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Perspectives on Gender Stereotypes and Glass Ceiling Beliefs of Male and Female Corporate Professionals

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Abstract

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MPhil, Walden University, 2020

MA, University of Detroit Mercy, 2005

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Dissertation Submitted in Partial Fulfillment

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Abstract

In the United States as of 2021, women comprise almost half of the entire workforce (46.8%), yet only represent 24% of top earning officers and 6% of CEO positions. A phenomenon known as the glass ceiling is recognized as an unofficial barrier to advancement within a profession or a company that specifically affects minority populations, including women in business. The purpose of this study is to examine the relationship between the glass ceiling barriers to career advancement for professional women and gender stereotypes. The framework used for this study was based on the role congruity theory that proposes prejudice towards women in management positions occurs because inconsistencies exist between the perception of female gender stereotypes and those associated with traditional leadership qualities. Using a nonexperimental and quantitative design, data were collected from 144 participants using two online surveys. This study has three research questions focused on results of three statistical tests measuring the combination of 18 survey subscales for distinct groups with common patterns of scores and whether they differentiate men and women's perspectives on gender stereotypes and glass ceiling beliefs. The findings of this study showed gender is a statistically significant variable accounting for 50.3% of the variance in the set of predictors. This finding was expected given the current disparity of viewpoints of men and women on women's leadership ability in recent research. The findings from this study may help with the recognition of the need to develop policies and practices that would aid in the reduction of the glass ceiling barriers that continue to prevail.

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Chapter 1: Introduction to the Study

From the formation of the United States, the country has been a male dominated society and women have faced the challenge of gender equality for acknowledgement and respect (McGuire, 2017; Ortner, 2014; Ruggles, 2015). The 20th century saw women fighting for the opportunity to be seen as an equal contender, first for admission into, among other areas, the workplace and, later, for leadership and management positions (Ortner, 2014; Ruggles, 2015; Women's International Center, 2016). The beginning of the 21st century has seen the fight evolve to equality in pay and equal opportunity to upper leadership positions, such as board members and CEOs (Adams, 2016; Chizema, Kamuriwo, & Shinozawa, 2015; Eagly, 2018; Post & Byron, 2015). As of 2021, there are more females in the workplace than ever before (46.8%; Catalyst, 2021) and, overwhelmingly, their pay is considerably less than that of their male counterparts. On average, women are paid 18% less than men, regardless of job type or worker seniority (Payscale, 2021). The issue of gender inequality is partially due to the persistent view of women as less able or inferior, causing negative perceptions of women in leadership, particularly in top, senior level positions (Fisher, 2015; Heilman, 2012; Mastracci & Arreola, 2016; Storberg-Walker & Gardiner, 2017).

Although women in solely domestic roles, such as homemaker, are not the norm in the 21st century, gender stereotypes have proven hard to overcome, particularly prescriptive (what gender should be like) and descriptive (what each gender is like) stereotypes (Heilman, 2012; Koenig, 2018; Koenig & Eagly, 2014; Mensi-Karblach, 2014). These stereotypes begin to form in childhood with children taught to act and think

a certain way based on their and others' gender, which continues into adulthood (Bem, 1981; Heilman, 2012; Koenig, 2018; Koenig & Eagly, 2014; Mensi-Karblach, 2014; Schein, 2001). Historically, women were viewed as more docile and cooperative compared to men, who were viewed as assertive and competitive (Heilman, 2012; Koenig, 2018; Koenig & Eagly, 2014; Koenig et al., 2011; Schein, 1973; Schein et al., 1989). Women who challenge this gender stereotype receive backlash from all levels, including colleagues, subordinates, and supervisors, for acting "masculine", thereby limiting their ability to pursue senior management positions (Baskerville-Watkins & Smith, 2014; Rudman et al., 2012; Storberg-Walker & Gardiner, 2017). Backlash manifests in reduced approval ratings of women managers considered to have a masculine leadership style and the social perception of male colleagues calling them cruel, unapproachable, and harsh (Mastracci & Arreola, 2016; Phelan et al., 2008; Rudman et al., 2012).

