With the steady pipeline of women enrolling in higher education institutions and the growth in graduation rates at all degree levels for women, a parallel increase would be expected in the number of women faculty members, senior leaders, and presidents. Scholars have noted that the inequitable representation of women in leadership positions is problematic and have

recognized the importance of diversity of thought and perspective when making decisions (Longman, 2018). Gender diversity is critical in addressing recruitment and retention issues within leadership, accommodating more diverse student populations, and closing gaps in institutional knowledge (Hoobler, 2018). A need exists for higher education leadership to balance the landscape of women in higher education and reflect equal representation at every level of academia. In order to create equitable representation, environments must be created that consider the unique needs and attributes of women leaders.

The Global Landscape of Women in Higher Education

In many professional and workforce sectors, women lag in numbers and equity compared to their male counterparts (Fitzsimmons et al, 2014; Longman, 2018; Kiser, 2015; Krivkovich et al., 2017). Much of this phenomenon rests on the historical and structural societal constructs that disadvantage women. Specific to higher education, many researchers have studied and published on the landscape of women, including the growth in student enrollment, presence in faculty and administrative ranks, and the slow growth in leadership positions (Hannum et al, 2015; Johnson, 2017; Smith, 2017). It is also important to note that the disparity of women in leadership roles is a global concern and not one specific to the United States.

Scholars in Australia, China, Saudi Arabia, and the United Kingdom (UK) have conducted similar studies that identify and address the lack of women in leadership roles within higher education (Longman, 2018). These studies often cite continuing barriers for women, how women leaders are trained and developed, and other ongoing challenges, such as masculinist organizational cultures (White & Burkinshaw, 2019). Globally, women in academia are underrepresented as full professors; are prioritized less than men in recruiting practices, promotion, and retention; have limited geographic mobility; and experience gaps in pay (White

& Burkinshaw, 2019). For example, women in African higher education institutions experience barriers because of limited geographic mobility, while some women at higher education institutions in the UK face pay gaps more than double the national average (White & Burkinshaw, 2019). Women educators in South India cite socio-cultural barriers, including experiencing misogynistic attitudes in male-dominated disciplines, discrimination and marginalization, and divide regarding women's work (Longman, 2018). Similarly, women in China face cultural and socio-cultural barriers that shape their leadership opportunities; only 4.5% of Chinese women hold senior level leadership roles in higher education (Longman, 2018). Researchers continued to share findings that men have globally dominated formal leadership positions in higher education and that advancing women leaders is in the best interest of equitable opportunity and societal benefit (Hannum et al., 2015; White & Burkinshaw, 2019). Although the issue of representation is complex, it has been highlighted that greater representation improves outcomes. As female leadership is maximized and the number of women executives increases, organizations tend to perform better (Hoobler et al., 2019; Shepherd, 2017).

Women Leaders in Higher Education

Characteristics of Women Leaders

A range of characteristics exist that are associated with women's leadership and many are the direct result of societal norms, demands, and expectations. Although characteristics can differ dramatically based on industry and life experiences, research has indicated several common themes among women leaders. Generally, women are interpersonal leaders (Gipson et al, 2017; Huszczo & Endres, 2017; Karelia & Guillén, 2014; Nelson & Piatak, 2019; Nidiffer, 2003). Women's leadership styles are generalized as relationship-oriented, consensus-building, and

reflecting an ethic of care (Huszczo & Endres, 2017; Sanchez-Hucles & Davis, 2010). Women are also more likely to prioritize investing in others through personal and professional development, motivation, and collaboration than their male counterparts (Huszczo & Endres, 2017; Sanchez-Hucles & Davis, 2010). Through this person-centered approach, women are more likely to achieve buy-in from team members and, ultimately, produce favorable outcomes (Gipson et al, 2017; Huszczo & Endres, 2017). ; Gipson et al, 2017). While men are more task-oriented, women view organizational problems through a holistic lens (Gipson et al, 2017; Huszczo & Endres, 2017). Resilience, the ability to recover from adversity, is another characteristic associated with women leaders and often prompts appointments to leadership positions during times of crises, when interpersonal characteristics are deemed more essential **(**Gipson et al., 2017).

Men are viewed as agentic, or autonomous and self-controlled. Women leaders often have similar characteristics; however, agentic behaviors are often perceived negatively when demonstrated by women (Gipson et al, 2017; Huszczo & Endres, 2017; Rudman & Phelan, 2008; Rosette et al., 2016). Women leaders can be direct, assertive, task-oriented, and competitive, but, because these characteristics are not socially acceptable for women, they can result in an identity conflict (Karelia & Guillén, 2014). According to Nelson and Piatak (2019), “women are presented with two options to either conform to a masculine leadership style or conform to perceptions of stereotypes and agree that a feminine leadership style exists, which both reinforce the masculine perspective” (p. 4). When women adhere to traditionally accepted norms, they are viewed as less effective or valuable, and are deemed unfriendly or harsh when traditionally masculine traits are displayed (Hannum, 2015; Shepherd, 2017). Thus, it is important to also consider gender identity and its significance when approaching women’s leadership.

Gender Identity Development and Leadership Development

Identity is a socially constructed and complex phenomenon that is critical to leading effectively (Karelia & Guillen, 2014; Sanchez-Hucles & Davis, 2010). Identity refers to an individual's characteristics, how they view themselves, and what they consider to be personally meaningful (Karelia & Guillen, 2014; Sanchez-Hucles & Davis, 2010). Social roles are typically defined by others and assigned based on social norms; however, one's identity and established social roles do not always align. Identity development is a personal process for all leaders, but is especially personal for women leaders because real and perceived social norms often create dissonance between womanhood and leadership (Hoyt & Murphy, 2016; Yang, 2016). As leadership is often gendered, identity is a strong determinant of women's beliefs in their abilities to lead. Karelia and Guillen (2014) asserted that "the more favorable evaluation of the social category of women (leaders) an individual holds, the more positive her gender (leader) identity, and the more self-esteem she derives from it" (p. 205). This assertion presents opportunities to further develop women leaders and address systemic changes within higher education to embrace all leadership characteristics, even those characteristics traditionally categorized as masculine.

The characteristics associated with male leadership are vastly different from the characteristics associated with female leadership. For instance, women are often perceived as warm and communal and men are considered cold and agentic (Gipson et al., 2017; Huszczo & Endres, 2017; Karelia & Guillén, 2014; Nelson & Piatak, 2019). Leaders who are considered successful are expected to display self-standing, "masculine" characteristics, such as assertiveness, competitiveness, and the ability to resolve problems (Karelia & Guillén, 2014). Whether displayed by a woman or man in leadership, agentic leadership traits are viewed as the most effective (Huszczo & Endres, 2017). These traits incite further incongruence because

women leaders must decide whether to take on a gender-specific model of leadership or the "think-leader-think-male" stereotype (Nelson & Piatak, 2019).

Developing an identity as a leader is a primary component of leadership development. Due to the gendered acceptance of leadership characteristics, leadership development strategies are compromised because they are framed to use the same male-oriented standards (Burton & Weiner, 2016; Ely et al., 2011). However, an understanding of gender-role stereotyping and the acknowledgement of biases based on cultural and organizational assumptions, alleviates the dissonance between women and leadership. Knowledge of these biases and their implications empower women to disassociate personal leadership traits from gender (Burton & Weiner, 2016; Ely et al., 2011). Without intentional strategies to counter the effects of gender bias, leadership development strategies fail to address the specific needs of women leaders and the many intersections of their identities.

Intersectionality

Although many ideas and views of leadership are based on masculine and feminine attributes, this gendered approach excludes additional intersecting attributes that impact women leaders, particularly within women representing marginalized groups. Women of color often experience gendered racism due to the inability of others to separate individual aspects of the women's identities (Moorosi et al., 2018; Morales, 2019). In 1989, Kimberle Crenshaw coined the term 'intersectionality' to address multi-layered forms of discrimination and expose many of the gaps in traditional feminist and anti-racist dialogues. Crenshaw's work confronted the erasure of Black women's experiences as their race and gender discrimination claims were frequently overshadowed by privileged group members (Carbado et al., 2013; Crenshaw, 1989; Moorosi et al., 2018). Intersectionality extends beyond a single social category, but incorporates overlapping

experiences and domains of power (Nelson & Piatak, 2019; Sanchez-Hucles & Davis, 2010). These identities are material consequences; multiple intersections of oppression play significant roles in the trajectory of women leaders (Morales, 2019; Sanchez-Hucles & Davis, 2010). For instance, a woman of color in leadership who is differently-abled is more likely to experience barriers related to upward mobility than a white woman who does not have a disability.

The segregation of women with multiple marginalized identities in entry level positions limits those women's access to individuals who could support career advancement (Carbado et al., 2013, Moorosi et al., 2018; Sanchez-Hucles & Davis, 2010). An intersectional lens provides a more nuanced understanding of women leaders and their development. Such a lens shows that, while multiple identities intersect, they are not finite and can fluctuate throughout one's life (Moorosi et al., 2018). The intersection includes, but is not limited to, class, sexual orientation, parental status, and ability level. Leadership development strategies must incorporate an intersectional lens because such a lens considers how one learns, who one is, and how one leads (Moorosi et al., 2018). Intersectionality captures the complex human experience and identifies power and privilege in traditional forms of leadership study and how it contributes to the barriers faced by women in higher education.

Barriers for Women Leaders in Higher Education

A wealth of information exists on barriers that prevent women from advancing into senior leadership roles within higher education. Diehl (2014) categorized these barriers as individual barriers, organizational barriers, and societal barriers. Individual barriers include work/family conflict and communication style (Diehl, 2014). Organizational barriers include tokenism, exclusion from informal networks, lack of mentors and sponsors, salary inequities, gender discrimination, and workplace harassment (Diehl, 2014). Societal barriers include

cultural constraints on women's choices, perceptions of leadership related to masculinity, and gender stereotyping (Diehl, 2014). In regard to cultural barriers, it is deemed more acceptable for women (than men) to experience career interruptions due to familial responsibilities, such as caring for children or aging parents. These domestic obligations are exacerbated by social policies that emphasize women's responsibilities over men's responsibilities. For example, maternity leave is often favored over paternity leave (Schwanke, 2013).

Beyond these individual, organizational, and societal barriers, additional barriers include unsupportive leadership and micro-politics in the academy (Diehl, 2014; White & Burkinshaw, 2019). These two barriers are gender-based and directly affect a woman's ability to advance and succeed (Diehl, 2014). Organizations like the American Association of University Women (AAUW), ACE's Inclusive Excellence Group (IEG), and the Virginia Network have each worked to address gender-based barriers, such as the pipeline myth, glass ceiling, chilly climate, and leadership pathway (Blackchen, 2015; Britton, 2017; Hannum et al., 2015; Johnson, 2017).

Pipeline Myth

The pipeline myth asserts that too few women exist in the leadership progression who are qualified to hold senior positions in the academy (Johnson, 2017). Some higher education administrators would argue that fewer women are in leadership roles because fewer women desire to be there or have what it takes to succeed at higher levels of leadership (Hannum et al., 2015). The higher a woman rises in higher education administration, the less female colleagues she sees. Yet, data indicates that enough women are in the pipeline to fill available positions and women are graduating at a faster rate than men (Johnson, 2017).

The pipeline myth also demonstrates another barrier: too few women are available to mentor other women (Blackchen, 2015). The term 'womentoring' was coined to highlight the

need for senior women faculty members to mentor younger women professionals (Blackchen, 2015). The president of Benedict College, Roslyn Clark Artis, hinted at this term when she stated that "I think gender has been a bigger issue for me, quite frankly, than race," when asked about the significant barriers on her path to the presidency (Gray, 2018, p. 3). Artis described the fact that progressing through the ranks for women is about relationships and that women have not been exposed to or are not able to develop the relationships needed for presidential roles (Gray, 2018). The pipeline myth is more of a cover for the fact that women are available for leadership roles, but lack the relationships and exposure to be considered (Blackchen, 2015; Gray, 2018).

Glass Ceiling

The 'glass ceiling' is a common colloquialism for the "invisible or artificial barrier that prevents women from advancing past a certain level" into or obtaining leadership positions (Blackchen, 2015, p. 2). Given the number of graduates at all levels of academia, it is alarming that women do not hold the rank of professor at a statistically equivalent rate as their male colleagues (Johnson, 2017). Women faculty outnumber male faculty at the ranks of lecturer, instructor, and assistant professor and represents less than half of all full professors at degree-granting postsecondary institutions (Johnson, 2017). The invisible barrier for women faculty members exists at the ranks of associate and full professor (Johnson, 2017).

For women of color, the idea of a glass ceiling is more evident in higher education; women of color are more likely than white women to serve in lower ranking positions (Johnson, 2017). Among faculty ranks, women of color represent 3% of assistant and associate professors and 1% of full professors at degree-granting postsecondary institutions (Johnson, 2017). The experience for women of color is often characterized by the double barrier of having multiple marginalized identities (Davis & Maldonado, 2015). Between 1986 and 2006, the percentage of

women of color presidents rose from 3.9% to 8.1% (Davis & Maldonado, 2015). In 2011, women of color, specifically Black women, held 6% of the role of college presidents, yet only two led predominantly white institutions (Davis & Maldonado, 2015).

Due to racism and discrimination, women of color are often remanded to career opportunities at historically black colleges and universities (HBCUs). Yet, even at HBCUs, women's opportunities are relegated to majors that cater to gender role stereotypes (e.g., teaching, home economics), while other academically rigorous subjects are reserved for men (Davis & Maldonado, 2015). Black women continue to be treated differently, experience unsupportive systems, are required to perform at higher levels than male colleagues, and face the intersection of racism and sexism making it difficult for them to fit into the white academy (Davis & Maldonado, 2015). The ability to overcome the glass ceiling for women of color is more challenging than for their white female counterparts (Ortega-Liston & Rodriquez Soto, 2014).

Chilly Climate

Initially coined by Hall and Sandler in 1982, 'chilly climate' describes a disparity between men and women in higher education (Britton, 2017; Hall & Sandler, 1982). Maranto and Griffin (2011) describe chilly climate as the exclusion, devaluation, and marginalization of women faculty members' achievements. This chilly climate exists because women experience harassment from colleagues, students, and departments where the environment is inhospitable and there are biases in practices, inequitable allocation of work responsibilities, and policies that penalize women's roles balancing work/family responsibilities (Britton, 2017).

In addition, women faculty members do not feel a sense of belonging in their departments, do not have social networks, and are typically not included in departmental

discussions about research, teaching, and promotion (Maranto & Griffin, 2011). The chilly climate creates the need for women to rely on informal collaboration and mentoring (Britton, 2017; Maranto & Griffin, 2011). Women of color, including Latina faculty members, have described experiences where students and other faculty members have assumed that they are service workers and not professors, or have language barriers that impact their abilities to advance (Ortega-Liston & Rodriquez Soto, 2014). The feeling of isolation due to a lack of diversity is more apparent for the broad spectrum of women of color than white women (Davis & Maldonado, 2015; Ortega-Liston & Rodriquez Soto, 2014). Moreover, both the glass ceiling and chilly climate are extreme barriers that exacerbate the institutional oppression of women in the structure of higher education.

The Leadership Pathway

In addition to the glass ceiling and chilly climate, the pathway to leadership positions within higher education is not a direct, predetermined route. Ortega-Liston and Rodriguez Soto (2014) described the actual route as more of a labyrinth with a maze-like complexity. Higher education, in general, is a complex organization to navigate, whereby advancement is dependent on one's breadth of work, scholarship, research, experience, and longevity. The assumption by some leaders in higher education is that women who want to advance must follow a prescribed process to achieve promotion. In reality, women must persist and overcome obstacles if they want to pass through the labyrinth of higher education successfully. Accordingly, no direct or straightforward route exists by which to accomplish this goal (Ortega-Liston & Rodriguez Soto, 2014).

The notion of advancing through the labyrinth of higher education, often causes professional women to weigh familial responsibilities against professional gains (Ortega-Liston

& Rodriguez Soto, 2014). According to ACE, 32% of women presidents altered their career progress to care for their families, compared to 16% of men (Bartels, 2018). The decision to balance family and career aspirations contradicts the notion that, within higher education, every employee has an equal opportunity to advance and not be impacted by workplace barriers (Ortega-Liston & Rodriguez Soto, 2014). For women, having equal access to on-the-job educational opportunities and fair employment practices may not reflect workplace realities (Ortega-Liston & Rodriguez Soto, 2014).

Hannum et al. (2015) identified additional leadership pathway barriers for women, which include not having a leadership identity, the lack of opportunity or support, discouragement, sabotage, and different expectations for men and women. The leadership pathway models used for a competency framework are based on masculine leadership principles and practices (White & Burkinshaw, 2019). As a result, men are considered default leaders, while women are considered atypical leaders with the belief that they have violated accepted norms of leadership when they exhibit male leadership characteristics (Hannum et al., 2015). The leadership pathway through the glass ceiling, while experiencing a chilly climate, navigating the labyrinth of higher education, and developing a leadership identity are barriers that can be discussed and addressed through formal and informal networks, mentoring, and training.

Leadership Programming for Women in Higher Education

Several studies have shown that having women's only leadership development (WOLD) programs or women's leadership programs contribute to increased opportunities for women leaders in higher education (Brue & Brue, 2016; Brue & Brue, 2018; Debebe et al., 2016; Ely et al., 2011; O'Neil et al., 2015). Rationales for why women benefit from WOLD programs focus on the intersections of gender, identity construction, mentorship, networking, and the ownership

of leadership identity (Beddow, 2018; Brue & Brue, 2018; Day et al., 2013; Derue & Ashford, 2010; Ely et al., 2011). Critics of WOLD programs focus on the lack of exposure to other genders and the impact that lack has on the organization that is being led (Brue & Brue, 2018). It is this exact concept that warrants the need for WOLDs — by focusing on women only, programs for professional development are emphasizing the role that gender plays in social identity construction and perception as a leader (Brue & Brue, 2018).

Traditional leadership programs (i.e., programs that do not specifically focus on gendered programming) focus on distinct skills that are emphasized for all leaders. These skills are tailored toward behaviors that male leaders typically display. When these same behaviors are displayed by women leaders, those women are perceived as cold, aggressive, inauthentic, and less competent (Beddow, 2018; Brue & Brue, 2018; Ely et al., 2011). Consequently, when women leaders display traditionally feminine behaviors, their leadership is considered inferior and the women are viewed as dubious, weak, and powerless (Brue & Brue, 2018; Debebe et al., 2016; Ibarra et al., 2013; O'Neil et al., 2015). These experiences have been validated in autoethnographic studies and case studies (Brue & Brue, 2018; Debebe et al., 2016).

Woman to Woman: Identity, Connection, Validation, and Feedback

Scholars focusing on developing women leaders have found several key elements that should be emphasized in WOLD programs to address the barriers faced by women: developing a leadership identity, fostering relationships and belonging, highlighting/emphasizing personal agency, leaning into relational and collaborative leadership, mentorship and coaching for promotional opportunities, and evaluation of skill sets and organizational structures (Brue & Brue, 2016; Brue & Brue, 2018; Debebe et al., 2016; Debebe & Reinert, 2014; Ely et al., 2011;

Ibarra et al., 2013; O'Neil et al., 2015). At the center of WOLD is the development of a leadership identity that elevates and acknowledges the impact of gender on self-perception.

Actualizing a leadership identity allows leaders to communicate that identity to others (Ely et al., 2011). In addition to teaching women how to convey their leadership identity to others, a need exists for WOLD programs to prioritize how race and class contribute to women's social identities (Debebe et al., 2016; O'Neil et al., 2015). This prioritization of how women leaders' social identities impact their performances, organizational culture, and purposes is paramount to the educational opportunities available for women to reflect and assess their motivations for leadership aspirations (Brue & Brue, 2018; Debebe et al., 2016; Ely et al., 2011).

Connecting with Other Women Leaders

The desire and need for women to connect with other women who are currently leaders or who aspire to become leaders is reflected in many anecdotal research studies about the efficacy of WOLD programs (Brue & Brue, 2018; Debebe et al., 2016; Ely et al., 2011). It is during these WOLD programs that women are able to reflect on the intersections of culture, class, sex, gender, sexual orientation, and many other social identities that contribute to their leadership perspectives (Debebe & Reinert, 2014). WOLD programs may prioritize gender, but program leaders still must be cognizant of not excluding other social identities so as not to belittle women's leadership development unintentionally (Brue & Brue, 2018). In addition, due to the realities that social identities are either privileged or oppressed, acknowledging that women leaders will have identities in both categories may help them to understand the environments in which their decision-making may be elevated or constrained (Brue & Brue, 2018; Debebe & Reinert, 2014; O'Neil et al., 2015).

Belonging

Learning with and from other women leaders allows participants to learn in an environment where they are in the gender majority (Brue & Brue, 2018). Women leaders are constantly faced with challenges that force them to prove they belong due to the lack of congruence between what constitutes leadership and gender roles (Stead & Elliott, 2019). In WOLD program conversations, women are able to discuss experiences and challenges directly tied to their gender. While Mavin and Grandy (2016) focused specifically on elite leaders, or those individuals who occupy executive positions, they highlighted an interesting variable that impacted most women in leadership positions: exercising power in the organizational position they occupy, but being socially ostracized due to their gender. WOLD programs provide the space and opportunity for women to celebrate the agency they have as women, while also empowering them to strategize ways by which to evolve their organizations' institutional understanding of leadership (Ely et al., 2011).

Professional Coaching

WOLD programs offer women the ability to immediately apply what they have learned through role playing scenarios with opportunities for feedback and reflection (Debebe et al., 2016). Post-program evaluation of the skills developed in these programs is essential to the continued success of the program and value of the services it provides (Brue & Brue, 2016; Debebe et al., 2016; Vinnicombe et al., 2013). Vinnicombe et al. (2013) emphasized the need for professional coaches to extend the knowledge learned during WOLD programs. Through formal partnerships, professional coaching provides opportunities for women to reflect on and process stressors as well as strategize how to respond in future situations (Brue & Brue, 2016; O'Neil et al., 2015).

American Council on Education (ACE) and the Women's Network

The Women's Network is a system of networks operating under the ACE Inclusive Excellence Group. ACE, an organization of associations and higher education institutions, officially organized in 1918 to liaise between the federal government and all public and private higher education institutions in the United States (Cook, 1998). From its inception, ACE has worked to advance the involvement of women as students and leaders in higher education through the establishment of such groups as the Committee on War Service Training for Women College Students (1918-1920), Committee on the Training of Women for Professional Service (1920-1922), Commission on the Education of Women (1953-1962), and the ACE Women's Network through the ACE Office of Women in Higher Education (OWHE, 1973-2011) and ACE Inclusive Excellence Group (2011-present) (American Council on Education [ACE], 2018; ACE, 2020b; Cook, 1998; Elliott, 2014; Holmgren, n.d.; Kolbe, 1919; Martin, 1920; Mather, 1995; Shavlik & Touchton, 1984; Teague & Bobby, 2014). Today, ACE actively engages in national, regional, and local issues, and develops programs while advocating for legislative changes to advance equity and access in higher education (ACE, 2020b; Cook, 1998). The ACE Women's Network continues to serve as a conduit for women leaders who are intentional about leadership development and progression.

The Office of Women in Higher Education

The OWHE was established in 1973 and was primarily charged by ACE to promote women's leadership and identify specific women across the nation qualified for executive leadership positions in colleges and universities (Holmgren, n.d.). In its infancy, the OWHE helped institutions reach compliance with newly passed Title IX and equal opportunity legislature (ACE, 2018; Mather, 1995). The OWHE also collected, analyzed, and disseminated

data and publications relevant to women in higher education and leadership (Elliott, 2014; Holmgren, n.d.; Mather, 1995). However, the OWHE's leadership longed to find a way to help women build confidence and overcome barriers directly rather than spending all of their resources educating others on the value of women leaders (Elliott, 2014).

In 1977, the OWHE launched ACE's National Identification Program for the Advancement of Women in Higher Education (ACE/NIP). The ACE/NIP was a nationwide organization of individual state networks led by a central executive committee. The goals of the program were to help women realize their potential and increase the number of women in top positions across higher education by dispelling the pipeline myth and eliminating the artificial glass ceiling (ACE, 2018; Mather, 1995). In 2011, the OWHE was dissolved, and the ACE/NIP was renamed the ACE Women's Network to be more responsive to all senior leadership constituencies (ACE Women's Network, 2016; ACE, 2020a; Elliott, 2014). The Women's Network has supported women for decades through state network activities, national forums, and other national initiatives. The Women's Network has also worked to develop relationships that endorse national and state support for the advocacy of women in higher education (Holmgren, n.d.). The organization continues to pride itself on the partnerships and collaborative networking environments that result from its four-part structure: Women's Network Executive Council (mentors to state network chairs), state networks, presidential sponsors, and institutional representatives (ACE Women's Network, 2016; ACE, 2020a). Women leaders in the United States primarily interact with the ACE Women's Network through volunteer state networks and institutional representatives at colleges and universities (ACE Women's Network, 2016).

State Networks

State networks have been an integral part of the Women's Network since its founding in 1977 (ACE Women's Network, 2016). The responsibilities of these state networks include creating effective strategies for identifying qualified women leaders and methods to advance those women into executive leadership positions within the state. As of 2016, the Women's Network had 47 active state networks with an engagement of over 8,000 women (ACE Women's Network, 2016). While the overall structure of state networks varies, all of the networks consist of a voluntary planning board, state chair, institutional representatives, and endorsement and support from college presidents of all genders within that state (ACE Women's Network, 2016; Teague & Bobby, 2014).

The state networks have created a variety of programs and initiatives in response to the needs of the women in their states (ACE Women's Network, 2016). Some of these programs and initiatives include state or regional conferences, workshops, webinars, awards, leadership programs, opportunities for students, and receptions for women executives and legislators in the state (ACE Women's Network, 2016; Teague & Bobby, 2014). The researchers of this study conducted a review of 30 state network websites revealed that a majority offer annual conferences with topics related to the advancement of women. Additionally, state networks provide education, support, networking, and training for women working in higher education through those conferences. Conference sessions aim to help women overcome the common barriers experienced by women in higher education leadership and focus on topics such as personal/professional branding, conquering imposter tendencies, negotiating, authentic leadership, emotional health, charting a career path, intersectionality, and the glass ceiling experienced by women of color (ACE Women's Network: Ohio [ACE WNO], 2018; ACE

WNO, 2019; ACE Women's Network: Northern California [ACE NorCal], 2019; Nebraska Women in Higher Education Leadership [NWHEL], 2018; ACE Women's Network: Pennsylvania [PAACE], 2019; Texas Women in Higher Education [TWHE], 2018).

Eight state network websites promote other developmental opportunities for women in higher education. For example, Indiana, Oregon, Tennessee, and Vermont created virtual professional development opportunities for women in their states. Indiana, Tennessee, and Vermont scheduled multiple synchronous discussions in the summer of 2020 with topics related to leading during a pandemic, work/life balance, and allyship during civil unrest (ACE Women's Network: Indiana, 2020; Women in Higher Education in Tennessee [WHET], 2020; (Vermont Women in Higher Education [VWHE], 2020). Both Iowa and Michigan offer mentoring and shadowing programs for mid-level women leaders in higher education who aspire to become senior and executive leaders (ACE Women's Network: Iowa [IOWAWHE], 2020; Michigan American Council on Education Women's Network [MI-ACE], 2020a). Finally, Michigan initiated a Women of Color Collaborative, a convening of women within the state network with the goals to provide a forum for support and to advance the careers of women of color in the state (MI-ACE, 2020b). Within the state networks, institutional representatives (IRs) are volunteers responsible for ensuring that information about the Women's Network and its state networks are shared at their respective institutions. IRs are also responsible for actively advocating for women's professional development and leadership advancement at their institutions (ACE Women's Network, 2016).

The Virginia Network

Virginia was one of the original state networks developed in 1977 as part of ACE/NIP (Douglas & Pritchett, 2012; The Virginia Network, n.d.-b). Originally named the Virginia

Identification Program, today's Virginia Network for Women in Higher Education (colloquially the "Virginia Network") operates as a 501(c)(3) non-profit organization led by a volunteer state chair and executive planning board (Douglas & Pritchett, 2012). The mission of the Virginia Network is to support women leaders in higher education at all levels.

The network supports its mission through two major initiatives: the Senior Leadership Seminar and an annual state conference (ACE Women's Network, 2016; Douglas & Pritchett, 2012). The Senior Leadership Seminar, an opportunity for women in higher education, focuses on personal and professional development through guest speakers, panel discussions, personal assessments, workshops, and a legislative/policy-making awareness session (Douglas & Pritchett, 2014; Virginia Network, 2020; ACE Women's Network: Virginia, n.d.). The annual conference covers many of the same topics and sessions offered by the other state networks, in addition to dedicating an annual conference every three years specifically to women of color. The Virginia Network Women of Color Conference offers networking and bonding opportunities with and for women of color and allows all participants to gain a better understanding of the perspectives and barriers facing women of color in higher education (Baltodano et al., 2012; Douglas & Pritchett, 2012).

Chapter Summary

While women have made significant strides in higher education, women's only leadership programming is still needed for career advancement actualization. The work of the ACE Women's Network continually provides leadership programming to address barriers faced by women. Understanding whether the programming provided by the Virginia Network is effective and meets the needs of women in the Commonwealth of Virginia is vital. Chapter III will detail the study methodology used to collect data for analysis of the professional experiences

of women in Virginia's higher education institutions and the Virginia Network's ability to provide programming to address women's needs.

Chapter III: Methodology

The number of women in higher education has increased in overall enrollment numbers and degrees earned, yet women continue to face multiple barriers toward advancement within the academy (Hannum et al., 2015; Johnson, 2017; Smith, 2017). Organizations such as ACE, the ACE Women's Network, and the Virginia Network address these barriers and provide programming to support women in higher education through professional development opportunities and structured communities that facilitate advancement in the field. Using combined social justice leadership and process evaluation frameworks, this study aimed to evaluate the effectiveness of the Virginia Network's programming. This chapter details the exploratory sequential mixed method process used to answer the research questions posed below.

Statement of Purpose and Research Questions

The purpose of this study was to understand the needs of women in higher education roles across the Commonwealth of Virginia. This research capstone project also explored the ways by which the Virginia Network addresses the needs of women. The outcomes of this research study will help the Virginia Network actualize its mission of recruiting and retaining women leaders in higher education across the Commonwealth. Two research questions will be addressed in this paper:

1. What are the needs of women in higher education across the Commonwealth?
2. In what ways does the Virginia Network address the needs of women in higher education?

Theoretical Framework

The exclusion and eventual inclusion of women in higher education has elevated the need for professional development opportunities for women who seek career advancements (Brue &

Brue, 2018; Debebe et al., 2016; Ely et al., 2011) Previous examinations of women's leadership programming have focused on transformational leadership theory, highlighting social identities that are reinforced by society's patriarchal expectations of gender roles (Beddow, 2018; Brue & Brue, 2018; Debebe et al., 2016; Ibarra et al., 2013; Ely et al., 2011; O'Neil et al., 2015). This reliance on providing traditional leadership programming with an emphasis on behaviors that male leaders are often praised for (and women leaders are adversely impacted by) raises an important opportunity to highlight the need to emphasize social justice leadership (Brue & Brue, 2018; Debebe et al., 2016; Theoharis, 2007; Wang, 2018). This exploratory sequential mixed methods study was, therefore, informed by two frameworks: social justice leadership and process evaluation. Both frameworks are necessary in that they provide context for creating and evaluating leadership development programming for women in higher education.

Social Justice Leadership

Scholars focusing on social justice leadership collectively define this concept as the acknowledgement of marginalization and action toward eliminating disparities faced by oppressed groups (Bogotch, 2002; Dantley & Tillman, 2006; Dantley & Tillman, 2010; DeMatthews & Mawhinney, 2014; Furman, 2012; Gerwitz, 1998; Potter et al., 2014; Taysum & Gunter; 2008; Theoharis, 2017). Wang's (2018) social justice leadership conceptual framework was influenced by the aforementioned scholars and explicitly defines social justice leadership as the ability to "engage in democratic, inclusive, and transformative practices to change social structures and influence all stakeholders to collegially promote justice and equity" (p. 476). This framework relates to the goal of the Virginia Network, to "create an educational, social, and political climate in which women, in all their diversity, can participate equally with men in setting public agendas" (Virginia Network, n.d.-a, para. 1). This declaration of emphasizing a

diverse environment must be informed by an understanding of the Virginia Network's current climate. The application of a social justice leadership lens allows the network to know if it is meeting its stated goal.

The tenets of social justice leadership theory applicable to educational leadership include intentions and actions that are "action-oriented and transformative, committed and persistent, inclusive and democratic, relational and caring, reflective, and oriented toward a socially just pedagogy" (Furman, 2012, p. 195). Jean-Marie et al. (2009) also noted that the training of leaders for social justice must include opportunities for "critical reflection and critical discourse" (p. 20). For women in higher education, leadership programs that implement tenets of social justice leadership into their programming create efficient and effective approaches to expanding opportunities.

For the purpose of this study, social justice leadership is defined as providing an intentional focus on the intersections of inclusion, celebrations of difference, and career achievements. These factors were operationalized into the study instruments via direct questions that provided participants with opportunities to discuss how inclusion, differences, and career successes impacted their lives. In doing so, this study attempted to not just emphasize one social identity over another, but, rather, provided intentional thought regarding how these intersections of identity play a role in the development of women as leaders. Thus, this study evaluated the Virginia Network through a social justice leadership practice lens by blending the research and conceptual frameworks of Wang (2018), Furman (2012) and Jean-Marie et al. (2009) to center on the following tenets: application of action-oriented, inclusive, democratic, and transformative practices and the availability of opportunities for critical reflection and critical discourse. Critics of using social justice leadership as a framework for educational leadership emphasize that

focusing on these intersections can lead to further marginalization (Capper & Young, 2014; Furman, 2012; Wang, 2018). As such, it is important to note that most research regarding social justice leadership is conceptual and only few studies exist that focus on social justice leadership as a practice (Furman, 2012).

Process Evaluation

Process evaluation is a structural framework that is applied to assess how well a social program operates and whether the program's services are effectively received by a satisfactory portion of the target population (Rossi, Lipsey, & Henry, 2019). Social programs are those programs developed to address social problems, just as the ACE Women's Network was developed to address issues of equity in leadership roles for women in higher education (Rossi, Lipsey, & Henry, 2019). In order to be successful, social programs must provide necessary services to an acceptable percentage of the target population, that those who receive the services must be satisfied with the services received.

For this study, assessment criteria for the Virginia Network's process evaluation was determined through discussions between the capstone team, the Virginia Network's executive board members, and a review of the administrative standards detailed in the *ACE Women's Network State Chairs Handbook* (ACE Women's Network, 2016). Text by Rossi, Lipsey, and Henry (2019) provided evaluative context for measuring a program's success through service utilization (i.e., the intended target population receives the intended services) and organizational function (i.e., the program is successfully providing the services needed by the population). This study's researchers used this concept to inform the development of survey questions used to collect and measure necessary social program assessment variables. This framework was also leveraged to ensure that the tenets of the social justice leadership theory are being upheld during

the program's execution.

Weaving social justice leadership theory and process evaluation throughout this study as guiding frameworks allowed this study's researchers to evaluate whether the Virginia Network has critically reflected on the programming it offers based on the needs and satisfaction of its constituents. These frameworks collectively emphasized whether the Virginia Network is achieving success based on equitable participation and access across intersections of women's characteristics. As the demographics of women in higher education continue to diversify, applying these frameworks concurrently allowed the researchers to determine whether the Virginia Network's programming is inclusive and transformative.

Research Design

The researchers used a mixed methods approach to answer the study's research questions. In mixed methods research, researchers collect, analyze, and interpret both quantitative and qualitative data within a single research study (Creswell & Creswell, 2018; Creswell & Plano Clark, 2011). The rationale for selecting this method was due to the inability for quantitative or qualitative data alone to sufficiently describe the needs and barriers facing women in higher education in Virginia, while also evaluating the impact of the Virginia Network's programs. Combining these two types of data allows researchers to more thoroughly explain the data's findings and formulate recommendations.

Exploratory Sequential Mixed Methods Design

The capstone research team used an exploratory sequential mixed methods research design, where the collection and analysis of the data is conducted in two separate phases (Creswell & Creswell, 2018; Creswell & Plano Clark, 2011). The structure of this design is outlined in Figure 1. The qualitative data was collected and analyzed in the first phase, while the

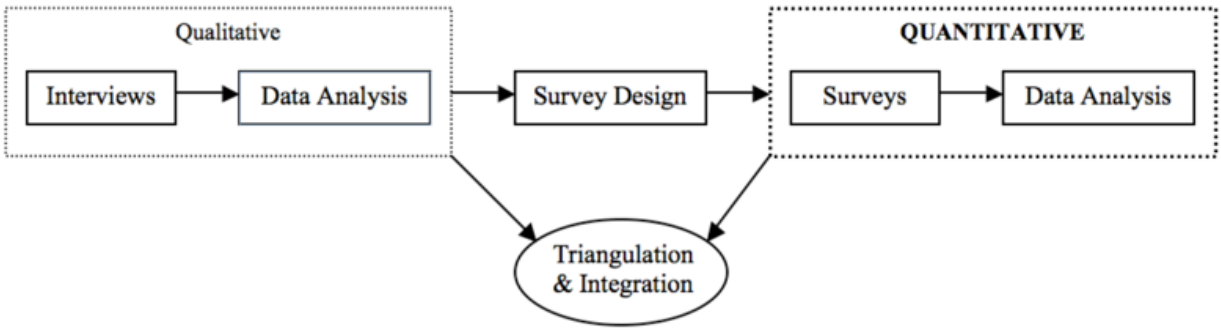
quantitative data was collected and analyzed in the second phase with the intent to further explain the qualitative findings (Creswell & Creswell, 2018; Creswell & Plano Clark, 2011). In the qualitative phase, researchers conducted one-on-one interviews with individuals who identified as women and were currently employed at degree-granting higher education institutions in Virginia. The purpose of the interviews was to develop an understanding of the professional and leadership development needs of women in higher education in the Commonwealth as they vary by career stage and aspirations.

The second (i.e., quantitative) phase of the study consisted of a survey distributed to any woman employed at a higher education institution in the Commonwealth. The aim of this survey, with its questions and intent influenced by the outcomes of the qualitative interview data analysis, was to more broadly collect information about the developmental needs of women, assess women's familiarity and satisfaction with the Virginia Network and its programming, and recommend opportunities that the Virginia Network could offer to its constituents.

Priority is given to the quantitative data in this study because the primary request of the capstone client was to evaluate the program's impact on women in higher education in Virginia and assess how familiar the Virginia Network's target population is with its existence. This data was captured through the quantitative survey questions in the second phase of the research study.

Figure 1

Exploratory Sequential Design



Note. Adapted from A Mixed Methods Approach to Technology Acceptance Research (p. 11) by P. F. Wu in *Journal of the Association for Information Systems* October 2011, doi: 10.17705/1jais.00287.

Rationale for the Data Collection Methods

Data collection methods included individual interviews and a survey. A one-on-one interview allowed for the examination of issues from a participant's personal perspective and provided researchers with descriptions of that participant's feelings, opinions, and attitudes about particular topics (Salkind, 2007). One-on-one interviews also allowed the researchers ample opportunities to clarify unclear questions for the participants and seek clarification of responses from the participants when necessary. In lieu of face-to-face interviews, which were highly discouraged due to the ongoing COVID-19 pandemic, the one-on-one interviews were conducted via the Zoom video conferencing platform. This delivery method allowed for ease of scheduling and opportunity as no local or regional travel was necessary for participation.

Surveys are beneficial to the chosen research design due to their low cost, the ability to include a large number of participants, and the rapid turnaround of the data collection for analysis (Creswell & Creswell, 2018). The cross-sectional, mixed methods survey captured the experiences of women working in higher education. Cross-sectional surveys allow researchers to make inferences about a population of interest at one moment in time (Lavrakas, 2008). Web surveys provide a feasible and low-cost option for researchers, particularly when email is chosen as the primary mode of communication, and allow for a large number of responses to be collected in a short amount of time (Dillman et al., 2014). REDCap, an online application that served as a secure data collection tool for researchers to design surveys and collect responses, was selected as the researchers' chosen survey platform.

Qualitative Phase

Participants

Individuals identifying as a woman, aged 18 or older, and currently employed at a degree-seeking higher education institution in Virginia were invited to participate in one-on-one interviews to ensure that the data collected captured the needs and experiences of all women in the field. Ideally, researchers desired to recruit a minimum of five women in each of the career phases (i.e., idealistic achievement, pragmatic endurance, reinventive contribution) as defined by O'Neil and Bilimoria (2005). Women in the first career stage, idealistic achievement, are typically very internally motivated and actively take steps to advance their careers in ways to ultimately achieve satisfaction and success. They often use an internal or self-focused approach to organizational change and are not derailed by negative organizational environments. It is also important to note that women typically begin confronting concerns with career and family during this phase.

The second stage, pragmatic endurance, generally consists of women whose career perspectives have shifted to a more practical nature, with an understanding that career advancement now is largely impacted by others, personally and professionally. During this stage, it is likely that women have acquired multiple familial and community obligations that challenge the career centrality experienced in the previous stage. Critical decisions and transitions tend to occur during this stage.

Finally, women in the third stage, reinventive contribution, have reached a phase where they are able to contribute to their organizations, families, and communities without losing themselves in the process. Women in this stage tend to define success as recognition, respect, and the living of well-integrated lives while providing service to others (O'Neil & Bilimoria, 2005).

Data Collection and Procedures

The one-on-one interviews elicited the views and opinions of the participants and provided a depth of insight not possible through quantitative data collection methods (Creswell & Creswell, 2008; Creswell & Plano Clark, 2011). The interviews were semi-structured and consisted of open-ended questions to allow for conversational interactions (Creswell & Creswell, 2018). Researchers also used predetermined prompts to elicit responses when the participants indicated that they were unsure of how to respond (see Appendix A). Qualitative interview questions were pretested with adult individuals employed in Virginia higher education who were unfamiliar with the study to ensure sound question construction and to measure content validity (i.e. the ability for the collected data to reflect the intended content) (Creswell & Creswell, 2018; Creswell & Plano Clark, 2011). The specific tool used to review the interview questions was the Survey/Interview Validation Rubric for Expert Panel (VREP) (see Appendix B).

Recruitment methods for interview participants included the sharing of the announcement by email via professional organizations in the state (e.g., Virginia Network, Association of Fundraising Professionals, Council for Advancement and Support of Education, Social Work organizations, Student Affairs organizations) as well as telephone and direct email invitations to qualified participants as discovered through research of Virginia higher education institutions' websites (see Appendix C). Researchers used their personal social media accounts (e.g., Twitter, Facebook, LinkedIn) to invite participation by qualified individuals (see Appendix D). On all recruitment materials, interested individuals were asked to complete a Google Form to give researchers necessary contact information for scheduling interviews (see Appendix E). This method of identifying participants in any way possible is evident of convenience sampling (Emerson, 2015).

Snowball sampling was leveraged in all instances by encouraging recipients to share the invitation to participate in the qualitative portion of this research study with others in their network. Snowball sampling is a sampling method whereby researchers invite individuals to share the invitation with friends, colleagues, and acquaintances (Emerson, 2015). Researchers made weekly social media posts to encourage qualified participants to register to participate and to share the invitation with others. Additionally, all of the participants who successfully completed an interview were entered into a drawing to win one of two American Express gift cards. All of the participants' names were entered into the Wheel of Names (https://wheelofnames.com/), which researchers used to randomly selected the first winner's name. Researchers removed that winner's name and spun the Wheel of Names again to select the second winner.

Researchers began to schedule one-on-one interviews after at least three individuals completed the Google Form indicating participation interest. Scheduling consisted of a personal email from the researcher who would conduct that particular interview, asking the potential participant to select an interview time from a list of options. Interviews were conducted as soon as they could be scheduled. If a participant did not respond to the scheduling email, a second email was sent one week later. If the participant still did not respond, no further outreach was conducted by the researcher and the individual did not participate in the study.

The scheduling and conducting of interviews continued until saturation was achieved for all three career stages, but the researchers were also limited by time constraints due to the nature of this capstone project. Researchers interviewed seven women in the idealistic achievement career stage, eight women in the pragmatic endurance career stage, and eight women in the reinventive contribution career stage. To reduce bias and interviewer influence, no researcher interviewed a participant who was an acquaintance.

All interview participants reviewed the Research Participant Information Sheet (see Appendix F) prior to the one-on-one interview. Review of the information sheet was required because the interview was recorded and personal information could have been shared during the conversation. Recording the event allowed researchers the ability to review and analyze the completed interview (Creswell & Plano Clark, 2011). Participants gave their consent to the details in the information sheet by continuing to participate in the interview process.

Researchers then conducted the interview sessions individually using Zoom, an online video conference platform, which had the ability to record both audio and video for meetings. All of the interviews included one researcher and one participant. All four researchers participated as interviewers. To enhance confidentiality and security, researchers explained that

the participants may turn off their video during the interviews if they desire. The audio and video files were stored securely on Google Drive. Researchers used Otter, an online transcription service, to transcribe each recording for data analysis (http://otter.ai). The interview audio recordings were uploaded to Otter using coded identifiers in the file name rather than personally identifiable information. While the transcripts were being generated, recordings were stored securely on Otter's website. When the transcripts were complete, the transcripts were downloaded by the researchers and all of the recordings and transcripts were immediately deleted from the Otter website.

In the transcripts, interview subjects' names were replaced with two-part, three-digit codes. The first number of the code represented the interviewer/researcher conducting that particular interview (1 - Stevara Clark; 2 - Jenaé Harrington; 3 - Reshunda Mahone; 4 - Kristin Smith). The second and third digit of the code represented the participants in order of their participation with that particular interviewer. One copy of the key document that linked the subject code with direct identifiers existed and that key was stored with protection in Google Drive. It was only shared with immediate members of the research team. No identifying information was made available to anyone beyond the immediate research team. The interview transcripts were saved on Google Drive with access granted only to members of the immediate research team. The key will be destroyed after successful submission and acceptance of this final capstone project.

Data Analysis

Researchers employed both deductive and inductive coding techniques through NVivo, computer-assisted qualitative data analysis software, to analyze the qualitative data. The team employed a provisional approach for deductive coding for the first cycle, which involved the

establishment of a predetermined list of codes informed by this study's literature review and guiding frameworks of social justice leadership theory and process evaluation (Saldaña, 2016). Provisional coding is commonly used in research studies that involve the corroboration of prior research rather than the development of new, grounded theory. Additionally, this type of coding assists researchers in ensuring that the data is analyzed for significant components uncovered in the literature and remains aligned with the selected frameworks (Saldaña, 2016).

For the second cycle of qualitative coding, researchers identified the most frequently used deductive codes and sought to more thoroughly analyze these areas for emergent subthemes. While the first cycle of coding ensured that the research team analyzed the data within specific areas of interest, the second cycle's technique allowed for inductive subthemes to emerge within the broader deductive categories (Saldaña, 2016). The results were analyzed using the social justice leadership theory and process evaluation frameworks to measure whether women have been provided opportunities for critical reflection, critical discourse, and/or integrates a pedagogy that relates to inclusion, ethics, and social justice (Furman, 2012). From a process evaluation lens, the coded data was analyzed to assess coverage and bias in Virginia Network program participation (Rossi, Lipsey, & Henry, 2019).

Data Integration & Triangulation

In deciding to use an exploratory sequential mixed methods design, the intent of the researchers was to use the data from the qualitative phase to inform the development of survey questions for the quantitative phase (Creswell & Plano, 2011). Data integration is conceptualized when methods of data collection and analysis are linked. In this study, integration occurred through building, which occurs when results from one data collection procedure inform the data collection of the other procedure (Fetters, Curry, & Creswell, 2013, p. 2140). Through the qualitative data analysis, researchers selected appropriate findings to build upon (Creswell &

Creswell, 2018). The researchers analyzed the qualitative data to determine themes that accurately depicted the experiences that were detailed by the interviewees. The researchers developed a table of prominent themes that were useful during the design of *A Survey for Women in Virginia Higher Education*, which was disseminated to the larger population of women employed at higher education institutions in the Commonwealth of Virginia. This table of themes assisted the researchers in determining different categories of questions and how to best organize the survey.