Significant improvements have been made over the decades with 36% of senior level managers/directors and 30% holding board positions were women, as of 2021; however only 6% of women hold the title of CEO in S&P 500 companies (Catalyst, 2021; McKinsey, 2021). Beeson and Valerio (2012) found women's numbers tend to be higher within internal-facing roles such as legal and human resources, while men are employed in customer facing roles that typically lead to high level promotions. Beyond certain departments, women are also found in certain industries in higher numbers, such as education and health and human services, and are successful in gaining top leadership positions (Catalyst, 2019a). Women represented the highest share of managers in medical

and health services (72%) and human resources (77.9%) as of 2018 (Catalyst, 2019a). Other industries, however, such as those represented by the acronym STEM (science, technology, engineering, and mathematics) see an even lower proportion of women working in certain fields with 25% working in computer occupations, 15% in engineering and architecture, and 40% as physical scientists, to name a few (Fry et al., 2021).

Numerous organizational, legal, and societal barriers have been identified to explain the discrepancies between men and women in senior executive positions (Abendroth et al., 2014; Hoyt & Murphy, 2016; Sawyer & Valerio, 2018; Valerio & Sawyer, 2016). Organizational barriers include the lack of mentors or role models for women in senior positions (Fitzsimmons & Callan, 2016; Sawyer & Valerio, 2018; Valerio & Sawyer, 2016), work-life imbalance (Bongiorno et al., 2014; Dave & Purohit, 2016; Hoyt & Murphy, 2016), glass ceiling beliefs (Eagly, 2013; Eagly, 2018; Eagly & Carli, 2016; Eagly & Karau, 2002; Eagly & Scezsny, 2009; Eagly & Wood, 2014), an organizational culture that may lend itself to gender stereotyping (Alvesson, 2013; Campuzano, 2019; Ely & Padavic, 2010; Hoyt & Murphy, 2016; Koch et al., 2014; Nanton, 2015; O'Reilly et al., 2014; Walker & Artiz, 2015), and/or having such few women at the top that it is presumed they are there for optics only, also known as tokenism theory (Eagly & Carli, 2016; Elvira & Cohen, 2001; Lyness & Thompson, 2000; Simpson, 2000). Legal barriers include the gender wage gap (Hegeswisch & Hudiburg, 2014; Hegeswisch & Williams-Baron, 2017; Ruggles, 2015), and affirmative action policies that may provide incorrect assumptions of the women who benefit from them (Fraser et al., 2015; Leslie et al., 2014; Oppenheimer, 2016). Societal barriers

include pervasive gender stereotypes (Schein, 1973; Schein, 2001; Schein & Davidson, 1993; Schein & Mueller, 1992; Schein et al., 1989; Schein et al., 1996), and backlash that can result from individuals attempting to dismantle them (Brescoll, 2016; Brescoll et al., 2010; Bongiorno et al., 2014; Fischbach et al., 2015; Katila & Eriksson, 2013; Phelan et al., 2008; Rudman et al., 2012). The glass ceiling, a metaphor created by journalists in the mid-1980s, represents these various barriers to senior leadership for ambitious women (Eagly, 2013; Eagly, 2018; Eagly & Carli, 2016; Eagly & Karau, 2002; Eagly & Scezsny, 2009; Eagly & Wood, 2014). Eagly (2013) asserted that beyond a ceiling, a better representation is a labyrinth, since women have many routes they take to reach the corporate suite. Research on how men and women view these barriers and perceive gender stereotypes will help to further understand the dynamics of women in leadership.

This chapter will address the background of glass ceiling beliefs and gender stereotypes in the workplace. A description of the problem with glass ceiling beliefs and barriers to career advancement for professional women is discussed in the problem statement. An explanation of the purpose of this study and the path it took is provided. The theoretical foundation was based on the role congruity theory. A thorough discussion of the statistical design, scope, and limitations are provided. This chapter concludes with a clarification of the significance of the study and its contribution to scholarly research.