Survey questions were framed around the following topics: needs, barriers, supervisor traits, knowledge of and experience with the Virginia Network, experience with Senior Leadership Seminar, and knowledge of campus Institutional Representatives. For example, job satisfaction, mentorship and sponsorship, supportive and flexible leadership, work/life balance, and equitable salaries emerged as sub-themes for needs of women which informed responses to the quantitative interview question, *In terms of my career, my top 3 needs are*. Participants were asked to select up to three responses. Because supportive and flexible leadership were identified as salient needs, researchers recognized this as an additional domain of importance to explore in the quantitative phase with the question, *I need a supervisor/leader who is*. Sub-themes also emerged for barriers experienced by women which were used as responses to the question, *I have faced the following barriers in the last 3 years working as a woman in higher education* (see Appendix G). Prior to dissemination in the larger population, the survey instrument was tested with individuals who were not eligible for the study to further refine the survey questions.

Quantitative Phase

Participants

A Survey for Women in Virginia Higher Education, the survey that drove the quantitative portion of the study, aimed to measure how the Virginia Network addresses and influences the success of women leaders in the Commonwealth of Virginia (see Appendix G). This survey had a broad reach with a target population of 51,000 full- and part-time employed women at degree-granting higher education institutions in the Commonwealth (National Center for Education Statistics, 2019b). Faculty, staff, and administrators were welcomed to participate in the survey. This approach is consistent with Creswell and Plano Clark's (2011) recommendation for exploratory sequential research to employ a much larger sample size for the quantitative than the qualitative phase.

Data Collection Instrument, Process, and Procedures

As is consistent with sequential research methods, the questions in *A Survey of Women Leaders in Virginia Higher Education* were informed by the findings from the analysis of the qualitative interviews. The topics covered in this anonymous survey included demographic and institutional details, as well as questions to assess the women's professional needs and experiences (including barriers) and familiarity with the Virginia Network and its programs. The survey questions were tested in advance using the Survey/Interview Validation Rubric for Expert Panel (VREP) analysis to measure content validity, or ability for collected data to reflect the intended content, and ensure sound question construction (Simon, n.d.). Although personal information was not collected in this survey, participant consent was required through a review of the Research Participant Information Sheet. At the start of the survey, instructions informed

the participants that participation in the study served as participant consent. The survey was constructed in REDCap.

The researchers executed several strategies to maximize survey responses, including requesting the same professional organizations that shared the qualitative interview invitation to share the quantitative survey invitation. The researchers also directly emailed invitations to qualified participants previously identified during the qualitative phase (see Appendix H) and used researchers' personal social media accounts (e.g., Twitter, Facebook, LinkedIn) to invite survey participation by qualified individuals (see Appendix I). With each strategy, the researchers encouraged snowball sampling. Additionally, survey participants were invited to enter a drawing for one of two American Express gift cards. Those individuals who chose to enter the drawing were redirected to a Google Form where they provided their name and email address (see Appendix J). All of the participants' names submitted through the Google Form were entered into the Wheel of Names (https://wheelofnames.com/), which researchers used to randomly selected the first winner's name. The researchers then removed that winner's name and spun the Wheel of Names again to select the second winner.

After the initial advertising of the survey invitation through professional networks, social media, and emails to qualified participants, reminders were distributed two weeks later to increase responses. The survey remained open for 18 days.

Data Analysis

This data was analyzed for significant variance and relationships using descriptive statistics, Pearson's chi squared analysis, and post hoc analysis in IBM SPSS Statistics. All of the survey responses in REDCap were assigned a Record ID based on the order of survey completion. No personally identifiable information was recorded and any references in the

research to any individual responses was indicated by Record ID. In alignment with Rossi, Lipsey, and Henry's (2019) process evaluation framework, demographic data from *A Survey for Women in Virginia Higher Education* was compared to participant survey question responses to measure familiarity with the Women's Network and participation in its programs to determine population coverage and bias. Researchers also analyzed barriers experienced by these women and their access to professional development opportunities in order to assess this population's need for services.

Demographic data was analyzed using the social justice leadership framework to assess how the Virginia Network has achieved its goal of promoting a diverse environment for women and their many intersections. "Social justice leadership focuses on the experiences of marginalized groups and inequities in educational opportunities," which lends itself to the proposed professional development opportunities in this study (Furman, 2012, p. 194). Therefore, the data collected was utilized to better understand how organizational practices may favor certain identities over others (Theoharis, 2007). Several survey questions requested demographic information, such as race/ethnicity and caregiver status. These identity variables, along with institutional characteristics, were compared to identify gaps in access or opportunities based on specific identities.

Limitations/Biases

Limitations and biases can affect the outcomes of this study. The target population for both phases of the study, any person who identifies as a woman, is older than 18, and is currently employed at a higher education institution in Virginia, is very large (over 51,000 individuals) and no convenient method existed by which to reach all of the eligible participants with researchers recruitment efforts. Another limitation to the study was the time constraint dictated by the

doctoral program's requirements. To complete this study in an optimal time frame, researchers relied on snowball and convenience sampling methods. These non-probability sampling methods helped obtain the number of participants needed for this study; however, the results could be influenced by unexpected and uncontrolled factors (Emerson, 2015). Limitations related to the use of one-on-one interviews included the potential for the presence of an interviewer to bias participant responses and the fact that not all participants will be equally articulate, perceptive, and explicit with their responses (Creswell & Creswell, 2018).

While the researchers' approach to conducting this study was focused on the implementation of the theoretical frameworks, biases could unintentionally skew the analysis of the results. Each of the researchers leading this study were women in higher education and have affiliations with institutions in the Commonwealth of Virginia. Additionally, one researcher is a former board member of the Virginia Network. Each member of the capstone research team was committed to upholding the fidelity of the study by not allowing bias to impact data analysis and interpretation. During the one-on-one interviews, no single researcher interviewed any participant who was an acquaintance. No research team member was the sole coder for the transcript of an interview that she conducted. All of the interview transcripts were de-identified before the coding and analysis began. The survey responses were naturally de-identified due to their anonymous nature.

Chapter Summary

The Virginia Network has two major programming opportunities by which to engage and support women in higher education within the Commonwealth of Virginia, the annual conference and the Senior Leadership Seminar. These are opportunities for the Virginia Network to understand and engage with women to further understand women's professional development

needs and to spread awareness of the network and its programs. The aim of this study was to conduct a comprehensive assessment of the organizational relevance and effectiveness of the Virginia Network. Using an exploratory sequential mixed methods design, the researchers collected qualitative and quantitative data from women in the Commonwealth of Virginia. Researchers used a variety of methods to recruit and maximize the number of participants. Using the social justice leadership theory and process evaluation frameworks, results describe how the Virginia Network supports women in higher education, Institutional Representatives, and Senior Leadership Seminar alumnae.

Chapter IV: Data Analysis & Research Findings

The purpose of this study was to better understand the needs of women working in higher education across the Commonwealth of Virginia. Further, this capstone project also explored the ways by which the Virginia Network addressed the needs of these same women. This chapter outlines the data analysis and findings from the study's qualitative and quantitative phases to answer the research questions that guided this study. Both phases were necessary as neither qualitative nor quantitative data alone could sufficiently describe the needs and barriers facing women in higher education in Virginia while evaluating the impact of the Virginia Network's programs. The outcomes of this research will help the Virginia Network actualize the American Council on Education's Women's Network's mission of developing, advising, and supporting women in higher education at the state level. The two research questions addressed in this study were:

1. What are the needs of women in higher education across the Commonwealth?
2. In what ways does the Virginia Network address the needs of women in higher education?

Researchers conducted this study using an exploratory sequential mixed methods design. The qualitative phase consisted of individual interviews with women over the age of 18 who were employed at degree-granting higher education institutions in Virginia. The researchers sought to understand the aspirations of women in higher education, identify women's needs and barriers, and assess women's familiarity with the Virginia Network. Researchers coded and categorized the responses into themes to inform the survey that was disseminated in the second phase of the research study. The second, quantitative phase employed a survey with questions designed to more broadly collect information about the professional needs of women and the

barriers they have experienced in order to assess women's familiarity and satisfaction with the Virginia Network and its programming and recommend opportunities the Virginia Network could offer to its constituents. This chapter will report the results of both phases.

Findings: Qualitative Phase

Data Collection

To answer the first research question, researchers recruited qualified participants: individuals who identified as women and were employed at a degree-seeking higher education institution in the Commonwealth of Virginia. Using professional networks, social media, and email messages, researchers invited the participants to complete a Google Form indicating their interest in participating in one-on-one interviews. The Google Form collected the participant's name, email address, and institution name. Based on the collective outreach of the research team, 116 women completed the Google Form, representing 18 higher education institutions across the Commonwealth of Virginia.

Researchers selected the participants to interview based on their identified institutions, ensuring an even representation of institution types and geographical regions across the Commonwealth of Virginia. Once the participants responded via email to re-confirm their interest, researchers scheduled the interviews via email and extended calendar invitations for the virtual interviews. Interested participants who were not responsive to the scheduling emails were sent a reminder email after one week of no response. The researchers completed 23 interviews. These completed interviews provided the basis for the qualitative analysis.

Table 1 describes the interview participants' characteristics, including their institutions' geographical region, institution types, institutional characteristics, self-identified career stage as defined by O'Neal and Bilimoria (2005), and familiarity with the Virginia Network. See

Appendix K for the map of Virginia that outlines each geographical region used for this study. The aforementioned career stages, as defined by O'Neil and Bilimoria (2005), are as follows:

1. Idealistic Achievement is the first career stage: "Women in this phase are most likely to see themselves in charge of their careers and will doubtless be proactive in taking strategic steps to ensure their career progress (internal career locus). They are achievement-oriented and motivated to succeed and see their careers as opportunities to make a difference and as paths to personal happiness and fulfillment" (p. 182).
2. Pragmatic Endurance is the second career stage: "Women in this phase are pragmatic about their careers and are operating in production mode, doing what it takes to get it done. They have a high relational context and are managing multiple responsibilities both personally and professionally" (p. 183).
3. Reinventive Contribution is the third career stage: "Women are focused on contributing to their organizations, their families, and their communities. They are most likely to attribute personal and professional others as having had input into the direction of their careers and are likely to reflect a stable, planned career path" (p. 184).

Each interview participant was asked eight questions, with 12 supportive prompts, or follow-up questions as necessary based on the participant's initial responses (see Appendix A). Researchers used Zoom, an online video conferencing program, to facilitate the interviews. Both the audio and video of the interviews were recorded. This process allowed the researchers to transcribe the interviews for the qualitative analysis.

Table 1

Participant Characteristics by Career Stage

Participant #	Institution Region	Institution Type	Other Institutional Characteristics	Familiar with VA Network?
		Idealistic Achievement Career Stage		
103	1 - Central Virginia	4 year - Public	PWI	No
105	1 - Central Virginia	4 year - Public	PWI	No
203	1 - Central Virginia	4 year - Public	PWI	Yes
204	4 - Northern Virginia	4 year - Private	PWI	No
304	8 - Southside	4 year - Public	PWI	No
404	2 - Tidewater	4 year - Public	PWI	Yes
406	4 - Northern Virginia	4 year - Public	PWI	No
		Pragmatic Endurance Career Stage		
101	1 - Central Virginia	4 year - Public	PWI	No
202	1 - Central Virginia	4 year - Private	HBCU	No
205*	5 - Valley	2 year - Public	PWI	Yes
301	1 - Central Virginia	4 year - Public	PWI	No
305	2 - Tidewater	2 year - Public	PWI	No
306	7 - Southwest	4 year - Public	PWI	Unsure
307	7 - Southwest	4 year - Public	PWI	Yes
403	1 - Central Virginia	4 year - Public	PWI	No
		Reinventive Contribution Career Stage		
102	1 - Central Virginia	4 year - Public	PWI	No
104	1 - Central Virginia	2 year - Public	PWI	Yes
201	4 - Northern Virginia	4 year - Private	PWI	No
302	2 - Tidewater	4 year - Public	PWI	No
303	5 - Valley	4 year - Public	PWI	No
401	4 - Northern Virginia	4 year - Private	PWI	Yes
402	5 - Valley	4 year - Public	PWI	Unsure
405*	3 - Northern Neck	4 year - Public	PWI	Yes

Note. The interview participants were given a participant number to maintain confidentiality. PWI is an acronym for Predominantly White Institutions and HBCU is an acronym for Historically Black Colleges and Universities. The participants with an asterisk* by their number were Senior Leadership Seminar alumnae.

Prior to coding the transcripts, researchers assembled the most prevalent themes and concepts from this study's literature review, social justice leadership theory framework (Furman, 2012; Jean-Marie et al, 2009; Wang, 2018), and process evaluation framework (Rossi, Lipsey, & Henry, 2019). This method of provisional, deductive coding allowed the researchers to align the analysis with prior research and the chosen frameworks. The resulting 10 codes that guided the first-cycle of qualitative coding are described in codebook format in Appendix L: solicited positive experiences, unsolicited positive experiences, needs, Virginia Network service utilization, Virginia Network organizational function, transformative [action], inclusive or democratic [action], reflection or discourse, internal barriers, and external barriers.

Once the research team developed the codebook, the transcripts were assigned to each researcher using a random number generator in Microsoft Excel. Each researcher analyzed five to six transcripts using NVivo, a computer-assisted qualitative data analysis software, using the 10 codes derived from the literature review and frameworks. Once this analysis was completed, the researchers reviewed the collective results of the completed coding in order to identify emergent sub-themes or clear areas of emphasis from within the original ten deductive codes. Several themes of high interest emerged and included job satisfaction, mentorship and sponsorship, supportive and flexible leadership, work/life balance, and equitable salaries. The themes within the process evaluation framework focused on the familiarity of the participants with the Virginia Network, awareness of the Virginia Network's Institutional Representatives, and the Virginia Network's function. In each of the themes and sub-themes, the participants described their needs and opportunities, which allowed the research team to develop a robust quantitative survey that answered the study's research questions.

Themes

Social Justice Leadership

Social justice leadership as a theory centers on the collective need to reduce the marginalization faced by oppressed groups (Theoharis, 2007; Wang, 2018). The qualitative interviews for this study were coded and analyzed for the tenets of the social justice leadership theory: *transformative* (i.e., actions or statements that moves them beyond complaint, competition and 'us versus them' thinking), *inclusive or democratic* (i.e., actions or statements that emphasize using different strategies for different scenarios with a commitment to leadership that addresses varying needs), *reflection and discourse* (i.e., training, actions or statements that provide an opportunity for critical reflection and critical discourse regarding identifying, questioning, and assessing the participants deeply-held assumptions) (Furman, 2012; Jean-Marie et al, 2009; Wang 2018). In order to assess these measures and to answer the first research question, the following questions were asked:

1. Is your current role one you aspired to hold? Why or why not?
2. What have been positive outcomes/successes in your higher education career thus far?
3. In terms of your career, what are your needs as a woman in higher education?
4. What opportunities have you explored to meet your needs?
5. What barriers, if any, have you encountered trying to meet your needs?
6. What is your aspirational career role?
7. What steps have you taken to achieve that role?
8. What assistance do you still need to achieve that role?

Job Satisfaction

Job satisfaction is described as the overall affective orientation to one's work and is often a predictive factor of job performance, counterproductive work behavior, and turnover intentions (Hwang & Ramadoss, 2017). The data collected in the qualitative phase identified job satisfaction, often associated with the work environment and organizational culture, as a need.

Several of the participants emphasized their desire for communal or inclusive work environments as contributing factors to their job satisfaction. Participant 204 asserted, "I want to work somewhere where it feels like a community and it feels like a family… and so, that's important to me." Participant 104 similarly expressed a longing for a team environment stating: "I've always been siloed, since I started my career ... so it'd be nice to have colleagues again." The participants' responses also revealed that equitable interactions are a need for women in the workplace. Participant 105 shared:

> I'd like a seat at the table. Even though I enjoy my department... I feel like I don't always get taken seriously. They look at me as more of you know, like a secretarial role, rather than somebody having the same seat at the table as maybe like some of the male faculty or the male dean.

Despite challenges with equity, the majority of the participants highlighted positive job satisfaction related to working in higher education. Many noted the fulfillment they received from working with and assisting students, solving problems, and being a confidant or advisor. They believe in the work of higher education and how it transforms the lives of students, along with the opportunities that are presented to the students upon graduation. Several of the participants also highlighted the satisfaction they received from sharing a united goal of student

success across campus and the fulfilment that comes from seeing the students succeed. Participant 204 stated,

> I mean I love working at a university just from the standpoint of being able to be a piece of something that helps students get education. I know that my role does not directly have to do with academics, but you know I get to work in the office where we raise funds to help scholarships and buildings and all the different things on campus that help those students with their educational goals. So, I find that fulfilling.

Women are characterized as interpersonal leaders (Gipson et al., 2017; Karelia & Guillén, 2014; Nelson & Piatak, 2019; Nidiffer, 2003). These examples confirm how the presence of interpersonal relationships is indicative of job satisfaction. Women may place more value on investing in others through motivation, collaboration, and professional development, interactions that often occur during interpersonal engagement (Huszco & Endres, 2017; Sanchez-Hucles, 2010).

Mentorship and Sponsorship

Mentorship and sponsorship emerged as sub-themes among interview participants. The relationships cultivated in the workplace were not only significant in the personal and professional development of the recipients, but also in the personal and professional development of the mentors/sponsors (Helms, Arfken, & Bellar, 2016). Forty-three percent of the participants (n = 10) alluded to either desiring or benefitting from formal or informal engagements with mentors or sponsors. Participant 204 summarized this type of relationship by stating, “I would say professionally... a really great mentor would help propel me up the ladder.” Participant 303’s reflection confirmed how mentorship has improved her organizational experiences, “[supervisor’s] support is a consistent go-to for me... Just having her as a mentor

has been really helpful and critical for me to be able to understand how I can use my voice within those spaces that are challenging." These findings directly correspond to the findings presented by Theoharis (2007), who indicated that leaders who are "motivated to work toward social justice and equity" highlight building relationships as a key strategy (Furman, 2012, p. 197). It is also important to note the adverse effects when these relationships are not present, particularly in areas where women are severely underrepresented. Participant 105 shared, "So I think for me that's something that's been missing... I feel like maybe the mentoring piece isn't there to help women cope in male dominated environments." This sentiment directly relates to Diehl's (2014) claim that a lack of mentors is an organizational barrier preventing women from advancing in their careers. Participant 204 also addressed negative perceptions of leadership due to a perceived lack of interest: "I just don't feel like any of [the leaders in her organization] were really open to mentorship or cared about [the] people below them that were interested in mentors."

Mentoring relationships can be beneficial to women regardless of the mentor's gender; however, womentoring is critical to social identity development and overall leadership perceptions (Blackchen, 2015; Brue & Brue, 2018; Debebe & Reinhart, 2014). Participant 105 posited, "I think having female mentors really helps to give you their perspective and give you encouragement... I've had that at certain points, but it kind of ebbs and flows." Similarly, interpersonal interactions between women and their supervisors can impact job satisfaction and career advancement.

Supportive Leadership and Flexibility

Interview responses that were coded as emphasizing inclusive or democratic leadership indicated that supportive leadership and work flexibility lead to increased job satisfaction. Fifty-

two percent of the participants (n = 12) mentioned experiencing or having exhibited inclusive or democratic leadership. Participant 202 discussed the value of having a supportive and flexible leader:

> When I first got here was when my supervisor found out that I had just had a baby. So, I didn't give them a whole lot of time to prepare and support me, but it was almost immediately that my supervisor and the whole department was like, what can we do to make sure that you are able to be what you want to be as a mother and support you as much as we need to?

Participant 202 echoed findings from Furman (2012) and Griffin, Patterson, and West (2001), who discussed how intentional leadership actions that are caring and relational are important when attempting to be perceived as a supportive leader. In addition, Participant 306 remarked an affinity for "being able to partner with my supervisor and just kind of talk to her and let her … guide me through the process of 'these are things that you need.'" This finding highlighted the emphasis that Jean-Marie et al. (2009) placed on leaders providing effective techniques that increase professional opportunities for their supervisees. Participant 103 also addressed how having a supportive leader impacted her job satisfaction, reflecting:

> I definitely feel like... I'm able to grow in my position, even if it's not by title or salary or anything, I feel like I still am able to build my skill sets and in a direction that I have interest in growing in the future.

The participants discussed not only the leadership of their supervisors, but how their own leadership has been impacted by having a supportive supervisor. Participant 301 reflected on her new promotion, which allows her more opportunities to be present for decision-making conversations with her supervisor and other leaders, and how it has opened opportunities for her

to enhance her own leadership style: “Knowing all the factors that are going into a decision now that's been eye opening for me. And also impacts a lot of the way that I lead my staff now [when] trying to communicate decisions.” This evidence supported Hannum et al.’s (2015) assertion that, when supportive leadership is present, informal and formal opportunities for leadership identity development are present. Participant 101 also reiterated an appreciation for leaders who emphasized flexibility, “So every position I've held, especially the one I have now, my supervisors have always been flexible with me in regard to my time, so I appreciate that I get to set my 40 hours.”

The effects of having a supervisor that does not tailor their leadership style to be inclusive of what their supervisees need were discussed as well. Participant 306’s response noted the differences she felt between supervisors who supported her professional development and those supervisors who did not: “Not everyone understands the different needs that women need to kind of crack through that glass ceiling. So, I've had some supervisors that understand, and I've had some that are like, nope, you're at where you're at, you're good.” Participant 105 questioned whether male supervisors are aware of the needs of their female employees, stating, “There's just something that he doesn't understand because of his perspective and it's hard to get that across to … another leadership position that is more traditional and male-oriented and doesn't take you seriously.” The findings from Participants 306 and 105 corresponded to Hannum et al.’s (2015) assertion that perceived discouragement and a lack of opportunity from leaders continue to be barriers for women in higher education.

Work/Life Balance

Several of the respondents identified work/life balance as a need. Participant 102 expressed the balancing of home and work obligations as a long-standing challenge, stating

"knowing what I want and what I aspire for, my place here at work, in my community and even at home with my family. And that's been a challenge over the last 25 or so years, balancing it all." However, she also expressed her resolve in obtaining the appropriate balance:

> I've been at the place where work and family struggle for my attention. So, now, I've been able to find a balance. Like when I get off, [work] is pretty much shut off unless I have the opportunity to answer an email. But I don't feel obligated to answer that email.

This statement corresponded to Goldfarb and Grinberg's (2002) definition of social justice as the exercise of altering organizational arrangements by actively reclaiming social and personal dimensions. This experience also aligns with the transformative tenet of social justice leadership theory in that behavioral shifts must be deliberate and action-oriented. Similarly, Participant 101 declared, "but for me, I am all about work/life balance of like, I work to live, not live to work. So, for me, it's not necessarily about the role, it's more about my lifestyle."

Many of the women shared the impactful challenges that have occurred related to caregiving or mothering. This phenomenon aligned with Diehl (2014), who categorized the barriers faced by women to include individual, organizational, and societal barriers. For example, Participant 203 stated,

> I think when I first started out in my career, it was trying to be everything to everyone to include my husband, my children, the workplace, the student athletes, and the staff. And so [I'm] really having to learn to balance, as much as possible.

Participant 202 stated quite simply, "Being a mother is a barrier, but I mean it's a joy every day. I don't regret it, but it was a barrier."

Diel (2014) stated that women experience career interruptions due to familial responsibilities, such as parenting or caring for aging parents. Similarly, Cabay et al. (2018)

expressed that women disproportionately exit STEM-related fields because of life transitions involving family and caregiving. Participant 304, a faculty member married to another faculty member, provided this memory:

> What I realized is that anytime my daughter has gotten sick, or just some areas like daycare is closed for whatever reason... it's kind of fallen to me automatically to be the one to say "okay, well I guess I'm not going to go to work today" ... And I'm not sure if that's because I'm a female or because my schedule is flexible. I'm only teaching two classes as opposed to my husband who was teaching the full four load.

Participant 307 realized how being a mother impacted her career advancement, stating,

> I have had opportunities to pursue advancement, but some of them I have chosen not to apply for because I just dread the idea of having to work 60-70 hours a week again. And know that that would mean sacrificing my relationship with my spouse and my child.

As a result of COVID-19, Participant 301 offered a perspective on work/life balance stating, "I'm hoping that in a post-COVID world, assuming that ever happens, we have a little bit more flexibility for teleworking within our roles to, to have better work life balance." In addition to reevaluating and establishing one's work/life balance, discussions regarding how striving for this balance impacts salary earnings are also needed.

Equitable Salaries

Equitable compensation also surfaced as a common theme among the responses. Participant 102 reflected:

> For me personally, it's just trying to obtain what I feel that I'm worth monetarily and even my position title. So yeah, that's been my barrier now for over a year. I get additional responsibilities and it's like they're dragging their feet in the mud.

Participant 102 also spoke about the income gap and ways to address it among women, stating:

> There is definitely an income gap. So, I think for me ...it's hard this year, but just trying to get the women together so that we can talk, become a collective, and figure out the ins and outs. Some women know how to navigate that ladder. Others don't.

In addition, Participant 102's experience further illustrated the organizational barriers of a lack of inclusion in formal networks in addition to equitable salaries, as highlighted by Diehl (2014). Participant 101 addressed how the salary gap has impacted her home life, reflecting, "I think that's one of the things I definitely struggle with the most is like not being able to make a living on my own. I'm like, thank God I'm married, and my husband makes good money."

Salary inequity is a known disparity and often a barrier faced by women in higher education. A key aspect of social justice leadership is the acknowledgement of marginalization and eliminating any disparities faced by oppressed groups (Bogotch, 2002; Dantley & Tillman, 2006; Dantley & Tillman, 2010; DeMatthews & Mawhinney, 2014; Furman, 2012; Gerwitz, 1998; Potter et al., 2014; Taysum & Gunter; 2008; Theoharis, 2017). The salary inequities acknowledged by the participants were also evident in the workplace. Participant 405 noticed at her institution that,

> My counterpart in [redacted division name]... does nothing! He's male, obviously, he makes $20,000 more than I do, and he has a [company] car. We are considered on the same level in every aspect of university operations. But… I've just sort of learned to accept that... It's not all about pay, but it's just, it's really inequitable.

Participant 301 continued these same sentiments, stating, "What I've observed is that women continue to be underpaid and undervalued."

While the analysis of the needs and experiences of women in higher education provided insight into research question one, the researchers also assessed the women's familiarity with the Virginia Network and the programs it offers in order to answer research question two.

Process Evaluation of the Virginia Network

Researchers applied the process evaluation framework as presented by Rossi, Lipsey, and Henry (2019) to answer research question two: "In what ways does the Virginia Network address the needs of women in higher education?" Answering this research question required assessing the operation of a program designed to address social problems, such as the Virginia Network. The qualitative interviews were coded and analyzed for the two key components of a process evaluation as determined by Rossi, Lipsey, and Henry (2019): *service utilization* (i.e., the intended target population receives the intended services) and *organizational function* (i.e., the program is successfully in providing the services needed by the population). In order to assess these measures, the researchers asked the interview participants the following questions:

1. Do you have knowledge of the Virginia Network?
2. Have you participated in any of the Virginia Network's programs?
3. Has your involvement with the Virginia Network impacted your career?
4. Do you know who your institution's Institutional Representative is? (A description of the role of an institutional representative was provided if necessary).

It must be reiterated that the researchers' abilities to fully answer both of the research questions relied on the synthesis of both the qualitative and quantitative phases of this study.

Service Utilization

Rossi, Lipsey, and Henry (2019) posited that a successfully managed program sustains an acceptable level of participation of the target population and takes action if the participation is ever below that acceptable level. That acceptable level of participation is typically identified in the program design and generally referred to as 'coverage.' However, the Virginia Network is not a membership-based organization, but a provider of professional development. As a result, it is difficult to ascertain a desired 'level of participation' of women in Virginia higher education in the network's programs. This limitation will be revisited in Chapter 5.

Despite being unable to identify a target participation level, the researchers were able to assess the Virginia Network's coverage. To determine the covered population, researchers asked the women if they were familiar with the Virginia Network. Of the 23 women interviewed, 61% (n = 14) indicated that they had not heard of the Virginia Network. Two of the women (9%) were unsure as to whether they had heard of the Virginia Network, and the remaining seven (30%) were certain they had heard of the Virginia Network.

Unfamiliar with the Virginia Network. The most common coverage issue in social programs is failure to reach a high percentage of the target population due to a lack of awareness of the program (Rossi, Lipsey, & Henry, 2019). The qualitative results of this study indicated this issue as a potential area of concern for the Virginia Network. Of the 14 women unfamiliar with the Virginia Network, three indicated that they became familiar with the name of the organization only by way of the researchers' work in presenting the capstone prospectus or soliciting for interview participants. These participants were categorized as not having prior, organic knowledge of the Virginia Network for the purpose of this study.

Participant 105 explained, “The first time I heard about [the Virginia Network] was your prospectus hearing. I had no clue what it was. I still don't really know what it is.” Participant 301 contributed, “Actually, the first time I'd heard of [the Virginia Network] was when [redacted researcher name] sent out the call for survey stuff. So, I actually know nothing about it.”

The remaining 11 women expressed equal unawareness as to the existence and role of the Virginia Network. Many of the participants provided short, simple responses similar to that of Participant 102’s response: “I'm not aware of the Virginia Network.” Other women asked for clarification as to the organization’s role and function. Participant 202 asked, “can you clarify what you mean by the Virginia Network?” Two women indicated that they assumed that the interviewer was simply referring to the collective of higher education institutions in Virginia existing as an informal “network.” Participant 201 began listing acronyms of organizations with which she was familiar, but followed up with “…but I never heard of the Women's Network in Virginia... is it new?” One participant, Participant 403, immediately attempted to search the internet for the name of the network when asked if she was familiar with it. When politely prompted to respond to the question before executing the search, the participant provided, “I have not. I'm a big visual person, so that's why I was looking to see if I’d seen the website. But no, I do not think I have heard of the Virginia Network.” After executing the search, she confirmed that she had not heard of the Virginia Network.

Familiar with the Virginia Network. Of the seven women who were familiar with the Virginia Network, three had not participated in any of the Virginia Network’s programs. These women were aware that the group existed, were familiar with its intended purpose, and exhibited appreciation for its availability as a resource if they wished to learn more. Participant 307 contributed, “I know of it, I have not dug too deep. Beyond that, but I have just a basic

awareness that it exists and it's something that I could tap into if I wanted to pursue more information." Participant 401 provided:

> My mom actually told me that there was a Women's Network and I looked it up on the site… It kind of appeared to me... just like a branch of ACE. I didn't really think anything of it, unfortunately. I didn't really go beyond that. That's the knowledge that I have of the Virginia Women's Network.

Participant 404 added,

> One of my mentors from [redacted institution name], she was like, are you in this network? This network? This? She starts adding me to like everything on LinkedIn and Facebook. So, Virginia Network was one of them on LinkedIn that she added me to…I am aware of it. If there's history behind it, I do not know the history, but I do know it's a network.

Four of the women familiar with the Virginia Network (17% of the total interviewed population) participated in one or more of the Virginia Network's programs. All four women had attended one or more of the annual conferences, and two of these women also participated in the Senior Leadership Seminar. Participant 203 shared, "I have gone to some of the conferences… I've certainly enjoyed some of the presentations. But I really haven't dove into it enough like I need to. So not a whole lot of knowledge about that." Participant 405 added,

> I am familiar, but I wasn't until I participated in the senior leadership program. I knew a couple of people at the university who had gone through the program, but I didn't really understand what they were going through. And I did look up to them as leaders… And so, when I was asked to do it, I was honored and I did think highly of it. I just didn't know a lot about it.

Institutional Representative (IR) Awareness. According to the Virginia Network's operating guidelines (Virginia Network, 2020), IRs are significant connections between their higher education institutions and the Virginia Network. IRs are charged with "encouraging campus-based professional development, increasing visibility of women on the campus, supporting the advancement of women in administration, and encouraging participation in Network activities and programs" (Virginia Network, 2020, p. 10). Since IRs play such an integral role in spreading awareness of the Virginia Network and its programs, it is imperative that women on campuses be familiar with their institution's IR to maximum service utilization. The researchers asked the interview participants whether they knew the identity of their institution's IR. Of the 23 women interviewed, whereby seven were familiar with the Virginia Network, only two women made attempts to guess their IR (neither was certain). Only one of the women provided the correct name.

Organizational Function

A social program's ability to deliver its intended services to its target population is a key indicator of the success of the program's organizational function (Rossi, Lipsey, & Henry, 2019). The researchers' full ability to measure the Virginia Network's organizational function required the synthesis of the assessed needs of women in higher education and an evaluation of the content that the Virginia Network provides through its programs. However, knowing whether the Virginia Network's programs have positively impacted the careers of the women who have participated in them is an appropriate method by which to assess the program's function. No matter the positive intent of a social program, it cannot be deemed successful unless it is proven to contribute beneficially to the problem it seeks to ameliorate (Rossi, Lipsey, & Henry, 2019).

The responses of the four women who had participated in the Virginia Network's programs were generally positive when asked how these programs have impacted their careers. Many cited an appreciation for the networking and the awareness of opportunities that their participation in the programs provided. Participant 405 shared the following about her experience:

> I did learn things... I always went back from them [conferences] feeling inspired, and thinking, "Gosh, I want to put this into practice…" I guess more than anything, just being with colleagues who were facing similar situations made me realize that I wasn't alone. And that it gave me more confidence, I guess. That's a good way to put it. I would talk to people outside of the sessions and learn things about how they ended up where they were, and it was helpful.

However, Participant 205 offered some helpful criticism:

> I think the time in between the next conference, that spark is kind of dimmed a little bit right. So, nothing really to… follow up on or engage. Maybe if they had smaller workshops ... to keep that engagement throughout the year. The conferences that I went to were once a year in May.

Participant 104 supplied:

> I wouldn't say that it had a lot of impact, really, I mean, I've only been to a couple, and [they] kind of made me think about what my career path should be, what I should do… I've been to the ones where they had a panel of the presidents from different colleges. That's not a path that I ever saw myself, being a president or even a vice president… I like the role that I'm in right now. And [I'm] comfortable with that…

These reflections of the participants' experiences with the programming offered by the Virginia Network provided clear feedback on the organization's strengths, in addition to opportunities for growth. The researchers used this information to develop related exploratory questions about the Virginia Network's relevancy and efficacy for the broader audience of women in Virginia higher education.

The qualitative interviews allowed the researchers to learn first-hand how women in higher education are supported and the areas of opportunities for the Virginia Network. A limitation to the qualitative phase is that it only provided a limited number of perspectives. To expand on the information shared during the qualitative phase, the researchers used the feedback from the interviews to develop a comprehensive survey, which was implemented during the second phase of this research study.

Findings: Quantitative Phase

The quantitative phase of this study employed *A Survey for Women in Virginia Higher Education*, a 24-question survey that addressed the themes from the qualitative phase and the literature review (Appendix G). Researchers shared the survey through several channels to maximize responses. The survey link was shared via email and recipients included women who initially responded to the request for qualitative interview participants, the Virginia Network's Institutional Representatives, and qualified participants within the researchers' own professional networks. Researchers used several social media channels (i.e., LinkedIn, Twitter, Facebook) to share the survey link and relied on snowball sampling to spread awareness of the survey to qualified women, encouraging the participants to share the link with other women in their networks. Reminder emails and multiple social media posts were deployed to increase the survey responses.

The survey was conducted using REDCap, an online survey tool. The survey link was available for 18 days and a total of 495 responses were received. However, 43 survey responses were incomplete and could not be included in this analysis, leaving 452 completed responses for analysis. A discussion of the results follows.

Needs of Women in Virginia Higher Education

This section details the information from the survey that answered the first research question of this study: "What are the needs of women in higher education across the Commonwealth?" The researchers used a broad definition to determine what constituted a need. As provided in Appendix L, needs were defined as anything that a woman required to reach an aspirational role or be effective in her current role. This definition was inclusive of personal and professional needs, but also extended to barriers experienced and desired supervisor traits, as these items are necessary to address in order for a woman to be effective in her role. The data analysis from the qualitative phase of this study informed the needs and barriers offered as choices for the survey's multiple-choice questions. Additionally, the qualitative analysis identified supportive and flexible leadership as a need emphasized by many of the participants; therefore, the researchers offered the respondents an opportunity to identify the top three traits that they need in a supervisor within the survey. Collectively, explicitly knowing women's needs, the barriers to those needs, and the essential character traits of leaders helped shape the recommendations that the research team has provided to the Virginia Network in Chapter IV. This section contains the analyses of these three areas.

Overall Needs

The participants were asked to complete the following sentence: *In terms of my career, my top three needs as a woman in higher education are...* They were able to choose from the

following options: networking, flexibility, work/life balance, equitable income, mentorship, professional development, continuing education, and self-advocacy. The participants were also able to select "other" and provide, through an open-ended response, a need or needs they identified with but did not feel were addressed in the explicit multiple-choice options. Overall, equitable income, work/life balance, and flexibility were the top three reported needs of women in higher education. Table 2 provides the frequency distribution for the needs of all of the respondents.

Table 2

Frequency Distribution of Women's Needs

	Frequency	Percent
Equitable Income	316	23.7
Work/Life Balance	285	21.3
Flexibility	179	13.4
Mentorship	155	11.6
Professional Development	111	8.3
Self-Advocacy	106	7.9
Networking	98	7.3
Continuing Education	72	5.4
Other	13	1.0
Total	1335	99.9

Needs by Race/Ethnicity. The researchers analyzed a subset of survey responses to test the null hypothesis: H_0 = No difference exists in the career needs of those women who identify as women of color and those women who identify as white women. For the purpose of this study, women of color are defined as any survey respondent who reported identifying as Black/African American, Asian, Hispanic/Latino, Native American/Indigenous, Pacific Islander, or selected multiple options, one of which was not White/Caucasian. White women are those women who reported identifying solely as White/Caucasian. One respondent did not identify her race/ethnicity; as such, that response was excluded from this particular analysis. Women were asked to identify zero to three needs in a multiple-choice question providing eight explicit needs. A ninth option, "Other," was offered. Thirteen women selected this "other" option and provided an open-response need they did not feel was addressed in the prior eight options. These 13 "other" responses were excluded from this analysis, but were subsequently reviewed for the possibility of identifying needs overlooked by the researchers. The remaining data included 451 respondents who reported their race/ethnicity and identified 1,319 selections of needs from the provided list of eight explicit options. Table 3 shows that a majority of the women of color identified equitable income, work/life balance, and mentorship as their top three career needs in higher education, while a majority of the white women identify equitable income, work/life balance, and flexibility as their top three career needs in higher education.

Table 3

Needs of Women by Race/Ethnicity

Race/Ethnicity	Needs							
	Equitable Income	Work/Life Balance	Flexibility	Mentorship	Professional Development	Self-Advocacy	Networking	Continuing Education
Women of Color								
Asian (*n*=5)	40%	40%	60%	60%	0%	80%	20%	0%
Black/African American (*n*=98)	72.4%	51.0%	31.6%	48%	27.6%	15.3%	22.4%	25.5%
Hispanic/Latino (*n*=3)	100%	100%	100%	0%	67.7%	0%	0%	0%
Two or More Races (*n*=14)	78.6%	64.3%	28.6%	50%	7.1%	28.6%	21.4%	21.4%
All	**70.8%**	**53.3%**	**34.2%**	**47.5%**	**25.0%**	**19.2%**	**21.7%**	**23.3%**
White Women								
White/Caucasian (*n*=330)	69.4%	66.4%	41.8%	29.7%	24.2%	25.2%	21.8%	13%
All Women	**69.8%**	**62.9%**	**39.8%**	**34.4%**	**24.4%**	**23.6%**	**21.8%**	**15.8%**

Note. The woman who did not identify her race and the woman who did not select one of the eight explicit needs were excluded from this table. As such, 450 survey responses are reflected.

A Pearson's chi-squared test of independence was calculated, yielding a statistic of $\chi 2 = 20.053$, $df = 7$, $p < .01$. This led the researchers to reject the null hypothesis. The analysis supported the conclusion that women of color and white women have different career needs in higher education. As the chi-squared test showed a statistically significant effect ($p < .01$), a post-hoc analysis with the Bonferroni adjusted significance was conducted to compare the pair-wise products of the grouped respondents (i.e., women of color, white women) and needs to attempt to identify the specific groupings within this analysis that were statistically significant (Beasley & Schumacker, 1995). The Bonferroni adjusted significance was used to reduce the chance of Type I errors, or false positives, in this statistical test (Sharpe, 2015). The post-hoc analysis did not identify any statistically significant differences between the specific needs identified by women of color and the specific needs identified by white women. This phenomenon is not uncommon, as the chi-squared test simply compares the observed frequency distribution to a theoretically equal distribution in order to identify *any* significant differences in the two frequencies; the post-hoc analysis is only capable of comparing the specific pairs of variables analyzed (Cox & Key, 1993). If the chi-squared test proved statistically significant, yet the post-hoc analysis did not result in a statistically significant pair-wise set, then it simply means that the contrast between populations is more complex than simply a pair of variables (Beasley & Schumacher, 1995; Cox & Key, 1993).

Needs by Caregiving Status. The order of top identified needs were different when looking at caregiver status. For the purpose of this analysis, any woman who reported acting as a caregiver for any person over or under the age of 18 was identified as a caregiver. A limitation arose when considering women who did *not* report themselves as being caregivers, as the survey choices did not offer an option to self-identify as *not* a caregiver. For this reason, the researchers

could not compare caregivers and non-caregivers, but, instead, were left to compare women who identified as being caregivers with women who did not identify themselves as being caregivers. Table 4 shows that 76.6% of the caregivers chose work/life balance as their top need, with equitable income and flexibility as their other top needs. The top need for women who did not identify themselves as caregivers was equitable income, with 69.3% of those women selecting this need. This subpopulation's other top needs were work/life balance and flexibility. Additional research would need to be done to further understand this group's need for the work/life balance.

Table 4

Needs of Women by Caregiving Status

	Caregiving Status	
	Yes (n = 77)	No (n = 375)
Work/Life Balance	76.6%	60.3%
Equitable Income	72.7%	69.3%
Flexibility	51.9%	37.1%
Mentorship	31.2%	34.9%
Professional Development	18.2%	25.9%
Networking	13.0%	23.5%
Continuing Education	13.0%	16.5%
Self-Advocacy	10.4%	26.1%
Other	5.2%	2.4%

Note. All of the caregivers, those who had caregiving responsibilities for a person(s) under age 18 and/or caregiving responsibilities for a person(s) over age 18 are grouped together.

Needs by Career Stage. Based on the survey responses, the researchers tested the following null hypothesis: H_0 = No difference exists in the career needs of those women who identify across the three career stages: idealistic achievement, pragmatic endurance, and reinventive contribution. The survey respondents read brief descriptions of the career stages as identified by O'Neil and Bilimoria (2005) and self-selected the stage with which they most identified. All 452 respondents identified a career stage as this question was required. For the needs, respondents could select from zero to three needs from the eight options provided, which resulted in 1,319 selections made.

A Pearson's chi-squared test of independence was calculated, yielding a statistic of $\chi 2 = 27.588$, $df = 14$, $p < .05$. This result led the researchers to reject the null hypothesis. The analysis supported the conclusion that women may identify or prioritize different career needs based on their career stages. A post-hoc test was conducted to examine the variables within this particular analysis for significance (Beasley & Schumacker, 1995; Cox & Key, 1993), but did not identify any statistically significant differences between the specific needs identified by the women in the various career stages. However, further examination of the post-hoc analysis identified five pairs of career stages and needs as being the most significant (although not statistically). These five pairs accounted for 51% of the overall chi-square for the dataset, with the remaining 19 pairs making up the remaining 49%. These five pairs are:

1. Women who identified with the idealistic achievement career stage reported flexibility as a need *less* than what was expected when accounting for equal distribution.

2. Women who identified with the pragmatic endurance career stage reported networking as a need *less* than what was expected when accounting for equal distribution.
3. Women who identified with the pragmatic endurance career stage reported self-advocacy as a need *less* than what was expected when accounting for equal distribution.
4. Women who identified with the reinventive contribution career stage reported equitable income as a need *less* than what was expected when accounting for equal distribution.
5. Women who identified with the reinventive contribution career stage reported networking as a need *more* than what was expected when accounting for equal distribution.

Needs by Institution Type. To answer the first research question and to specifically explore the relationship between the needs of women and institution level, the researchers used a Pearson's chi-squared test of independence, yielding a statistic of $\chi 2 = 19.153$, $df = 16$, $p < 0.05$. An institution's level is a classification of that institution's programs as 4-year or higher (4-year) or 2-year, but less than 4-year (2-year) (IPEDS 2020-2021 Data Collection System, n.d.) and was analyzed with the following needs: networking, flexibility, work/life balance, equitable income, mentorship, professional development, continuing education, and self-advocacy. The following null hypothesis was tested: H_0 = No difference exists between the needs of women working at different institution types. The *p* value of .26 was not statistically significant; therefore, the null hypothesis was accepted. Although a relationship was not determined, researchers identified flexibility, work/life balance, and equitable income as the top three needs for women, regardless

of institution type. The researchers explored the needs of women and institution type: public; private, non-profit; and private, for-profit.

A Pearson's chi-squared test of independence was used to test the following null hypothesis: H_0 = No difference exists between the types and amounts of needs between those women working at public versus private institutions. The test yielded a statistic of $\chi 2 = 24.569$, $df = 24$, $p < .05$. The p value of .43 was not statistically significant; therefore, a relationship was not determined and the null hypothesis was accepted. In ranked order, equitable income, work/life balance, and flexibility were identified as the needs for women working at public institutions, while work/life balance, equitable income, and professional development were identified as the needs for women at private, non-profit institutions. Equitable income, work/life balance, mentorship, continuing education, and flexibility were identified as the top needs for women at private, for-profit institutions. Table 5 displays the frequency of needs selected by institution type.

Table 5

Needs of Women by Institution Type

	Institution Type			
	Public	Private - NFP	Private - FP	Total
Equitable Income	161	43	4	208
Work/Life Balance	139	50	3	192
Flexibility	90	29	2	121
Mentorship	71	27	3	101
Professional Development	46	31	3	80
Self-Advocacy	49	21	1	71
Networking	47	17	1	65
Continuing Education	31	7	1	39
Other	8	1	0	9
Total	642	226	18	886

Note. NFP represents non-profit institutions and FP represents for-profit institutions.

Needs by Region. The researchers used the compiled data to test the null hypothesis: H_0= No difference exists in regard to the needs between the women regardless of where they are located across the Commonwealth of Virginia. The data included 452 respondents with a total with 450 reporting their regions and needs. Table 6 shows that the needs most selected across the

regions were flexibility, work/life balance, equitable income, and mentorship. However, professional development was chosen as the top need for women in Region 4 - Northern Virginia (n = 12, 63.2%) and Region 7 - Southwest (n = 12, 40%).

A Pearson's chi-squared test of independence was calculated, yielding a statistic of $\chi 2$ (64, n = 452) = 69.974, p > .05. This result led the researchers to accept the null hypothesis of no difference in needs between the women located across various geographic regions within the Commonwealth of Virginia. The analysis supports the conclusion that there is no statistical significance between geographical location and needs of women.

Table 6

Cross Tabulation of Needs by Geographical Region

	Region							
	1 Central Virginia *n*=224	2 Tidewater *n*=58	3 Northern Neck *n*=19	4 Northern Virginia *n*=19	5 Valley *n*=58	6 Western Virginia *n*=33	7 Southwest *n*=30	8 Southside *n*=9
Networking	19.2%	32.8%	15.8%	21.1%	17.2%	18.2%	36.7%	11.1%
Flexibility	41.1%	43.1%	31.6%	31.6%	37.9%	42.4%	30.0%	55.6%
Work/Life Balance	61.6%	60.3%	78.9%	42.1%	60.3%	72.7%	66.7%	88.9%
Equitable Income	78.1%	65.5%	68.4%	52.6%	62.1%	60.6%	46.7%	66.7%
Mentorship	35.7%	19.0%	31.6%	36.8%	39.7%	48.5%	36.7%	11.1%
Professional Development	19.2%	22.4%	21.1%	63.2%	27.6%	21.2%	40.0%	44.4%
Continuing Education	17.4%	19.0%	10.5%	21.1%	13.8%	12.1%	13.3%	0.0%
Self-Advocacy	21.4%	25.9%	10.5%	26.3%	34.5%	21.2%	20.0%	22.2%
Other	1.8%	5.2%	10.5%	5.3%	1.7%	0.0%	6.7%	0.0%

Note. The responses for the two participants who did not select their institutional region were omitted from the table above. The numbers in the table reflect the regional percentage breakdown of professional needs.