Background

Extensive research on agentic and communal traits in leadership have been conducted across industry and functional areas (Acar, 2015; Arvate et al., 2018; Leicht et al., 2014; Pillemer et al., 2014; Vinkenburg et al., 2011). Individual perceptions of

leadership have also been studied and the results suggest that, by organizational or managerial level, skills and competencies are expected to increase as the level increases (Chizema et al., 2015; Fitzsimmons & Callan, 2016; Sanchez & Lehnert, 2018). Executive level positions have agentic characteristics as job requirements, such as planning for the future of the organization and communication management (Evans, 2014; Sanchez & Lehnert, 2018). If women are perceived to be incongruous with agentic characteristics (Evans, 2014; Sanchez & Lehnert, 2018) and experience backlash when displaying agentic characteristics (Bongiorno et al., 2014; Fischbach et al., 2015; Katila & Eriksson, 2013), this places women that hope to advance in the ranks of their organization at a deep disadvantage.

In quantitative audit studies, participants responsible for hiring decisions were given identical resumes from both men and women (Eagly, 2013). Findings from these studies revealed significant discrimination towards women when they applied to senior level jobs that offered higher pay and power in male dominated positions or fields (Eagly, 2013). Discrimination was found not only in these audit studies, but also in laboratory experiments, field experiments, and correlational field studies (Eagly, 2013; Heilman, 2012; Hentschel et al., 2019b; Koch et al., 2015). Stereotypes related to agency extended to research on group tasks in a mixed gender team; participants were more influenced by men and perceived them as more competent, thereby requiring women to essentially prove their competency in a way not expected of men (Eagly & Karau, 2002; Mendez & Busenbark, 2015). Further, the standard for women was lower than the minimum standard, reflecting the belief of lowered competency in women (Eagly & Karau, 2002;

Storberg-Walker & Gardiner, 2017). If women have to do more than men to prove their competency, then women are still considered as the "weaker sex" (Pew Research Center of Social & Demographic Trends Project, 2015; Storberg-Walker & Gardiner, 2017). Overall, women in management positions earn less, are given less authority, and denied access to responsibilities that are likely to lead to promotion (Amon, 2017; Baskerville-Watkins & Smith, 2014; Brescoll et al., 2010; Campuzano, 2019; Eagly & Karau, 2002; Forsman & Barth, 2017; Haile et al., 2016; Kaiser & Spalding, 2015; Mastracci & Arreola, 2016).

The scholarly community does not know the relationship between the gendered stereotypes of agentic and communal behaviors, or the extent to which males and females' beliefs differ on these stereotypes (Festing et al., 2015; Smith et al., 2012; Spencer et al., 2018). Research on how men and women view glass ceiling barriers and perceive gender stereotypes will help to further understand the dynamics of women in leadership.

Problem Statement

While there has been emphasis on the selection process and the inclusion of women in organizations in the 21st century, the same emphasis has not extended to the selection of women for executive positions (Amon, 2017; Baskerville-Watkins & Smith, 2014; Beeson & Valerio, 2012; Brescoll et al., 2010; Campuzano, 2019; Catalyst, 2019a; Forsman & Barth, 2017; Haile et al., 2016; Kaiser & Spalding, 2015; Mastracci & Arreola, 2016). In the United States, women comprise 46.8% of all workers, however, in S&P 500 companies, women are only 24% of the top earning officers and 6% of CEO