Professional Development Needs. In order to determine whether differences existed in regard to the needs between women who had previously attended any professional development opportunity and those women who had not, Pearson's chi-squared test of independence was conducted. The test yielded a statistic of $\chi 2 = 6.589$, $df = 8$, $p = .582$. Since $p > .05$, the researchers accepted the null hypothesis that no difference existed between the types of needs between women who had and had not attended professional development opportunities.

Other Needs of Women in Higher Education. As indicated previously, the survey offered an 'other' option for the participants to complete if they wished to report a need that was not provided within the eight explicit options. Thirteen participants provided open-text descriptions of their needs. The researchers thoroughly reviewed these responses and determined that these additional responses did not contribute new information or insight into the needs of women in higher education. In fact, some of the content that the women contributed were barriers to success experienced in the workplace.

Overall Barriers

Participants were asked to complete the following sentence: *I have faced the following barrier(s) in the last three years working as a woman in higher education: (select up to three that you have most frequently experienced).* They were given the following options from which to select: unsupportive leadership; diversity, equity, or inclusion issues; lack of opportunity for career advancement; organizational culture; state or institutional policy on salary increases; salary inequity; balancing work and caregiving obligations; settling for less than achieving your goals; lack of opportunity to grow or be challenged; imposter syndrome; burnout/mental exhaustion; I have not faced any barriers; and other. Burnout, lack of opportunity, and salary inequity were the top three barriers selected. The order of these barriers was different when

factoring in the career stage selected by the woman and the types of institutions at which they were employed. Table 7 shows the frequency distribution for the barriers for the respondents.

Table 7

Frequency Distribution of Women's Barriers

	Frequency	**Percent**
Burnout	233	19.3
Lack of Opportunity for Career Advancement	151	12.5
Salary Inequity	149	12.3
Organizational Culture	130	10.8
Unsupportive Leadership	128	10.6
Imposter Syndrome	110	9.1
Work/Caregiving Balance	79	6.5
Salary Policies	74	6.1
Lack of Opportunity to Grow/Be Challenged	67	5.5
DEI Issues	49	4.1
Settling for Less	27	2.2
No Barriers	11	.9
Total	1208	99.9

Note. DEI is an acronym for diversity, equity, and inclusion.

Barriers by Career Stage. While burnout and salary inequity were the top two barriers for women in each career stage, women in the reinventive contribution career stage selected organizational culture as the other barrier in their top three as shown in Table 8. Women in the

idealistic achievement and pragmatic endurance career stages identified lack of opportunity as the third barrier in their top three.

Table 8

Barriers by Career Stage

	Career Stage		
	Idealistic Achievement (*n* = 129)	Pragmatic Endurance (*n* = 163)	Reinventive Contribution (*n* = 160)
Burnout	51.9%	55.2%	47.5%
Lack of Opportunity for Career Advancement	37.2%	39.9%	23.8%
Salary Inequity	34.1%	36.2%	28.8%
Organizational Culture	32.6%	25.2%	30.6%
Unsupportive Leadership	30.2%	28.2%	27.5%
Imposter Syndrome	26.4%	25.2%	21.9%
Salary Policies	17.8%	14.7%	16.9%
Lack of Opportunity to Grow or Be Challenged	14.0%	16.0%	14.4%
DEI Issues	13.2%	9.2%	10.6%
Work/Caregiving Balance	8.5%	27.0%	15.6%
Settling for Less	6.2%	6.7%	5.0%
Other	0.8%	4.9%	4.4%
No Barriers	0.8%	1.2%	5.0%

Note. All of the barriers that were provided as ‘other’ could have been categorized as one of the defined barriers above. The researchers decided not to combine them in the percentages above as it would not have changed any of the orders of the barriers.

Barriers by Institution Type. Burnout was the top barrier of women at every institution type. Of the women at four-year institutions, 34.5% (*n* = 130) had salary inequity as their second barrier and lack of opportunity as their third barrier (34%, *n* = 128) as shown in Table 9, whereas women at two-year institutions had unsupportive leadership (36.2%, *n* = 17) as their second barrier. A tie existed for the third barrier at two-year institutions with 31.9% of women selecting both organizational culture and lack of opportunity.

Table 9

Barriers by Institution Type

	Institution Type	
	4-Year (*n* = 377)	2-Year (*n* = 47)
Burnout	53.6%	46.8%
Salary Inequity	34.5%	27.7%
Lack of Opportunity for Career Advancement	34.0%	31.9%
Organizational Culture	28.4%	31.9%
Imposter Syndrome	26.8%	8.5%
Unsupportive Leadership	26.0%	36.2%
Work/Caregiving Balance	17.5%	21.3%
Salary Policies	17.0%	19.1%
Lack of Opportunity to Grow/Be Challenged	14.6%	14.9%
DEI Issues	10.6%	6.4%
Settling for Less	6.4%	2.1%
Other	3.4%	2.1%
No Barriers	1.9%	6.4%

Note. All of the barriers that were provided as 'other' could have been categorized as one of the defined barriers above. The researchers decided not to combine them in the percentages above as it would not have changed any of the orders of the barriers. Also, the respondents who did not select their institution type were not included in this table.

Barriers by Caregiving Status. The researchers analyzed the survey responses to test the null hypothesis: H_0 = No difference exists in the barriers faced by women who identified as caregivers and women who do not identify as caregivers. The researchers asked the respondents to select all characteristics that applied to their relationship and caregiving status. The post-study analysis revealed a limitation in the researchers' collection of caregiving status as there were only two caregiving options for the respondents to select (i.e., identify as a caregiver for a person under the age of 18, identify as a caregiver for a person over the age of 18). Two women did not provide responses to this question and, as such, their responses have been excluded from this specific analysis, leaving 450 possible responses. Of the remaining 450 survey responses, two of the respondents did not reply to the barrier question and two of the respondents only selected "other" as a response to the question. These four responses were excluded from this analysis, resulting in 446 survey responses analyzed, where the respondents could select from zero to three barriers from 12 options provided, resulting in 1,208 selections made.

A Pearson's chi-squared test of independence was calculated, yielding a statistic of $\chi 2 = 58.580$, $df = 11$, $p < .001$. This result led the researchers to reject the null hypothesis as the analysis supported the conclusion that women who identified as caregivers faced different barriers in higher education than those women who did not identify as caregivers. As the chi-squared test showed a statistically significant effect ($p < .01$), a post-hoc analysis with the

Bonferroni adjusted significance was conducted to compare the pair-wise products of the grouped respondents (i.e., women who did and did not identify as caregivers) and needs to attempt to identify the specific groupings within this analysis that were statistically significant (Beasley & Schumacker, 1995; Cox & Key. 1993). This post-hoc analysis determined that the only barrier determined to be statistically significant between the two populations was "balancing work and caregiving obligations" at $p < .01$.

Table 10

Post-Hoc Analysis of Barriers by Caregiving Status

Barrier	Chi-Square	Adjusted Significance
Work/Caregiving Balance	38.44	.000*
Lack of Opportunity to Grow/Be Challenged	7.29	.007
Lack of Opportunity for Career Advancement	6.76	.009
DEI Issues	4.00	.046
Burnout	1.21	.271
Unsupportive Leadership	1.21	.271
No Barriers	1.00	.317
Salary Inequity	0.81	.368
Settling for Less	0.64	.424
Salary Policies	0.49	.484
Organizational Culture	0.01	.920
Imposter Syndrome	0.01	.920

Note: Asterisk indicates a statistically significant result. The barriers are presented in descending order by chi-squared value. The Bonferroni adjusted significance level is $p < .002$. The "other" category of barriers is excluded from this table.

Barriers by Race/Ethnicity. Based on the survey results, the researchers used a statistical analysis to determine whether any differences existed in the barriers faced by women from different racial backgrounds. A Pearson's chi-squared test of independence was calculated, yielding a statistic of $\chi 2 = 29.117$, $df = 12$, $p = .004$. Since $p < .05$, the researchers rejected the null hypothesis that no relationship exists between the types of barriers faced by white women and women of color. Both white women and women of color agreed that burnout was the top barrier. However, white women reported salary inequity and lack of opportunity as the second and third top barriers faced, while women of color reported lack of opportunity as the second barrier, with organizational culture and salary inequity tied for the third barrier.

Professional Development. In order to understand whether statistically significant differences existed in regard to the barriers between women who had attended professional development opportunities and those women who had not, the researchers applied the Pearson's chi-squared test of independence. The results yielded a statistic of $\chi 2 = 11.523$, $df = 12$, $p = .485$. Since $p > .05$, the researchers accepted the null hypothesis that no difference exists between the types of barriers faced by women who had or had not attended professional development opportunities.

Supervisor Traits

The data from the qualitative phase indicated that the barriers experienced by women can be attributed to interactions with supervisors, which further demonstrated the need for support from individuals in leadership roles. The interview responses relevant to this topic were further explored for emergent themes and consistently mentioned supervisor traits. The 11 most frequently cited traits from the qualitative phase were provided as options within a multiple-choice question on this survey. While some traits could be considered personal (e.g.,

compassion, confidence, competence), others were directly related to the professional environment (e.g., work/life balance, consensus building, transformative). Of the traits directly connected to the social justice leadership framework (i.e., inclusive, democratic, critical reflection), inclusive was selected most frequently. The respondents were asked to identify up to three traits that they need exhibited by a supervisor. Each respondent identified with at least one of the listed traits, given the option to select none.

Supervisor Traits by Race/Ethnicity. The researchers analyzed the survey responses to test the null hypothesis: H_0 = No difference exists in the desired traits for a supervisor or leader between women of color and white women. One respondent did not identify a race/ethnicity; therefore, that response was excluded from this particular analysis, reducing the possible survey responses to 451. Women were asked to respond to the following prompt by selecting from zero to three traits in a multiple-choice question providing 11 choices and one "other" option: "*I need a supervisor/leader who is…*" As all of the respondents selected at least one desired character trait, 1,330 selected trait responses were provided.

A Pearson's chi-squared test of independence was calculated, yielding a statistic of $\chi 2 = 23.809$, $df = 10$, $p < .01$. This result led the researchers to reject the null hypothesis that no difference existed in the desired traits in a supervisor or leader between women of color and white women. The analysis supports the conclusion that women of color and white women prefer or prioritize different characteristics in their leaders. A post-hoc test with Bonferroni adjusted significance was conducted to examine the variables within this particular analysis for significance (Beasley & Schumacker, 1995; Cox & Key. 1993) and did not identify any statistically significant differences between the specific needs identified by women in the various racial groupings. However, further examination of the post-hoc analysis identified two pair-wise

combinations of the variables that were the most significant (although not having a statistically significant difference of frequency): women of color identified consensus-building less than what was expected when accounting for equal distribution and also identified being inclusive as a supervisor trait *more* than expected when accounting for equal distribution (see Table 11).

Table 11

Post-Hoc Analysis of Supervisor Traits by Racial/Ethnicity

Traits	Chi-Square	Adjusted Significance
Consensus Builder	9.00	.003
Inclusive	7.29	.007
Transformative	4.84	.028
Compassionate	1.69	.194
Fair	1.00	.317
Democratic	0.64	.424
Work/Life Balance	0.36	.549
Critical Reflection	0.25	.617
Authentic Leader	0.01	.920
Confident	0.01	.920
Competent	0.09	.764

Note: None of these results were statistically significant. The supervisor traits are presented in descending order by chi-squared value. The Bonferroni adjusted significance level was $p < .002$. The "other" category for supervisor traits is excluded from this table.

Supervisor Traits by Level of Institution. The survey responses were analyzed to test the following null hypothesis: H_0 = No difference exists in the desired traits for a supervisor or

leader between women working at 2- and 4-year higher education institutions. The respondents were asked to identify whether the institution at which they were employed at the time of responding to the survey was a 2- or 4-year institution. Of the 452 responses, 29 respondents did not identify their institutions as 2- or 4-year, and one respondent identified her institution as both 2- and 4-year. These 30 responses were excluded from this particular analysis for a total of 422 analyzed responses. All of the remaining respondents selected at least one desired character trait for this question, resulting in 1,246 selections from the 11 specific traits provided. A Pearson's chi-squared test of independence was calculated and did not show any significant associations between institutional level and preferred supervisor traits, $\chi 2 = 14.579$, $df = 10$, $p = .15$. Since $p > .05$, the researchers could not reject the null hypothesis.

Other Supervisor Traits. Similar to the question assessing women's needs, the survey offered an "other" option for the respondents to complete if they wished to report a supervisor trait that was not provided within the 11 explicit options. Twelve respondents provided open-text descriptions of desired supervisor traits. The researchers thoroughly reviewed these responses and determined that they did not contribute new information or insight into the desired traits in supervisors.

The Virginia Network and Women's Needs

The results from the various statistical tests allowed the researchers to better understand the needs of women in the Commonwealth of Virginia across race/ethnicity, caregiving status, institution level, region, experiences in professional development, and supervisor traits. This information shaped the feedback used to address the second research question, "In what ways does the Virginia Network address the needs of women in higher education?" In addition, the

researchers sought to understand the respondents' knowledge of and experiences with the Virginia Network. To assess these measures, the following questions were asked:

1. Have you heard of the Virginia Network?
2. Since attending a Virginia Network event, what has resonated with you regarding your professional development as a woman?
3. Would you attend any Virginia Network programming in the future?
4. What could motivate you to attend Virginia Network programming in the future?
5. Do you know who your Virginia Network Institutional Representative is?

All of the survey respondents were asked and responded to whether they had heard of the Virginia Network. Of the 452 responses, 36% (n = 161) had heard of the Virginia Network and 64% (n= 291) had not heard of the Virginia Network. This result is comparable to the researchers' qualitative findings of 39% and 61%, respectively, based on the one-on-one interviews. Of the 161 women who had heard of the network, 50% (n = 81) had attended an event hosted by the Virginia Network.

Desired Programming

Professional development is the hallmark of the Virginia Network. It convenes an annual conference, hosts a year-long Senior Leadership Seminar, and holds a Women of Color Conference every three years. To assess the ways by which the Virginia Network can address the needs of women, additional questions were asked to help the researchers understand the desired programming that could enhance its opportunities for growth, visibility, and reliability as a professional development source for women across the Commonwealth of Virginia.

Motivation to Attend a Future Virginia Network Event. The participants were asked whether they would attend a Virginia Network event in the future and 85.2% of the respondents stated that they would. Approximately 13.6% were not sure if they would attend a future event,

while 1.2% of the respondents stated that they would not attend a Virginia Network event in the future. The women who responded that they would attend an event in the future were asked to identify the factors that could motivate them to attend. Most of the respondents shared topics that would motivate them to attend a future event, including discussing and addressing equity and inclusion, sharing higher education trends, discussing how to serve underrepresented students, and explaining how to incorporate diversity and inclusion in higher education. One respondent recommended including men in the Virginia Network events. The respondent commented, "I have found that single-gender organizations tend to increase barriers [rather] than removing them. Open dialogue with men through the issues related to women in higher education is critical." As the Virginia Network plans future events and engagement opportunities for women, including these recommendations could yield an increase in attendance and participation within the organization.

Requested Professional Development Topics. Among the total survey responses, 340 women (75% of the total responses) provided answers to the professional development topics that they would appreciate from the Virginia Network. The most frequent themes in the responses were topics related to career advancement, leadership skills, and topics related to their functions or roles within higher education. For example, within career advancement, the majority of the respondents sought topics that would help them in obtaining promotions or foster upward mobility. Topics such as salary negotiation, advancing to executive-level leadership positions, breaking the glass ceiling, and developing paths to advancements were other examples noted. No matter the race/ethnicity or institution type, career advancement was the top area requested for professional development.

The second most frequent theme was related to topics to enhance the women's own leadership skills. The answers were broad, but many focused on how to help the women be more proficient, efficient, and successful in their current roles. For example, leadership presence, emotional intelligence, conflict resolution, and change management were frequently communicated as topics of interest. Overall, a strong desire exists to lead no matter the role or authority currently possessed.

The third most frequent theme included topics specific to the functions or roles that the women served in their institutions. The topics suggested included education policy, admission and recruitment efforts, assessment, budget and finance, and fundraising. Similar to leadership skills, the women commented on learning more about their functional areas, which may not be topics within the Virginia Network's current programming. For example, faculty members self-identified and mentioned topics such as research skills, finding outside funding, and the ability to write more. Those women who identified as working in advancement commented on increasing their knowledge in regard to development and advancement.

Memorable Experiences with the Virginia Network

The participants who responded as having previously attended a Virginia Network event were provided with an opportunity to respond to the following question: *Since attending a Virginia Network event, what has resonated with you regarding your professional development as a woman?* Responses were provided by 81 participants and the major themes provided were networking, a desire for more engagement with the Virginia Network, and self-reflection focused on leadership or skill development.

Thirteen comments specifically addressed networking as a resonating thought after attending a Virginia Network event. Multiple respondents noted that their experiences of

engaging with other women leaders across the state was a highlight of their experiences. One respondent noted, “I enjoyed networking with colleagues in the [Virginia] area. I gained plentiful nuggets for self-care from the sessions I attended.” Additional time to engage with women in higher leadership roles was a request with one respondent stating, “I would have liked to spend more quality time with peers and women who were senior to me.”

While the aspect of engaging with other women left a lasting impression on the participants, the engagement with the Virginia Network left a different impression. The responses ranged from “outside of attending the Virginia Network seminar there has been no connection with the network” to “the one thing I recall is that it was very dependent on the hosts. For instance, one year was very organized and great and then the next year was a bit underwhelming.” Another respondent stated that “the event I attended did not resonate with me and I do not see [an] upcoming event that appeals to me.” The experiences shared speak to the goals of the Virginia Network, while also providing opportunities for the Virginia Network to innovate and improve.

Senior Leadership Seminar

Alumnae of the Senior Leadership Seminar (SLS) were provided with four Likert-type questions to rate their agreement with four program specific statements with a rating scale of one to five, with one indicating strongly disagree and five indicating strongly agree. *Attending the SLS was a good use of my time* was the statement with the highest average response at 4.56 (n = 45). The statement with the lowest average response of 3.80 (n = 45) was *The skills/knowledge I gained from participating in the SLS advanced my career*. Table 12 shows the average responses to all of the statements from the alumnae.

Table 12

Senior Seminar Likert-Type Scale Responses

	N	Mean	SD
Attending the SLS was a good use of my time.	45	4.56	0.55
I would recommend attending the SLS to other women in higher education.	45	4.56	0.66
Overall, the SLS was an impactful leadership development opportunity.	44	4.34	0.81
The skills/knowledge I gained from participating in the SLS advanced my career.	45	3.80	1.06

Note. One participant did not respond to Overall, the SLS was an impactful leadership development opportunity therefore $n = 44$.

Perception of Gained Skills/Knowledge and SLS Participation. The researchers used the compiled data to explore whether differences existed between the skills and knowledge gained for career advancement among those women who participated in the SLS ($n = 45$). They were asked to respond to the following question and report their level of agreement: *The skills/knowledge I gained from participating in the SLS advanced my career.* Figure 2 shows that 64.4% ($n = 29$) of the respondents either strongly agreed or agreed.

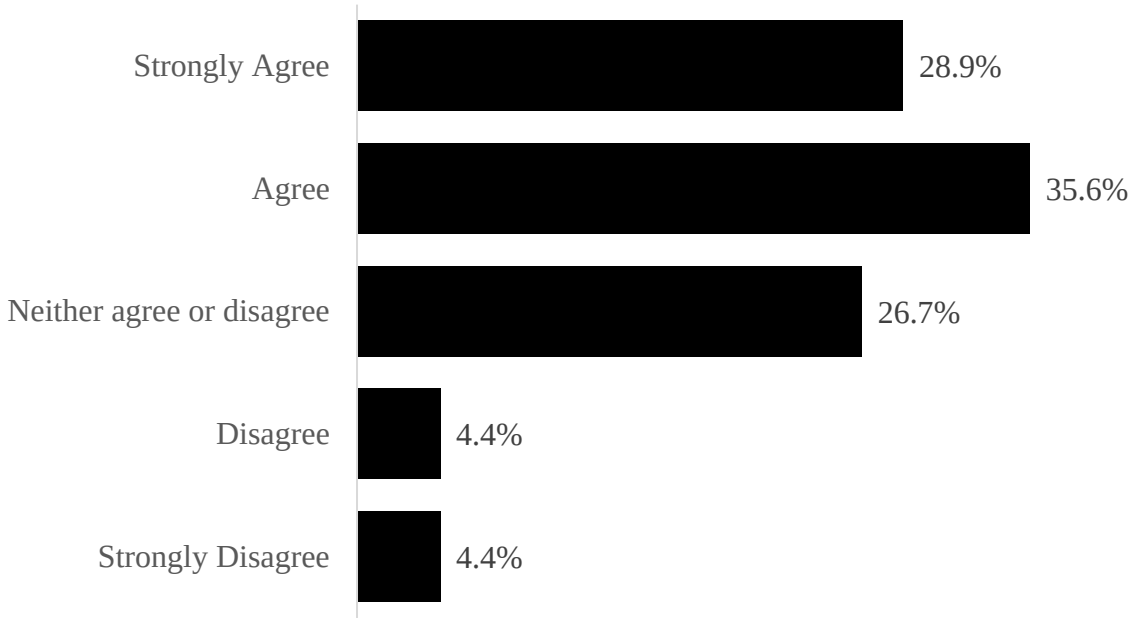
Participants were given the opportunity to provide additional comments about their SLS experiences through two open-ended questions:

1. What is one thing you learned that has been beneficial to your professional career?
2. Please provide us with any other information you would like us to know about your Senior Leadership Seminar experience.

The research team identified the following emergent themes to supplement the quantitative findings regarding the overall SLS experience.

Figure 2

Senior Leadership Seminar Participation and Perception of Gained Skills/Knowledge



Legislative Policy. When asked for additional information about their SLS experiences, six participants highlighted the benefits of increased knowledge and learning "how government affects higher education." One participant specifically emphasized their SLS transformative impact: "The sessions on higher education and state politics were incredibly helpful and changed the way I engage politically as well as in my job." The General Assembly sessions in Richmond, Virginia, were specifically mentioned as a helpful resource for navigating the higher education landscape, especially in regard for higher education funding. However, one participant offered a critique of the General Assembly opportunity stating, "The visit to Capitol Hill in January was interesting, but did not feel like the best use of professional development time for me personally."

Mentoring. Of the 41 total responses, nine SLS participants mentioned mentorship in response to the question: *What is one thing you learned that has been beneficial to your professional career?* The participants echoed career progression or successes due to mentor-type connections established during the SLS. One participant added, "[I] applied for and received a new job. I wouldn't have done this without the mentorship I received." Other participants addressed gaining clarity about the general structure of mentor-mentee relationships. One participant shared, "mentorship sometimes needs to be intentional and does not have to be regimented" and another highlighted the need for different types of mentors "not just disciplinary ones."

Networking. The participants also highlighted networking as a beneficial component of the SLS experience. The responses addressed the expansion of the participants' professional networks through participation in the program and learning about the importance of networking overall. One participant stated, "[I] expanded my network outside of my institution," while another added, "[I learned] the importance of networking with women and men at higher levels." The participants also highlighted opportunities for improvement when asked to share more about the SLS experience. One participant offered,

> I really had a hard time making connections to the other people. There were only a handful that I felt remembered me. I had no reason to follow up with them afterward. When I went to the next conference, they didn't seem like they remembered me.

Another agreed, "I think there could be more effort to make the cohort more cohesive by spending a little more time on relationship building. We have all gone our separate ways, and that makes me sad."

Institutional Representative

Knowledge of Institutional Representatives (IRs) and the Virginia Network. The research team used the compiled data to explore whether a difference existed related to the knowledge of an IR between those women who were aware of the Virginia Network. The data included 160 respondents who were aware of the Virginia Network and reported on their level of knowledge regarding their IR. Table 13 shows that a majority of the women who were aware of the Virginia Network (58.75%) were not aware of their IR.

Table 13

Awareness of Institutional Representatives

Awareness of Institutional Representatives		
Response	*N*	Percent
Yes	66	41.25%
No	94	58.75%
Total	160	100%
Mean	1.59	
Median	2	
Mode	2	

Note. Total responses equal 160 rather than 161 due to one respondent who was aware of the Virginia Network, but did not provide a response about her knowledge of her IR.

Other Comments

In order to increase overall inclusivity and allow the women to provide any relevant comments or feedback about the survey topic, researchers ended the survey with an open-ended

question asking: *Is there anything additional that you wish to share with the research team about your needs, experiences, and expectations as a woman in higher education?* Although this question was optional, 107 women provided responses. The researchers assessed these responses and completed a first-pass coding attempt using inductive, or emergent, coding. However, no new topics or concepts were uncovered. As such, the researchers were confident in the level of saturation achieved through the survey.

Chapter Summary

The qualitative phase of this study included 23 one-on-one interviews with women working at higher education institutions in Virginia. The participants represented various institution types and geographic locations. The data collected during the qualitative phase was used to determine career aspirations, identify needs and barriers, and assess the women's knowledge of the Virginia Network. The participants also self-identified one of three career stages as defined by O'Neil and Bilimoria (2005) so that the researchers could determine needs based on how the participants categorized themselves professionally. Through deductive and inductive coding of the participants' responses, the following themes ultimately emerged: job satisfaction, mentorship and sponsorship, supportive and flexible leadership, work/life balance, and equitable salaries. The researchers used these codes to inform the quantitative phase of the study.

The quantitative survey yielded 452 complete responses from women working at higher education institutions in Virginia. The survey responses revealed several themes, which allowed for the testing of 18 null hypotheses to determine the relationships between needs, barriers, and participant characteristics, such as race/ethnicity, caregiving status, institution type, region, and career stage. The researchers found that equitable salaries, work/life balance, and flexibility were

the top three needs of women in higher education. It was concluded that women of color and white women had different career needs. Needs also differed based on a woman's career stage. The data revealed that burnout, lack of opportunity, and salary inequity were the most frequently experienced barriers among all of the survey respondents. Interactions with supervisors were also cited as a barrier, which led the researchers to explore the top supervisor traits. The data indicated that women of color preferred and prioritized different supervisor traits than white women.

The data collected in both phases of this study provided an understanding of women's needs and whether the Virginia Network has addressed them. In both the qualitative and quantitative phases, the participants were asked about their knowledge of the Virginia Network: 39% of the participants in the qualitative phase had prior knowledge compared to 36% of the participants in the quantitative phase. This finding addresses the Virginia Network's ability to meet the needs of women given the general awareness of its programs and services. The following chapter will further discuss the findings, highlight study limitations, discuss implications for practice, and provide recommendations for the Virginia Network.

Chapter V: Discussion

Research has consistently shown that educational attainment for women continues to increase, but equitable representation in higher education leadership positions is lacking. Women are still less likely to hold senior leadership and faculty positions, yet recent changes in society's perceptions of leadership have made the path for women's advancement slightly less burdensome (Carli & Eagly, 2016). Professional development opportunities, in addition to holistic supervisor support, can aid and prepare women for securing leadership positions. This study, initiated by the Virginia Network, aimed to understand the needs of women in higher education roles across the Commonwealth of Virginia and explore the ways by which the Virginia Network addresses those needs. This study also provided opportunities to gather information for the Virginia Network to help actualize its mission of recruiting and retaining women leaders in higher education across the Commonwealth. Specifically, this research study aimed to address the following research questions:

1. What are the needs of women in higher education across the Commonwealth?
2. In what ways does the Virginia Network address the needs of women in higher education?

The data collected from the 23 one-on-one interviews and 452 survey responses described the multitude of needs and experiences of Virginia women employed by higher education institutions. This data also identified opportunities for the Virginia Network and educational institutions to provide professional development opportunities to enhance supervisory relationships, develop mentoring strategies, and reevaluate programming. This chapter summarizes the findings from the research, acknowledges study limitations, provides

recommendations for the Virginia Network, explains implications for practice, and supplies opportunities for future research.

Summary of Research Findings

By conducting an exploratory mixed methods study grounded in social justice leadership and process evaluation frameworks, researchers were able to understand the needs of women in the Commonwealth of Virginia and the ways by which the Virginia Network could address and support those needs. The following information is a summary of the findings from this research study.

Based on the results from the qualitative phase of this study, the following needs emerged as top priorities for women: mentorship/sponsorship, supportive and flexible leadership, and work/life balance. The needs identified align with the tenets of the social justice leadership theory, which includes transformative [action], inclusive or democratic characteristics, and reflection and discourse (Furman, 2012; Jean-Marie et al., 2009; Wang 2018). The results revealed that over 50% of the qualitative interview participants interacted with an inclusive or democratic leader, yet women continue to yearn for even more support, mentorship, and sponsorship. When supportive leadership is present, both formal and informal opportunities for professional development are also present (Hannum et al., 2015). The participants echoed those findings, sharing their desire for more formal and informal opportunities to engage with mentors/sponsors and expressed the ways they would benefit from those relationships. Interview participants recognized the roles that their supervisors play in opening the doors to those opportunities.

Finally, participants expressed tremendous pressure to balance their work and home lives. The survey respondents, especially those with caregiving responsibilities, admitted difficulty

navigating being a parent while working. These participants also shared their struggles with their current home/work responsibilities and attempting career advancements. Whether this pressure was exacerbated by the stay-at-home orders resulting from COVID-19 regulations is undetermined by this study. The defined lines between work and life are blurred, causing women to readjust to the already difficult challenge of finding a balance between the two worlds. These findings helped the researchers develop survey questions for the quantitative phase to define the needs of women further.

Supportive leadership was also identified as a need in the qualitative phase. The participants shared examples of supportive leadership and its impact on their work productivity, job satisfaction, and their ability to advance. Others commented on how a lack of supportive leadership has adversely impacted their ability to advance or resulted in a lack of trust and self-confidence. These experiences support the social justice leadership theory, in that leadership actions that are intentionally transformative, caring, and reflective positively impact women's careers, and lives (Furman, 2012; Jean-Marie et al., 2009). This information was used to inform the quantitative phase of the study, where the researchers offered the respondents an opportunity to identify the most important character traits of a supervisor. Within the quantitative study, the results indicated that women in higher education need a supervisor or leader who is supportive of their work/life balance, is competent, and is compassionate.

Results from the study's qualitative phase indicated that the main barrier faced by women was overcoming salary inequity. According to the social justice leadership theory, acknowledging a salary gap provides an opportunity for an action-oriented and transformative strategy to address the inequity (Furman, 2012). The participants shared examples of their

awareness of salary inequity, either through direct communication with colleagues or by acknowledging their workload and responsibilities compared to others.

The analysis and findings from the quantitative phase revealed the top needs of women in higher education as equitable income, work/life balance, and flexibility, which is consistent with the literature. Diehl (2014) defined the barriers that women face as individual, organizational, and/or societal, and this study confirmed that women continue to demonstrate needs in each of these three barrier categories. The ability to balance work and life, have the flexibility to perform their jobs, and have mentors and sponsors to advocate on their behalf, while dealing with salary inequities confirms the delicate dance that women face when working in higher education (Diehl, 2014; Hannum et al., 2015). The disparity between men and women in higher education, especially at the leadership levels, is what Hall and Sandler coined as the 'chilly climate' in 1982 (Britton, 2017; Hall & Sandler, 1982). A byproduct of not addressing women's needs could cause the chilly climate experienced in higher education. Women who are unable to find fulfillment of the needs identified in this study may leave higher education. This was also expressed in the quantitative phase survey results, where burnout was a top barrier experienced by women in the Commonwealth. Just as significant as identifying the needs of women in the Commonwealth are the barriers women face in their current roles and when attempting to advance their careers.

The top three most frequent barriers identified by women in the quantitative phase were burnout, lack of opportunity for career advancement, and salary inequity. When women were grouped by certain characteristics (i.e., race, career stage, institution type), burnout consistently stood out at a significant level as the number one barrier for all women in these subgroups. The remaining two barriers (lack of opportunity for advancement and salary inequity) were similarly ranked across these groups but were in slightly different orders.

Overall, the quantitative and qualitative phases of the research study found that women generally have similar needs, experience the same barriers, and require similar supervisory traits. These findings allowed the researchers to craft a plan for the Virginia Network to address the needs expressed by women specific to the Commonwealth of Virginia. The findings also identified areas of opportunity and better defined the Virginia Network's programming as it related to addressing women's needs and barriers in higher education. Human Resources offices at higher education institutions can work with faculty and staff to offer professional development courses, training, and methods by which to improve skills to better detect and resolve the experienced needs and barriers. They can also create ways to incentivize non-traditional options to help them balance work and life. Leadership courses can be developed for all managers to discern how the needs and barriers identified in this study manifest in team members. The Virginia Network is poised to lead in this space due to its organizational structure throughout the Commonwealth, as it can work with its Institutional Representatives to share a model for all employees among the various institutions.

Knowledge of the Virginia Network

The results from the qualitative and quantitative phases revealed that approximately 37% of women in the Commonwealth of Virginia are aware of the Virginia Network. Using the process evaluation framework, the researchers analyzed the network's service utilization and organizational function (Rossi, Lipsey, & Henry, 2019). Approximately 39% of the participants from the qualitative phase and 36% of the participants in the quantitative phase were familiar with the Virginia Network. Of the participants in the quantitative study, 18% of the respondents had attended a Virginia Network event. Of those women who attended an event, 85% stated that they would attend a future Virginia Network event.

In evaluating the Virginia Network's professional development opportunities, the results from this study revealed additional opportunities that the network might explore to meet the needs of women. These findings include suggested professional development topics, opportunities for the Women's Network to enhance the Senior Leadership Seminar, and suggestions for improving the efficacy of the Institutional Representative model. Topics related to career advancement, leadership skills, and enhancing current job functions within higher education were the most requested topics from the survey respondents. The results were similar across racial groupings, institution types, and career stages. Overwhelmingly, women desired to advance in their higher education careers as noted in the responses requesting ideas related to professional development topics. As the literature chronicles the growth in admission, attendance, and graduation for women in academia (Blackchen, 2015; Britton, 2017; Hannum et al., 2015; Johnson, 2017), women see the same opportunities to advance in the profession and aspire to gain the knowledge and skills to advance in higher education. The findings suggest that, if offered opportunities to gain the experiences needed to advance, the ideas of the pipeline myth, chilly climate, and glass ceiling could be resolved. This desire is aided by additional support and development that conferences and training can provide. The Virginia Network can fundamentally shift women's perspectives on leadership and advancement through their program offerings, which can simultaneously support women's needs and reduce barriers.

Study Limitations

This study was initiated during the height of social unrest, economic discord, and a global pandemic. This caused the researchers to face limitations which include COVID-19, the sampling population including representation of institution type, region, and race/ethnicity, women who are caregivers, and other research-related limitations. These limitations pose an

opportunity for further research and additional insight when seeking answers to determine the needs of women in higher education in the Commonwealth of Virginia.

The COVID-19 pandemic forced many institutions to shift operations and allow employees to work remotely beginning in March 2020. For many institutions in the Commonwealth of Virginia, this remote work has continued well into 2021. As a result of the remote work arrangements, researchers relied on email and social media channels to contact eligible participants. Since many eligible participants were no longer on campus, using campus Institutional Representatives to gather or contact women in-person or through inter-office channels was a limitation. Researchers could not use campus posters or flyers, or mailers to invite participants to join this study.

The sampling population was another limitation for this study. According to the National Center for Education Statistics (2019b), the study's population included over 51,000 women across the Commonwealth of Virginia. While the distribution of women in the population work at four-year public institutions (National Center for Education Statistics, 2019b), 83% of the participants in the qualitative phase represented four-year public institutions, and 48% of the participants in the quantitative phase represented four-year public institutions. Participants in the quantitative phase may not reflect an equal distribution of institution type. For example, only one woman in the qualitative phase and 12 women in the quantitative phase represented a historically black college and university. The Commonwealth of Virginia is home to five HBCUs, which poses an additional limitation that those women's input on their needs and barriers were not reflected in this study.

Additionally, most of the respondents in the quantitative phase were concentrated in Region 1 (Central Virginia). While each region was represented during the quantitative phase,

one region had no respondents participate during the qualitative phase. The distribution of institution type and regional location posed a limitation of this study, not having an equal response rate relative to the population size in each respective region (see Appendix K). Additionally, respondents were not required to share their current position, title, or role at their institution. Thus the analysis based on the career phases may not align with the respondent's tenure in higher education or their current leadership level within the institution.

This phenomenon also occurred with the race/ethnicity of the survey respondents as 73% identified as white. Given that the researchers used racial grouping as context for the analysis between the groups (i.e., women of color, white women), this was another limitation due to the disproportionate percentage of women of color when compared to white women. Another limitation related to diversity, equity, and inclusion, includes ensuring other marginalized communities, those with varying abilities or age was not considered as part of this study.

Another limitation of this study included the analysis of caregiving. The disruption in the higher education work environment forced women to balance the demands of work and life in an extraordinary capacity not necessarily planned for this study. Those demands may have caused women not to participate because of their career workload and family requirements, such as teaching school-aged students simultaneously provided little to no extra time to either join an interview or complete the survey. The definition of who is a caregiver was also a limitation for this study. Any woman who responded by selecting 'acting as a caregiver for any person over or under the age of 18' was identified as a caregiver in the quantitative phase. The limitation arose when considering women who did *not* report themselves as being caregivers, as the survey choices did not offer an option to self-identify as *not* a caregiver. For this reason, the researchers did not equate *not* identifying oneself as a caregiver with *not being a caregiver*. Instead, the

researchers assumed that, by not answering the question, the respondents were identifying as not a caregiver.

Lastly, the general limitations of this study included the survey capabilities and time constraints. REDCap, the survey tool used in this study, could not restrict survey respondents from submitting multiple responses. Researchers were also unable to verify if the respondent of the survey met the qualifications to participate. Therefore, there is a chance that participants could have completed the survey more than once or represent a group not intended for this study. Time constraints also posed a limitation. Due to IRB procedures, course timelines, and graduation requirements, researchers relied on convenience and snowball sampling to increase the number of responses for both phases of this study as quickly as possible.

Recommendations

A review of the literature and the subsequent collection and analysis of the qualitative and quantitative data led the researchers to offer four recommendations to the Virginia Network for Women. These recommendations provide suggestions to strengthen the overall function of the Virginia Network in correlation with the needs of women employed in higher education in the Commonwealth. The first recommendation allows the Virginia Network to prepare for continued future success by formulating specific, measurable goals for program outcomes and participation. The second recommendation offers suggestions by which to increase awareness of the Virginia Network and participation in its programs through brand management strategies. Recommendation three outlines the process by which the Virginia Network could evaluate current and recent program offerings and update those programs as a result of the data collected by researchers. The fourth recommendation considers the Institutional Representative component

of the Virginia Network and offers suggestions for bolstering its efficacy and leveraging the relationships developed to increase mentorship opportunities.

Recommendation 1: Virginia Network Branding

An organization's brand is established by a set of tangible and intangible attributes that create value and influence, often symbolized by a name or logo (Todor, 2014). The Virginia Network's mission, methods, and values form a brand that leads to psychological associations among its consumers. A positive brand identity can simplify choices and create excitement, joy, empathy, and stimulation when considering a product, service, or experience (Bilgin, 2018). A well-known brand often leads to a higher recall of advertised benefits and, ultimately, brand loyalty (Iyer, Davari, & Paswan, 2018). Disconnections between the brand and consumer can negatively impact an organization's ability to serve its constituents.

The present study's findings showed that the majority of the participants (approximately 63%) had not heard of the Virginia Network. Deliberate actions to increase brand awareness through brand and marketing strategies would likely increase knowledge of the Virginia Network and its mission to identify, develop, advance, and support women. As an initial step, a value proposition should be identified which would clearly define what to expect from the Virginia Network and what problems are solved by their efforts. Value propositions typically incorporate plain or conversational language that is relevant and relatable to the consumer. Using the data from this study, the Virginia Network could speak to the specific needs of women in higher education. Value propositions help identify the relevance of products and services, highlight specific benefits, and create a point of distinction which would serve as a clear introduction to the Virginia Network's brand and potentially extend its reach (Payne, Frow, & Eggert, 2017).

To that end, the Virginia Network could expand Institutional Representative (IRs) representation to all degree-seeking institutions. Approximately 71 institutions are currently connected to the Virginia Network through IRs, leaving 42 that are not connected. As such, IRs could be utilized to enhance overall brand performance. According to Iyer, Davari, and Paswan (2018), "brand performance is anchored in the notion that employees represent resources whose skills and knowledge can be harnessed to provide a sustainable competitive advantage for organizations" (p. 202). In this instance, IRs would be considered employees due to their connection to and knowledge of the Virginia Network. As brand ambassadors and internal stakeholders, IRs could successfully execute a brand vision and, in turn, share relevant information about the Virginia Network to women on their respective campuses. Important components of the internal brand management strategy would include familiarity with the following: the value proposition, objectives and characteristics of the brand, actions that the organization is taking, the organization's mission, and a method of sharing relevant information. These components should be included in a comprehensive brand kit that also includes logos, document templates and language, and appropriate color schemes to promote a cohesive internal brand identity. As women are generally relational leaders who value connections at work, developing a strong internal brand can create residual benefits to the external stakeholders of the Virginia Network.

In addition to its IR involvement, strengthening its social media presence may also benefit the Virginia Network and help calibrate marketing strategies. Social media channels, such as Facebook, YouTube, LinkedIn, Twitter, and Instagram, may significantly impact brand-constituent relationships and general brand awareness (Bilgin, 2018). Social media usage is highly dependent upon age, gender, race, and educational attainment; however, usage has

become more representative of the general population over time. Seventy-two percent of adults use at least one social media platform, and most engage daily (Pew Research Center, 2019). As this study demonstrates that women desire professional development topics addressing salary negotiation, change management, and conflict resolution, the Virginia Network could create consistent and compelling content that would likely be shared across users' networks, extending the Virginia Network's reach. Data from this study also suggested that women would appreciate ongoing engagement with the Virginia Network beyond the annual conference. Social media could be utilized to facilitate regular communication about organizational changes, as well as program successes and progress. In addition, social media provides a formal platform by which to solicit feedback through polls and short surveys.

In order to build a stronger social media presence, the Virginia Network should consider creating a Communications Plan which incorporates the following:

1. Develop a Social Media Plan that clearly identifies relevant goals and objectives to promote constituent engagement.
2. Hire a Social Media Manager or designate as a position on the Board of Directors.
3. Create monthly content calendars to highlight professional development topics, Virginia Network events, internal stakeholders (i.e. Institutional Representatives, Board of Directors), and other relevant information.
4. Implement a contest or giveaway series to increase brand awareness, increase social media following, drive engagement (i.e. free registration for annual conferences), or to promote new program offerings.
5. Implement quarterly polls or surveys to gain insight about suggested program offerings, topics of interest and to solicit general feedback.

Recommendation 2: Evaluation of Current Programming

This study has allowed the researchers the opportunity to survey over 400 women in higher education to determine their top needs, barriers faced, and desired supervisor traits. These important assessments, combined with the demographic and institutional characteristics collected, will allow the Virginia Network to evaluate recent and current program offerings for relevancy and interest to the population they wish to target. Consideration of these high-interest topics is recommended during the strategic planning process when envisioning future offerings during annual conferences, the Senior Leadership Seminar, and other professional development or networking opportunities. Additionally, the researchers recommend that the Virginia Network evaluate the effectiveness of its IRs at institutions across the Commonwealth and consider providing more explicit guidance and expectations for those individuals who serve in this role, which will be discussed in further detail in the next recommendation.

Updating Program Offerings

The Virginia Network historically convenes women across the Commonwealth of Virginia annually in a conference setting. While the conference location rotates every year, and every third year is hosted as the Women of Color Conference, the results of this study indicate a need for the Virginia Network to update its program offerings and increase the number of professional development opportunities offered to women across the Commonwealth. With the rise of virtual and hybrid conferences, the Virginia Network should explore hosting quarterly (or monthly) webinars on the topics identified in this study. Career advancement, leadership skills, and functional roles were the most popular topics women requested for professional development. These themes could rotate throughout the year, allowing women to share their experiences and experts to provide content and tips.

Additionally, the Women's Network could host informal virtual networking events so that women can network among themselves. The virtual networking events could occur separately from the professional development experience or as standalone events with the given topic for women to network with each other. Technologies such as Zoom, offer an opportunity to poll participants and create breakout rooms seamlessly, with little to no cost for participants to join. Participants are also not bound by travel and can participate wherever they are.

Ongoing Transformative Leadership Training

After the qualitative coding of the one-on-one interviews was complete, the researchers debriefed and reflected on the experience. The researchers determined that the challenge to "determine the needs of women" was framed/approached from the lens of women identifying the skills, training, or support that could be provided directly to them through professional development training or similar opportunities (i.e. "how can the woman be fixed?"). However, the researchers quickly learned from the women interviewed that many of their needs can only be realized by supportive, inclusive, and compassionate supervisors and a change in organizational structure and culture. Professional development and support for women are wonderful, but can never address the underlying structure that causes the barriers and inequities women face.

As a result, program offerings should be evaluated for and extended to providing ongoing transformative (including developmental and supportive) leadership training for current leaders at higher education institutions, regardless of gender. Beyond the Senior Leadership Seminar, women leaders should have access to tools, training, and resources to help them refine and continually develop their leadership skills. It is equally as important that these leaders be reminded of how to best support, encourage, and include those individuals under their leadership

in their decision-making processes. As discussed previously, many of the women interviewed expressed displeasure with the level of compassion, inclusion, and support received from their current supervisors. The preparation of women for senior and executive-level leadership roles requires the delivery of specific skills and tools for advancement and success. Incorporating the results highlighted in this study should be the foundation for those who aspire to lead in higher education. Current leaders will continue to lead and mentor others, and so program offerings should continually focus on the impact of leadership.

In addition to training on leadership style, guidance for promoting organizational change and cultural support for women employees must be provided. Women in higher education in Virginia could greatly benefit from the Virginia Network helping higher education institutions in the state make their environments more promising for women. Bolman and Deal (2017) describe several organizational cultural beliefs that contribute to women's difficulty succeeding in organizations, many of which have been explored in this study's literature review:

- Typical leadership characteristics, such as assertiveness and power, are associated with males.
- There are conflicting expectations of women leaders by subordinates. A woman leader is expected to be assertive, but is considered harsh when acting so. A woman leader is expected to be supportive, but then deemed feeble when acting so.
- Women continue to be discriminated against systematically and societally.
- A women's caregiving status has a negative perceived impact on work capability by supervisors, whereas a male's caregiving status has a positive impact, or no perceived impact, on capability.

- Women promoted to higher positions often have a more difficult time than men earning respect from subordinates, which ultimately leads to their failure as a leader.

Recommendation 3: Mentoring through Institutional Representatives

IRs are responsible for ensuring that information about the ACE Women's Network and its state networks are shared at their respective institutions (ACE Women's Network, 2016). These individuals are instrumental in "encouraging campus-based professional development, increasing visibility of women on the campus" (The Virginia Network, 2020, p. 10). Specifically, key responsibilities of the IRs include:

1. Building a campus network whereby other women are identified as potential leaders and mentored in their aspirations;
2. Identifying women in key leadership positions on campus, including women administrators and women who hold significant leadership positions on the faculty;
3. Nominating women for leadership positions as opportunities arise;
4. Encouraging senior-level women and men to serve as mentors or sponsors to women in middle-level administrative positions or to other women who have demonstrated potential for administrative responsibilities; and
5. Creating opportunities for campus women at all levels to get to know one another's interests, ambitions, and talents.