positions (Catalyst, 2021; McKinsey, 2021). A phenomenon known as the "glass ceiling" is recognized as an unofficial barrier to advancement within a profession or a company that specifically affects minorities (Eagly, 2013; Eagly, 2018; Eagly & Carli, 2016; Eagly & Karau, 2002; Eagly & Scezsny, 2009; Eagly & Wood, 2014; Valerio, 2018). The role congruity theory suggests an additional barrier to women in leadership - traditional leadership traits are agentic traits and, therefore, associated with male qualities (Eagly, 2013; Eagly, 2018; Eagly & Carli, 2016; Eagly & Karau, 2002; Eagly & Scezsny, 2009; Eagly & Wood, 2014). In addition to this basic stereotype, Wrigley (2002) proposed the concept of negotiated resignation based on qualitative interviews of women. Smith et al. (2012) developed the Career Pathways Survey based on Wrigley's findings that measures four domains of stereotypic thinking about the female glass ceiling: denial, resignation, acceptance, resilience. The scholarly community reveals a research gap between the relationship between gendered stereotypes (especially, agentic and communal), the endorsement of the four career pathway domains, and the extent to which males and females' beliefs differ on these stereotypes (Festing et al., 2015; Smith, et al., 2012; Spencer et al., 2018).

Purpose of the Study

The purpose of this study is to examine the relationship between gender stereotypes and the glass ceiling barriers to career advancement for professional women. Glass ceiling barriers include denial, resignation, acceptance, and resilience; gender stereotypes include agentic and communal traits (Hentschel et al., 2019a; Smith et al., 2012). Two separate instruments, the Career Pathways Survey and the Gender

Stereotypes Scale, will be used to measure glass ceiling beliefs and gender stereotypes as these variables are not currently measured within a single instrument. Glass ceiling beliefs will be measured by the Career Pathways Survey, an instrument created to identify employees' views on the effects of the glass ceiling using four subscales: resignation, acceptance, resilience, and denial (Smith et al., 2012). The Gender Stereotypes Scale was created with the intent of providing a contemporary assessment of gender stereotypes and their influence on the perceptions of others (Hentschel et al., 2019a). The instrument includes a total of seven categories for gender stereotypes, with three representing communality (sociability, concern for others, and emotional sensitivity) and four representing agency (leadership competence, independence, assertiveness, and instrumental competence; Hentschel et al., 2019a). Gender represents the dependent variable; the independent variables of the study are the four subscales of the Career Pathways Survey (Smith et al., 2012) that assess glass ceiling barriers and the seven subscales of gender stereotypes in the Gender Stereotypes Scale (Hentschel et al., 2019a; Hentschel et al., 2019b). Examination of relationships among these 18 scales will be conducted in three ways: (a) discriminant function analysis, (b) cluster analysis, and (c) chi square test of independence. This study will use quantitative methods and includes the distribution of two online surveys to both men and women professionals in the United States with at least 10 years of work experience.

Research Questions and Hypotheses

RQ1: In a discriminant function analysis, what combination of the four career pathway's subscales (resignation, acceptance, resilience, and denial) and the seven

gender stereotypes scales (leadership competence, instrumental competence, independence, assertiveness, sociability, emotional sensitivity, and concern for others) best discriminates between males and females?

RQ2: In a cluster analysis, what are the number and nature of distinct groups of individuals with common patterns of scores across the four career pathway's subscales (resignation, acceptance, resilience, and denial) and the seven gender stereotypes scales (leadership competence, instrumental competence, independence, assertiveness, sociability, emotional sensitivity, and concern for others)?

RQ3: To what extent are the cluster analysis taxonomies dependent on being male or female?

Theoretical/Conceptual Framework

The framework for this study will be based on Eagly and Karau's (2002) theory of role congruity. While explained in more detail in Chapter 2, this theory proposes a group will be viewed positively if its characteristics are familiar to those of typical social roles (Eagly, 2013; Eagly, 2018; Eagly & Carli, 2016; Eagly & Karau, 2002; Eagly & Scezsny, 2009; Eagly & Wood, 2014). Therefore, prejudice towards women in management positions occurs because inconsistencies exist between the perception of female gender stereotypes and those associated with traditional leadership qualities. Eagly and Karau (2002) explained communal qualities associated with women, such as nurturing, warmth, and supportiveness are in direct contrast with the agentic qualities associated with leadership roles such as competitive, self-confident, and aggressive. These same agentic qualities are thought to be aligned with individuals' perception of male qualities and,

therefore, follows that men are thought to be more suited for leadership roles (Eagly, 2013; Eagly, 2018; Eagly & Carli, 2016; Eagly & Karau, 2002; Eagly & Scezsny, 2009; Eagly & Wood, 2014). The purpose of this study is to examine the relationship between gender stereotypes and glass ceiling barriers to career advancement for professional women.