At the time of this study, the Virginia Network was serving 71 higher education institutions in Virginia by way of IRs, leaving the remaining 42 (37.2%) of Virginia degree-granting higher education institutions without a concrete connection to the Virginia Network. As IRs play an essential role in spreading awareness of the Virginia Network and its programs, it is critical that the Virginia Network increases its focus on IR recruitment to bolster its efficacy on Virginia

higher education institution campuses. Through an intentional focus on recruitment and training of IRs, the Virginia Network can develop a mentoring framework for use on individual campuses that will specifically highlight and actualize the five previously discussed key responsibilities of IRs.

Recruitment and Training of Institutional Representatives

The Virginia Network asks each eligible institution to identify a woman administrator on its campus to serve as its IR (The Virginia Network, n.d.-c). While IRs are provided with a position description and key responsibilities, what is not provided is how the Virginia Network helps campuses equitably recruit potential IRs. The survey distributed for this study highlighted that 58.75% of the women who were aware of the Virginia Network were not aware of their IRs. Therein lies an opportunity for the Virginia Network by focusing its efforts on increasing the visibility of its IRs. In addition, outside of a fall meeting where all IRs meet to "discuss programming and to network among themselves" (The Virginia Network, n.d.-b), the Virginia Network does not explicitly state how it prepares, trains, and supports IRs to fulfill their roles. It is also important to emphasize that training needs to be provided on what the Virginia Networks' expectations are for IRs to critically assess their campus climates, increase the visibility of women on their campuses, disseminate information on their campuses, and maintain communications with the Virginia Network (The Virginia Network, n.d.-b).

A robust recruitment and training plan would include the following: (1) the Virginia Network's commitment to supporting equitable opportunities for all interested women so that they are considered for the IR role, (2) an IR onboarding process that includes the history of the role and its responsibilities as well as conversations on how to execute the role, and (3) an agreed-upon transition plan for when IRs are no longer able or willing to serve in their roles. By

providing this plan, the Virginia Network would strengthen its relationships with campuses which, in turn, would help the Virginia Network achieve its goal of facilitating connections among women in higher education (The Virginia Network, n.d.-a). To implement this plan, the researchers recommend the following action steps: (1) survey current institutional representatives to gather information regarding their perceptions regarding their roles and responsibilities; (2) directly connect with each college/university president, or their representative, to emphasize the importance of the IR role further and recruit for those institutions that do not have IRs; and (3) develop and offer recruitment and onboarding plan previously mentioned.

Virginia Network and Mentoring

Previous studies have shown that a lack of opportunity for mentorship is an organizational barrier (Diehl, 2014). Mentorship was a theme that emerged from both the qualitative and quantitative phases of this study. Specifically, data from this study showed that a majority of women of color identified mentorship as a top-three need for their careers. Currently, the Virginia Network provides mentorship opportunities by way of involvement in the Senior Leadership Seminar. Data from this study indicated that an opportunity exists for the Virginia Network to provide additional occasions for women to be exposed to potential mentors.

The Virginia Network should explore using IRs as the conduit for helping establish cross-disciplinary mentoring relationships since they are responsible for "creat[ing] opportunities for campus women at all levels to get to know one another's interests, ambitions, and talents" (ACE Women's Network, 2016, p. 13). This woman-to-woman mentorship is critical as it fosters positive self-perceptions of leadership (Brue & Brue, 2018; Debebe & Reinhart, 2014). Through ongoing communication, IRs can provide quarterly opportunities for like-minded women interested in mentoring and being mentored to gather, whether virtually or in-person, and

develop informal and formal relationships. These gatherings may also highlight any other cross-institutional mentoring opportunities that can provide key networking opportunities for career development and advancement.

Following the identification of Institutional Representatives at each degree-granting Virginia institution served by the Virginia Network, the researchers recommend that the following actions are taken to implement this mentoring program:

1. At the beginning of each academic year, each Institutional Representative hosts an informational mentoring networking session with women on their campus; this can be in tandem with any other mentoring program for women hosted by the institution. IRs must commit to holding quarterly networking events so that during these sessions women can build interdisciplinary support networks;
2. Provide mentoring sessions at each annual conference for women at each career stage focusing on topics such as leadership presence, salary negotiation, and effective communication; and
3. Along with support from the Board of Directors, the IRs should disseminate information monthly, highlighting women leaders excelling at mentoring, to encourage other women to partner with the Virginia Network as mentors.

Recommendation 4: Strategic Planning

The final recommendation offers the Virginia Network a vehicle by which to tie all the recommendations and take the Network from where they are to where they wish to be: a strategic plan. A strategic plan is a proven, practical business method for the formulation of goals and strategies of focus is the strategic planning process (Bryson, 2018; George, Walker, & Monster, 2019; Porter, 1996). More than that, though, is a strategic plan's ability to provide an

organization with direction, communicate the organization's value to its audience, and to identify relevant, assessable action items (Bryson, 2018). Development of and adherence to strategic plans often result in increased organizational effectiveness and overall responsiveness to the audience's needs (Bryson, 2018; George, Walker, & Monster, 2019).

The national ACE Women's Network offers its state networks various resources on organizational function and strategic planning through its website and recorded webinars (https://www.acenet.edu/Programs-Services/Pages/Communities/ACE-Womens-Network.aspx). Especially of value is a recorded virtual presentation, *Make Your State Network Strategic Plan Live*, by the ACE Women's Network of Delaware (American Council on Education, 2020c). This presentation offers valuable, relevant guidance for any state networks wishing to revise or establish a strategic plan. The following guidance is taken from the information provided in this presentation.

Temperature

Take the audience's and executive board's temperatures, or assess their needs and opinions (American Council on Education, 2020c). The research provided in this study offers much of this information for the Virginia Network already, such as: the needs, barriers, and preferred topics for professional development of the audience; identified strengths in networking opportunities and the annual conference; identified opportunities for development in communication, branding, and Institutional Representative participation; participation and awareness rates between women in higher education and the Virginia Network, if the study's findings are generalized.

The Virginia Network should examine the extent to which the executive board believes that the Network supports the core principles of the ACE Women's Network, and the Network

should identify its value proposition (American Council on Education, 2020c). A key component of a strategic plan, especially for a non-profit organization, is its value proposition. A value proposition is an organization's explanation for why interacting with that organization is worthwhile, among all other similar organizations (Payne, Frow, & Eggert, 2017; Sheth, 2020; Smith, 2020). The value provided is more often an experience rather than a tangible item or specific benefit. A striking value proposition motivates consumers to engage with the organization. With non-profits, an attractive value proposition can also entice donors to contribute, backing the value the organization provides (Perić, Delić, & Stanić, 2020; Sheth, 2020).

Craft the Vision and Mission

Next, the Virginia Network should craft an aspirational vision statement and attainable mission statement using what was learned in the *temperature* phase. The Network should consider the impact it wants to have on women employed in higher education in Virginia while contemplating this step. Other issues to consider are how the Network can stay connected and relevant to its audiences' lives and what the Network's priority will be over the next several years (American Council on Education, 2020c).

Develop Action Steps

The Virginia Network must connect the value proposition to specific actions it plans to take during the strategic plan's cycle, including leveraging strengths and improving weaknesses (American Council on Education, 2020c). Every action step must contribute directly to part of the vision, mission, or value proposition. Metrics for evaluation or analysis must be built into each action step in order to assess the Network's ability to deliver these services (American

Council on Education, 2020c). Based on this research, some suggested areas from where to derive action steps are:

1. Recruit and establish Institutional Representatives at a certain percentage of all institutions in Virginia
2. Explore the Institutional Representative experience to assess how onboarded, supported, prepared, and engaged they feel.
3. Expand Virginia Network awareness and participation by developing a thorough communication and social media plan.
4. Regularly revisit current programming to provide multiple professional development opportunities on topics addressed in this study.

In summary, a strategic plan can allow the Virginia Network to clarify its value proposition and align action items and evaluation based on that proposition, the vision, and the mission (American Council on Education, 2020c). These types of plans allow organizations to remain relevant and effective by staying attuned to and supporting constituent needs (Bryson, 2018; Porter, 1996). A well-defined strategic plan developed by the Virginia Network can provide motivation and excitement for the executive board and the Network's audience and can provide guidance and focus for future planning since everything can relate to the strategic plan and its components.

Implications for Practice

This study's findings and recommendations have explicit implications for professional practice. Equitable income was cited as the top need and the third most frequently experienced barrier by all women in higher education across Virginia. Data from this study suggests that revisions to institutional and state policies may be necessary to meet the needs of women.

Several states have implemented intentional and deliberate measures to address the earnings gap, which is narrowing, but persists (Pew Research Center, 2020). Approximately 19 states have banned employers from requiring applicants to disclose their pay history during the application process. For example, North Carolina's Executive Order 93 prohibits state agencies from obtaining an applicant's salary history as a means to determine the hiring salary in direct response to the pay gap between women and men (Exec. Order No. 93, 2019). States have also mandated systems that force transparency in regard to employee pay information. Large employers in California are required to submit annual pay data reports by gender, race, and ethnicity. Due to billions of lost wages for women annually, Senate Bill (SB) 973 encourages self-assessment and accountability for organizations under the jurisdiction of the California Department of Fair Employment & Housing (California Department of Fair Employment & Housing, 2021). Generally, pay audits can be utilized by higher education institutions as a step to reveal statistically significant pay gaps based on gender and ethnicity (Connell & Mantoan, 2017).

Rumbley, Land, and Becker (2018) claimed that the vast majority of higher education leaders and managers enter their positions with no training and often learn while on the job. The responses of the study's participants regarding their interactions with their supervisors support this claim and demonstrate the need for formal and informal training opportunities for individuals in leadership roles. As higher education systems continue to grow and pressures to meet performance indicators increase, the need to train effective managers and leaders is more urgent (Rumbly, Land, & Becker, 2018). Formalized training opportunities provide higher education institutions with opportunities to not only fulfill the needs of employees, but increase productivity and change organizational culture.

Mentorship has been cited as a significant contributor to personal and professional growth, regardless of gender, and can be transformative for both the mentor and mentee. More institutions could benefit from developing structured mentoring programs to foster formal and informal networks within the campus community. Although not as widely recognized, an intentional focus on sponsorship could create a generalized awareness of the personal and institutional benefits of engaging in this type of relationship. Sponsors create career advancement opportunities for individuals, increase overall talent within an organization, facilitate leadership development, facilitate leader succession, and facilitate transition planning (Ayyala et al., 2019). Ideally, the deliberate integration of mentoring and sponsoring opportunities into organizational culture would create an environment that prioritizes continuous development and belonging.

Suggestions for Future Research

Identifying the needs of women and barriers to their personal and professional development is a complex task. Due to many intersecting identities and uncontrolled factors, the needs of women shift continuously. While the findings from this study add to the general body of literature regarding the needs of women in higher education, the researchers identified additional areas to explore these needs further.

Data from this study highlighted that women's needs vary based on indicators such as career stage. As the Virginia Network supports women at all levels in their careers (i.e., entry-, mid-, executive), it may be beneficial to create formalized definitions of career levels and research the needs of women based on these levels. With this knowledge, the Virginia Network could create targeted programming to address the specific needs of women at various points in their careers. Additionally, the Virginia Network prioritizes career advancement for women in higher education through its Senior Leadership Seminar. Surveying women in presidential and

other executive leadership roles could help the Virginia Network identify the obstacles, challenges, and opportunities that are experienced in achieving these roles. This data could be used to enhance program offerings and, perhaps, increase the likelihood of women earning university president and chancellor positions.

While the Virginia Network is singularly focused on professional development opportunities for women, an opportunity to expand research related to women in higher education should involve men. Surveying men in higher education on the same topics presented in this study could reveal additional stereotypes, generalizations of women in the field, and other opportunities to respond to the needs and barriers faced by women. Women are far less likely than men to hold leadership positions in higher education (Johnson, 2017); therefore, research from a male's perspective could lead to further insight on ways by which to advance women in the field.

Opportunities to expand research also extend to higher education institutions in Virginia and beyond. The findings from this study highlight the needs of women, the barriers they experience, and their desired supervisor traits. Institutions could explore how this data can be utilized to evaluate current policies, initiatives, and programs to determine if they are addressing the needs of women. An opportunity also exists to further research institution-specific retention issues and why women leave the higher education profession altogether.

Conclusion

Although historically complex, the relationships between women, leadership, and higher education opportunities led to the development of professional networks and organizations aimed at supporting women's aspirations in higher education. This study encompassed data from 23 one-on-one interviews and 452 survey responses. The qualitative data was collected and

analyzed using deductive coding using the most prevalent themes from this study's literature review, the social justice leadership theory framework (Furman, 2012; Jean-Marie et al., 2009; Wang, 2018), and the process evaluation framework (Rossi, Lipsey, & Henry, 2019). A secondary review identified emergent sub-themes from the original ten deductive codes. These themes were then used to develop the survey disseminated during the quantitative phase of this study. The quantitative data was collected and analyzed using descriptive statistics, Pearson's chi-squared tests for independence, and post-hoc analysis. Inductive coding was used to analyze the open-ended responses to the survey questions. The data collected provided a clearer understanding of the women's needs, the barriers they have faced, and their perceptions of the Virginia Network and its programming.

The Virginia Network originated as a professional development organization to provide support and eradicate barriers for women interested in and qualified for senior or executive-level leadership positions. Additionally, the Virginia Network executes its mission based on three primary priorities: supporting an established network of IR campus volunteers; hosting an annual conference and a tri-annual Women of Color Conference; and hosting the Senior Leadership Seminar, a leadership development program for women. The organization has reliably operated since 1977 as one of the original state networks instituted by the American Council on Education's Women's Network, but the foundation on which the Virginia Network lies needs innovation.

For the network to effectively meet the needs of the women in the Commonwealth of Virginia, a critical review of the IR model, the network's branding, and its program offerings are necessary. This review can be accomplished by developing a strategic plan that will guide organizational effectiveness and assessment. In essence, to truly lean into its mission of

recruiting and retaining women leaders in higher education across the Commonwealth, the Virginia Network should reevaluate its branding and programming to meet women's current and future needs. Updating the Senior Leadership Seminar's (SLS) curriculum and instituting an equitable and visible nomination process for SLS participation will allow the network to build upon the foundation that its alumnae depict as impactful and valuable. By incorporating the recommendations from this study, the network can enhance its brand awareness and easily reposition itself within the Commonwealth of Virginia as a premier organization that supports higher education institutions' efforts to recruit and retain women.

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Appendix A

Qualitative Interview Questions

Blue italicized questions are for prompting

Hello, my name is _____. Before we get started, we'd like to say thank you for your willingness to participate in our doctoral capstone. As you've read, our aim is to understand all of the needs of women who work in the various roles across higher education, specifically in the Commonwealth of Virginia. Our interview will begin with a series of open-ended questions about your professional experiences. We have also allotted time for any follow-up questions that may come up. Our conversation is being/will be recorded to allow the research team to reference this interview at a later date. Do you have any questions about the process?

1. How long have you been in higher education?

2. Please describe your higher education career path to include position titles and primary responsibilities.
    a. Is your current role one you aspired to hold? Why or why not?
    b. What have been positive outcomes/successes in your higher education career thus far?

3. In terms of your career, what are your needs as a woman in higher education?
    a. What opportunities have you explored to meet your needs?
        i. If they answer no: What has prevented you from doing so?
        ii. If they answer yes: What resources benefitted you in addressing those needs?
    b. What barriers, if any, have you encountered trying to meet your needs? *(Work/family conflict, communication style barriers, tokenism, exclusion from informal network, lack of mentors, lack of sponsors, salary inequities, gender discrimination, workplace harassment, unsupportive leadership, racism and discrimination)*
        i. If they provide an answer saying they've had barriers: What resources/strategies benefitted you in addressing those barriers?

4. What is your aspirational career role?
    a. What steps have you taken to achieve that role?
    b. What assistance do you still need to achieve that role? (i.e. overcome barriers: *work/family conflict, communication style barriers, tokenism, exclusion from*

informal network, lack of mentors, lack of sponsors, salary inequities, gender discrimination, workplace harassment, unsupportive leadership, racism and discrimination). Specifically, what professional and leadership development opportunities do you need to achieve your goals? Education, skills, experience, coaching/mentoring, etc..

c. Please describe any pivotal moments or notable changes that directly impacted your aspirations *(professional development opportunity, education, access to person)?*

5. What knowledge, if any, do you have of the Virginia Network?
    a. Have you participated in any of their programs?
    b. How has your involvement with the Virginia Network impacted your career?
    c. Do you know who your Institutional Representative is? (current faculty or staff at colleges and universities in VA that spread awareness of the network, its programs, and advocate for women's interests and advancement at their institution).

6. Describe your employment experiences as a woman at higher education institutions in Virginia.

7. In our research and analysis, we are classifying women by career stage. I am going to share my screen and provide you with summaries of the three career stages. Please read the stage descriptors and tell me which stage best applies to you, currently, and why you chose that stage.

8. Given the conversation we've had so far, is there anything you wish to add regarding your needs, experiences, and expectations as a woman in higher education?

Appendix B

Survey/Interview Validation Rubric for Expert Panel - VREP

Criteria	**Operational Definitions**	**Score** **1=Not Acceptable** (major modifications needed) **2=Below Expectations** (some modifications needed) **3=Meets Expectations** (no modifications needed but could be improved with minor changes) **4=Exceeds Expectations** (no modifications needed)				**Questions NOT meeting standard (List page <u>and</u> question number) and need to be revised.** ***Please use the comments and suggestions section to recommend revisions.***
		1	2	3	4	
Clarity	· The questions are direct and specific. · Only one question is asked at a time. · The participants can understand what is being asked. · There are no *double-barreled* questions (two questions in one).					
Wordiness	· Questions are concise. · There are no unnecessary words					
Negative Wording	· Questions are asked using the affirmative (e.g., Instead of asking, "Which methods are not used?", the researcher asks, "Which methods *are* used?")					
Overlapping Responses	· No response covers more than one choice. · All possibilities are considered. · There are no ambiguous questions.					

Balance	· The questions are unbiased and do not lead the participants to a response. The questions are asked using a neutral tone.					
Use of Jargon	· The terms used are understandable by the target population. · There are no clichés or hyperbole in the wording of the questions.					
Appropriateness of Responses Listed	· The choices listed allow participants to respond appropriately. · The responses apply to all situations or offer a way for those to respond with unique situations.					
Use of Technical Language	· The use of technical language is minimal and appropriate. · All acronyms are defined.					
Application to Praxis	· The questions asked relate to the daily practices or expertise of the potential participants.					
Relationship to Problem	· The questions are sufficient to resolve the problem in the study · The questions are sufficient to answer the research questions. · The questions are sufficient to obtain the purpose of the study.					
Measure of Construct: A: ( )	· The survey adequately measures this construct.****[Include Operational Definition and concepts associated with construct]***					
Measure of Construct: B: ( )	· The survey adequately measures this construct. ****[Include Operational Definition and concepts associated with construct]***					

Measure of Construct: C: ( )	· The survey adequately measures this construct.* ***[Include Operational Definition and concepts associated with construct]***					
Measure of Construct: D: ( )	· The survey adequately measures this construct.* ***[Include Operational Definition and concepts associated with construct]***					

Appendix C

Telephone and Email Scripts to Participate in Qualitative Interviews

Telephone Script - Invite to Participate

Hello,

My name is _____. I am a doctoral candidate in Virginia Commonwealth University's Educational Leadership Program and I am calling to ask if you would participate in my doctoral capstone research study that my capstone group and I are conducting titled: The Effectiveness of the Virginia Network for Women: A Mixed Methods Study. The purpose of this study is to understand the needs of women in higher education roles across the Commonwealth of Virginia. The study will also research the ways the Virginia Network addresses the needs of women. The outcomes of this study will help the Virginia Network strategize their efforts to actualize their mission of recruiting and retaining women leaders in higher education across the Commonwealth. We are especially interested in understanding the Virginia Network's ability to identify, develop, advance, and support women in higher education.

We would like to schedule a time to interview you to understand what needs you have professionally and for your leadership development. The interview will take approximately one hour. If you elect to participate in the interview, you will be entered into a drawing to win one of two $25 American Express gift cards.

Your participation is voluntary and if during the interview, you come to any question you prefer not to answer, please let me know and I will skip to the next question.

Email Script - Invite to Participate

Dear colleagues,

We hope this email finds you well as we all continue to persevere during this unprecedented time. We are doctoral candidates in Virginia Commonwealth University's Educational Leadership Program and we are reaching out to ask for your participation in our doctoral capstone research study: The Effectiveness of the Virginia Network for Women: A Mixed Methods Study. The purpose of this study is to understand the needs of women in higher education roles across the Commonwealth of Virginia and to research the ways the Virginia Network addresses the needs of women. The outcomes of this study will help the Virginia

Network strategize their efforts to actualize their mission of recruiting and retaining women leaders in higher education across the Commonwealth. We are especially interested in understanding the Virginia Network's ability to identify, develop, advance, and support women in higher education.

If you identify as a woman and currently work at a higher education institution in Virginia, we would like to invite you to participate in a one-on-one interview via Zoom to better understand your professional and leadership development needs. The interview will take approximately one hour. If you elect to participate, you will be entered into a drawing to win one of two $25 American Express gift cards. Your participation and responses are completely voluntary.

If you are willing and able to participate, please complete this Google Form to notify us of your interest: http://bit.ly/VCUCapstone. One of the members of the capstone research team will contact you to set up an interview. If you have questions about this process, please contact Jenae' Harrington at jdharrington@vcu.edu.

This project is research. Please review our Research Participant Information Sheet.

Please consider sharing this message with any qualified friends and colleagues that identify as a woman and are also employed at a Virginia higher education institution. Our goal is to reach as many eligible participants across the Commonwealth as possible, representative of all identities and at varying institution types and career stages.

We sincerely thank you for your time,

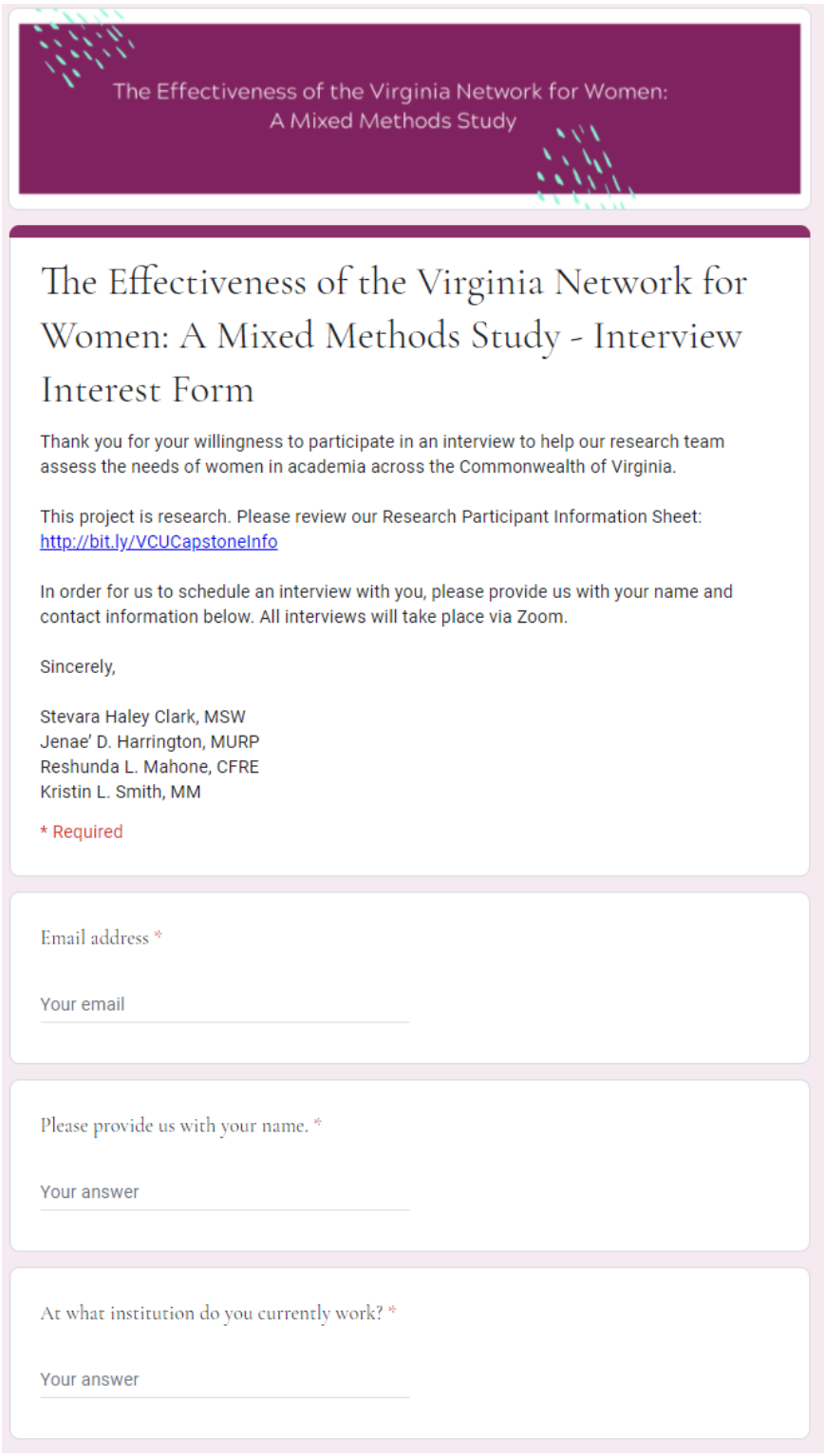
Stevara Haley Clark, MSW
Jenae' D. Harrington, MURP
Reshunda L. Mahone, CFRE
Kristin L. Smith, MM

Appendix D

Social Media Graphics for Interview Participants

Appendix E

Google Form to Express Interest to Participate in Interview



Appendix F

Research Participant Information Sheet

VCU IRB PROTOCOL NUMBER: HM20020495

STUDY TITLE: The Effectiveness of the Virginia Network for Women: A Mixed Methods Study

VCU INVESTIGATOR: Dr. Tomika Ferguson, Interim Assistant Dean for Student Affairs and Inclusive Excellence

PURPOSE OF THIS STUDY:

You are invited to participate in a research study about needs of women in higher education roles across the Commonwealth of Virginia. The study will also explore the ways the Virginia Network addresses the needs of women. The outcomes of this study will help the Virginia Network strategize their efforts to actualize their mission of recruiting and retaining women leaders in higher education across the Commonwealth. This study will contribute to the literature an understanding of the landscape of women in the Commonwealth of Virginia, the barriers faced as a woman in academia, and how the Virginia Network can support the needs of women in the areas of professional development and leadership development.

VOLUNTARY NATURE OF THIS STUDY:

Taking part in this study is voluntary. You may choose not to take part or may leave the study at any time. Leaving the study will not result in any penalty or loss of benefits to which you are entitled.

RESEARCH PROCEDURES:

In this study, you will be asked to do one of the following things:

1. Participate in a recorded interview via Zoom about your experience as a woman working in higher education. You will be asked to provide your availability by email for scheduling purposes.
2. Take a survey and answer questions about your experience as a woman working in higher education.

CONFIDENTIALITY:

VCU and the VCU Health System have established secure research databases and computer systems to store information and to help with monitoring and oversight of research. Your

information may be kept in these databases but are only accessible to individuals working on this study or authorized individuals who have access for specific research related tasks.

Identifiable information in these databases are not released outside VCU unless stated in this consent or required by law. Although results of this research may be presented at meetings or in publications, identifiable personal information about participants will not be disclosed.

Personal information about you might be shared with or copied by authorized representatives from the following organizations for the purposes of managing, monitoring and overseeing this study: Representatives of VCU and the VCU Health System.

In general, we will not give you any individual results from the study.

In the future, identifiers might be removed from the information you provide in this study, and after that removal, the information could be used for other research.

CONTACT FOR QUESTIONS:

If you have any questions, concerns, or complaints about this study now or in the future, please contact Dr. Tomika Ferguson at (804) 828-1125 or tlferguson2@vcu.edu during regular business hours (i.e. 8:00 AM – 5:00 PM).

Appendix G

A Survey for Women in Virginia Higher Education

0. Do you identify as a woman, currently work at a degree-granting higher education institution based in Virginia, and are over the age of 18?

a.Yes
b. No

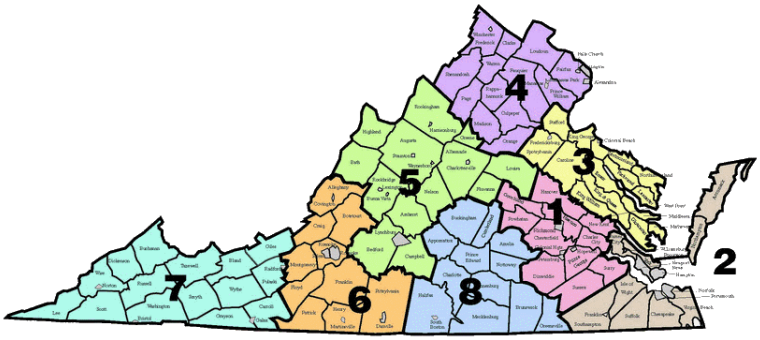
Section I: Demographic and Institutional Information

1. With which race/ethnicity do you identify? (Select all that apply)
    a. Black/African American
    b. Asian
    c. White/Caucasian
    d. Hispanic/Latino
    e. Native American/Indigenous
    f. Pacific Islander
    g. Other: _____

2. With which of the following do you identify? (Select all that apply)
    a. Single, never married
    b. Married or domestic partnership
    c. Widowed
    d. Divorced
    e. Separated
    f. Caregiver for person(s) under age 18
    g. Caregiver for person(s) over age 18
    h. Other: _____

4. What attributes describe your current institution? (Select all that apply)
    a. Four-year
    b. Two-year
    c. Public
    d. Private not-for-profit
    e. Private for-profit
    f. Single-sex
    g. HBCU

5. What region of the state is your institution located based on the regional map provided? Click here to launch this image through its website in a new tab with a list of cities and counties per region.



a. Region 1 – Central Virginia
b. Region 2 – Tidewater
c. Region 3 – Northern Neck
d. Region 4 – Northern Virginia
e. Region 5 – Valley
f. Region 6 – Western Virginia
g. Region 7 – Southwest
h. Region 8 – Southside

Section II: Professional Needs

6. I have attended conferences or professional development to support my professional advancement within the last five years.

1) Yes, I have
2) No, I have not (6a)

6a. I have not attended conferences or professional development in the last 5 years because... (Select your top 2-3 reasons)

a. Too time consuming
b. Do not wish to remain in higher education
c. Not encouraged by your supervisor or institution
d. Too much theory and not enough practical application
e. Perception that leadership is for supervisors and/or executives
f. Content was not targeted toward my job function or role
g. I don't feel that my identities are included/represented in the target population
h. Cost/Budget
i. Other (please specify)

7. When considering a leadership program or professional development opportunity, these characteristics or qualities are important to me? (Select your top 3)

a. Effective and efficient use of my time
b. Convenient modality (virtual, single day, weekend, etc.)
c. Encouragement from your supervisor or institution
d. Practical application of theories and concepts
e. Individuals at my career level are represented
f. Content is targeted toward my job function or role
g. I see my identity/identities represented in the target audience
h. Affordable
i. Other (please specify)

8. As a woman working in higher education, I would appreciate professional development on the following topics: (please provide 2-3 topics)

9. In terms of my career, my top 3 needs as a woman in higher education are:

a. Networking
b. Flexibility
c. Work/Life Balance
d. Equitable Income
e. Mentorship
f. Professional Development (Conferences or Trainings)
g. Continuing Education (Degree or Certification)
h. Self-Advocacy
i. Other: _____

10. I need a supervisor/leader who is...(select your top 3):

a. Inclusive
b. Democratic
c. Transformative
d. Supportive of Good Work/Life Balance
e. Fair
f. Provides Opportunities for Critical Reflection
g. A Consensus-Builder
h. An Authentic Leader
i. Confident
j. Competent
k. Emotionally Intelligent/Compassionate
l. Other: _____

11. I have faced the following barrier(s) in the last 3 years working as a woman in higher education: (select up to 3 that you have most frequently experienced)

a. Unsupportive Leadership
b. Diversity, Equity, or Inclusion Issues
c. Lack of Opportunity for Career Advancement
d. Organizational Culture
e. State or Institutional Policy on Salary Increases
f. Salary Inequity
g. Balancing Work and Caregiving Obligations
h. Settling for Less than Achieving your Goals
i. Lack of Opportunity to Grow or Be Challenged
j. Imposter Syndrome
k. Burnout/Mental Exhaustion
l. I have not faced any barriers
m. Other: _____

Section III. The Women's Network

12. Have you heard of the Virginia Network for Women?
    a. Yes, and I have attended a Virginia Network for Women event (continue to 13 & 14)
    b. Yes, but I have not attended a Virginia Network for Women event (continue to 13, skip 14)
    c. Yes, but I am not interested in attending a Virginia Network for Women event. (continue to 13, skip to 16)
    d. No, but I am interested in attending a Virginia Network for Women event (skip to 15)
    e. No, and I am not interested in attending a Virginia Network for Women event. (skip to 16)
    f. No, I have never heard of the Virginia Network for Women. (skip to 16)

[logic] 13. How did you hear about the Virginia Network? (select all that apply)
    a. Online search/VA Network website
    b. Institutional Representative (Virginia Network Representative on your campus)
    c. Social media
    d. Word of mouth, friend, or colleague
    e. Other

[logic] 14. Since attending a Virginia Network for Women event, what has resonated with you regarding your professional development as a woman? (open-ended)

The Virginia Network for Women in Higher Education is a non-profit organization that supports women employed at higher education institutions in the Commonwealth of Virginia through its connection with the American Council on Education's Women's Network. The goals of both The Network (national) and the Virginia Network are to:

- promote women's leadership throughout higher education and society;
- to create an educational, social, and political climate in which women can participate equally with men in setting public agendas;
- to facilitate connections;
- and to facilitate effective partnerships between women and men in the workplace.

For more information, visit http://www.virginianetwork.org.

[logic] 15. Would you attend any Virginia Network for Women programming in the future?

1) Yes (skip to 17)
2) No (continue to 16)
3) Not Sure (continue to 16)

16. What could motivate you to attend Virginia Network programming in the future? (open ended)

[logic] 17. Do you know who your Virginia Network Institutional Representative is?

a. Yes (17a)
b. No (19)

[logic] 17a. If yes, please rate your level of agreement with the following statements:

	Strongly Agree	Agree	Neither agree or disagree	Disagree	Strongly Disagree
I understand the role of my Institutional Representative at my institution.					
My Institutional Representative keeps me informed about professional development opportunities for women?					

[logic] 18. How often do you receive communication from your Institutional Representative?

a. Monthly
b. Quarterly
c. Twice per year
d. I never receive communication

[logic] 19. Have you attended the Senior Leadership Seminar (SLS) hosted by the Virginia Network?

a. Yes (continue to 20)
b. No (skip to 23)

[logic] 20. What influenced you to attend the Senior Leadership Seminar (SLS)? (open-ended)

[logic]21. Since attending the SLS, what is one thing that you learned that has been beneficial to your professional career? (open-ended)

Please rate your level of agreement with the following statements:

	Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly Disagree
Attending the SLS was a good use of my time.					
I would recommend attending the SLS to other women in higher education.					
The skills/knowledge I gained from participating in the SLS advanced my career.					
Overall, the SLS was an impactful leadership development opportunity.					

[logic] 22. Please provide us with any other information you would like us to know about your experience with the Senior Leadership Seminar (including suggested changes to the SLS curriculum).

Section IV. Additional Information

23. In our analytical research, we are classifying respondents by the career stage with which they identify. Please read the summaries of the three career stages below and choose which stage *best* applies to you *currently.*

a. I am internally motivated and actively take steps to advance my career in ways to ultimately achieve satisfaction and success. I often use an internal or self-focused

approach to organizational change and am not derailed by negative organizational environments.

b. I have a practical perspective of my career, with an understanding that career advancement is now largely impacted by others, personally and professionally. I have multiple familial and community obligations that challenge my ability to focus solely on my career. I am likely experiencing transitions and weighing consequential decisions.
c. I have reached a stage in my career where I am able to contribute to my workplace, family, and community without losing myself in the process. I have reclaimed my career as an opportunity to contribute meaningfully through my work. I tend to define success as recognition, respect, and living a well-integrated life while providing service to others.

24. Is there anything additional that you wish to share with the research team about your needs, experiences, and expectations as a woman in higher education?

Appendix H

Email to Participate in Survey

Initial Invitation

Hello,

Our names are Stevara Haley Clark, Jenae' D. Harrington, Reshunda L. Mahone, and Kristin L. Smith. We are doctoral students in Virginia Commonwealth University's Educational Leadership Program and we are writing to ask to kindly ask for your participation in our doctoral capstone research study that we are conducting titled: The Effectiveness of the Virginia Network for Women: A Mixed Methods Study. The purpose of this study is to understand the needs of women in higher education roles across the Commonwealth of Virginia. The study will also explore the ways the Virginia Network addresses the needs of women. The outcomes of this study will help the Virginia Network strategize their efforts to actualize their mission of recruiting and retaining women leaders in higher education across the Commonwealth. We are especially interested in understanding the Virginia Network's ability to identify, develop, advance, and support women in higher education.

The questionnaire should take about 10-15 minutes to complete. To begin the survey, simply click on this link:

Survey Link Here

This project is research. Please review our Research Participant Information Sheet.

This survey is confidential. Your participation is voluntary and if you come to any question you prefer not to answer, please skip it and go on to the next. If you complete the survey in its entirety, you will have the option to enter into a drawing to win one of two American Express gift cards. Gift cards are physical cards and will be mailed to the selected participants preferred address.

Please share this email with any other woman who works at a degree granting higher education institution in the Commonwealth of Virginia. Should you have any questions or comments, please contact Kristin Smith at klsmith@vcu.edu or Tomika Ferguson at tlferguson2@vcu.edu.

Sincerely,

Stevara Haley Clark, MSW

Jenae' D. Harrington, MURP
Reshunda L. Mahone, CFRE
Kristin L. Smith, MM

Reminder Email

Hello,

Two weeks ago, we sent an email to you asking for your participation in our doctoral capstone research study that we are conducting titled: The Effectiveness of the Virginia Network for Women: A Mixed Methods Study. If you have already participated, we would like to thank you for your contribution to our research. We truly appreciate your help.

If you have not, we hope that providing you with a link to the survey website makes it easy for you to respond. To begin the survey, simply click on this link:

Survey Link Here

This project is research. Please review our Research Participant Information Sheet.

This survey is confidential. Your participation is voluntary and if you come to any question you prefer not to answer, please skip it and go on to the next. If you complete the survey in its entirety, you will be entered into a drawing to win one of two American Express gift cards. Gift cards are physical cards and will be mailed to the selected participants preferred address.

Please share this email with any other woman who works at a degree granting higher education institution in the Commonwealth of Virginia. Should you have any questions or comments, please contact Kristin Smith at klsmith@vcu.edu or Tomika Ferguson at tlferguson2@vcu.edu.

Sincerely,

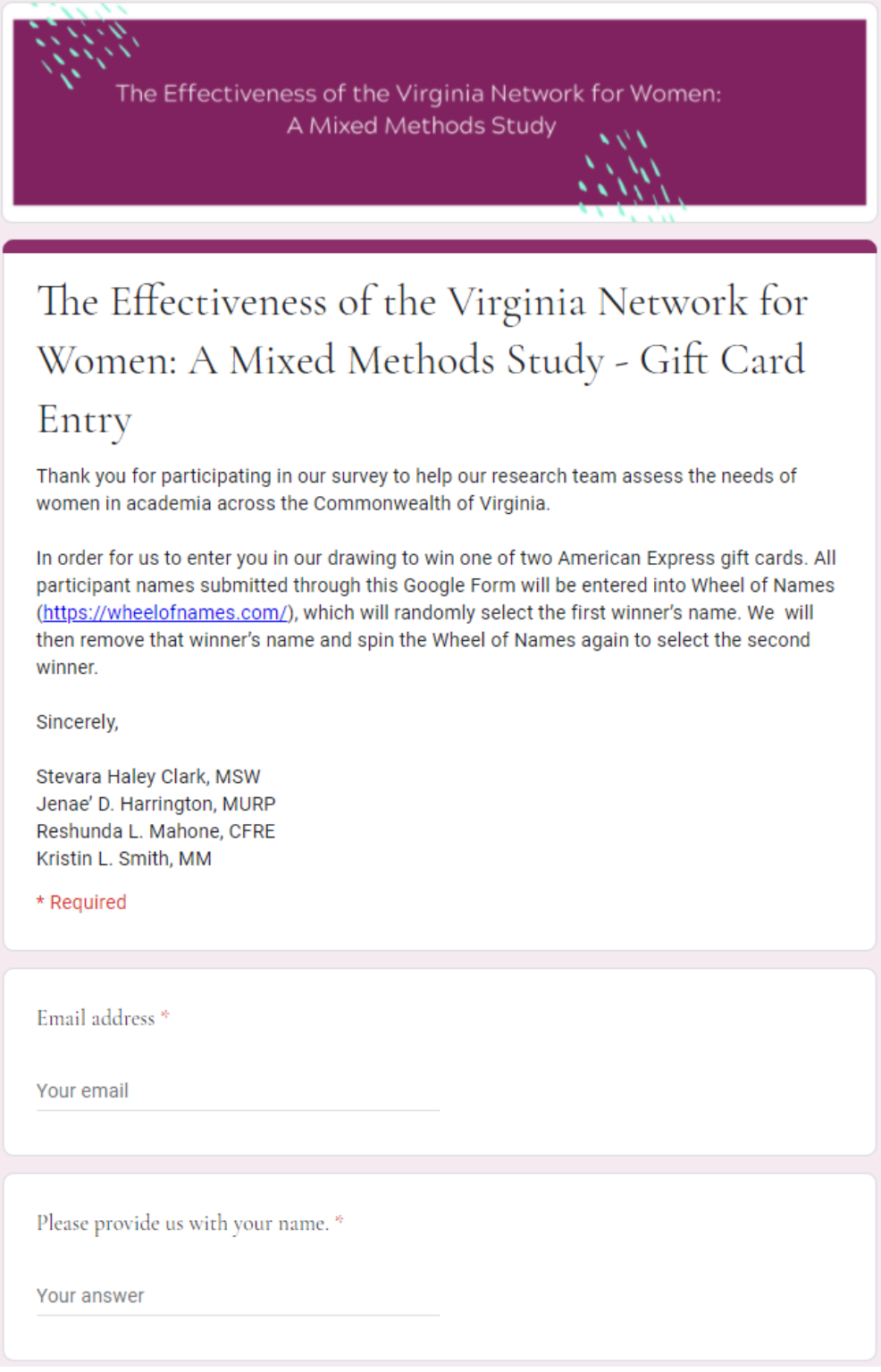
Stevara Haley Clark, MSW
Jenae' D. Harrington, MURP
Reshunda L. Mahone, CFRE
Kristin L. Smith, MM

Appendix I

Social Media Graphics for Survey Participation

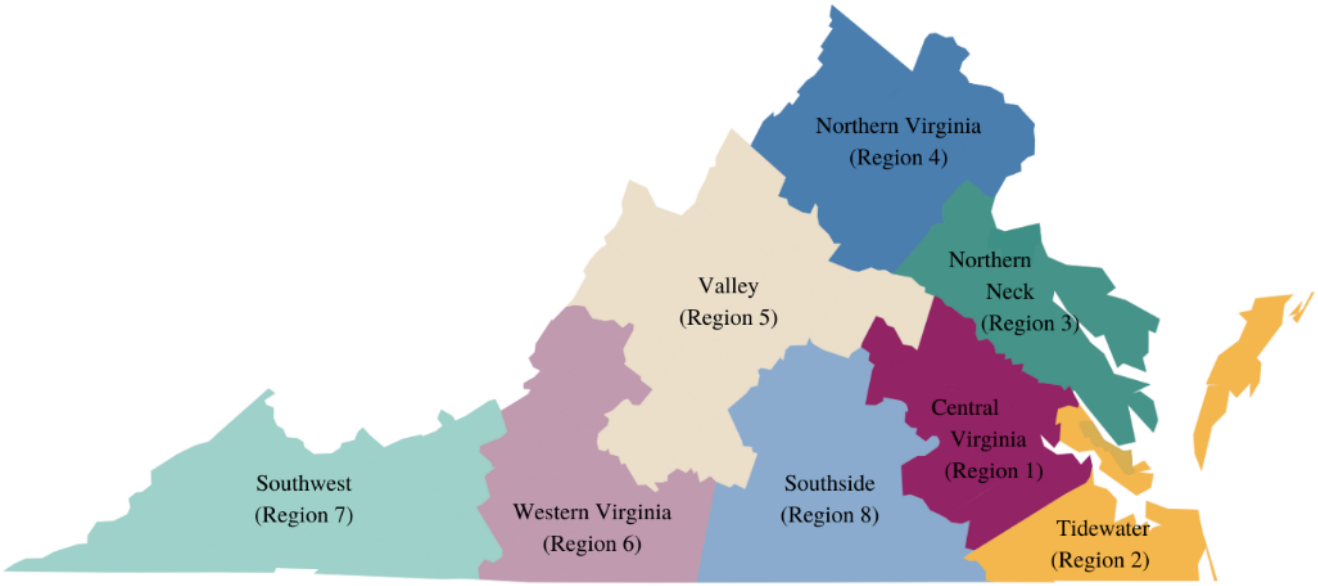
Appendix J

Google Form for Survey Gift Card Entry



Appendix K

Geographical Regions of Virginia



Appendix L

Deductive Codes & Definitions

	Code	Definition
1	Solicited Positive Experiences	Influences, successes, professional development, management support - Things that women purposefully enrolled in or sought out that benefited them/contributed to meeting needs/helped overcome barriers, etc. Includes mentorship, coaching, networking, orgs, professional development, etc. May include a pivotal moment if that moment was an influence, success, etc.
2	Unsolicited Positive Experiences	Influences, successes, management support - Things that happened to women that they did not seek out. Benefited them/contributed to meeting needs/helped overcome barriers, etc. Supervisor or manager support, unexpected promotion, etc. May include a pivotal moment if that moment was an unsolicited influence, success, etc.
3	Needs	General needs, needs to reach an aspirational role, needs to be effective in their current role. Anything a woman says she needs to advance or perform at optimal levels in current role. May be personal or professional.
4	VN Service Utilization	Factors that cover the extent to which the intended target population actually receives program services. Usually Coverage (extent to which participation by the target pop achieve levels intended by the program) and Bias (degree to which some subgroups participate in greater proportions than others). Basically, any language that indicates awareness and an understanding of Virginia Women's Network programs and initiatives.
5	VN Organizational Function	Whether the program is performing well in managing its efforts and using its resources to accomplish its essential tasks. Delivering intended services to the target population. Basically, any conversation about participation in VN events, especially takeaway and impact of the program. Any observation of VN operations, personalities.
6	Transformative	An explicit intention, action, or training that is action oriented and transformative to include any statement or action that they or their supervisor/another leader has taken that moves them beyond complaint, competition and “us versus them” thinking; an action that facilitates change and collaboration; challenges norms. Them as a leader, leaders they’ve observed, etc. Any experience of this at all.
7	Inclusive or Democratic	An explicit intention, action, or training that is inclusive and democratic to include any statement or action that they or their supervisor/another leader has taken/made that emphasizes using different strategies for different scenarios with a commitment to leadership that addresses varying needs. Leadership is not cookie cutter. Person-centered approach. Them as a leader, leaders they’ve observed, etc. Any experience of this at all.

8	Reflection or Discourse	An explicit intention, action, or training that provides an opportunity for critical reflection and critical discourse to include any statement or action that they or their supervisor/another leader has taken/made of identifying, questioning, and assessing their deeply-held assumptions. Them as a leader, leaders they've observed, etc. Any experience of this at all.
9	Internal Barriers	Anything having been or still being a barrier to anything. Barriers that are considered personal, identity-focused, and/or not attributed to the work environment or professional field.
10	External Barriers	Barriers attributed not to the individual, but to systems, social institutions, work environments