Nature of the Study

The nature of this study is nonexperimental and quantitative. Data were collected using two online surveys. The study participants were male and female professionals working in the United States for at least 10 years. The dependent variable was gender and the four subscales of the Career Pathways Survey (Smith et al., 2012) that assess glass ceiling barriers and the Gender Stereotypes Survey's seven subscales of gender stereotypes are the independent variables (Hentschel et al., 2019a; Hentschel et al., 2019b). The independent variables were analyzed first using a discriminant function analysis to determine what combination of the 18 variables best differentiate males from females, creating a profile. Secondly, a cluster analysis was conducted to examine the number and nature of distinct groups of individuals with common patterns of scores across the 18 variables, creating taxonomies. Finally, a chi square test of independence was conducted to determine if particular taxonomies are more common for males or females.

Definitions

Agency (Agentic traits): These traits include self-confidence and dominance. An agentic person is simultaneously focused on building themselves up and influencing

others to listen to them (Eagly, 2013; Eagly, 2018; Eagly & Carli, 2016; Eagly & Karau, 2002; Eagly & Scezsny, 2009; Eagly & Wood, 2014).

Communal traits: These traits include gently, nurturing and being affectionate. A communal person is focused on building everyone else up at the same time as they build themselves up (Eagly, 2013; Eagly, 2018; Eagly & Carli, 2016; Eagly & Karau, 2002; Eagly & Scezsny, 2009; Eagly & Wood, 2014).

Gender: Socially constructed ideas about the behaviors, actions, and roles a particular sex performs (Eagly, 2013; Eagly, 2018; Eagly & Carli, 2016; Eagly & Karau, 2002; Eagly & Scezsny, 2009; Eagly & Wood, 2014; Heilman, 2012; Hentschel et al., 2019b).

Gender roles: Expectations of the characteristics and behaviors desirable for each gender (Eagly, 2013; Eagly, 2018; Eagly & Carli, 2016; Eagly & Karau, 2002; Eagly & Scezsny, 2009; Eagly & Wood, 2014).

Glass Ceiling: An artificial and unseen obstacle providing restriction for career progression (Eagly, 2013; Eagly, 2018; Eagly & Carli, 2016; Eagly & Karau, 2002; Eagly & Scezsny, 2009; Eagly & Wood, 2014Eagly, 2013).

Stereotypes: An oversimplified or unfair belief that all people in a group are the same (Eagly, 2013; Eagly, 2018; Eagly & Carli, 2016; Eagly & Karau, 2002; Eagly & Scezsny, 2009; Eagly & Wood, 2014; Heilman, 2012; Hentschel et al., 2019b; Ibarra et al., 2013).

Assumptions

It is assumed that corporate men and women understood the term ‘glass ceiling’ and the impact it has had on women, historically. I provided an explanation in the introduction to the survey on glass ceiling beliefs for clarification. Another assumption is that men and women answered the survey honestly because I do not work for their company or are affiliated with them. An additional assumption is that these two survey instruments were reliable and valid for measuring glass ceiling beliefs and gender stereotypes. Finally, there was an assumption that role congruity theory is the correct theoretical framework for this study.

Scope and Delimitations

The scope of this study involved men and women professionals in the United States with at least 10 years of work experience. This population was chosen due to the likelihood of their knowledge of the glass ceiling and most research and statistics on the glass ceiling is based on corporate environments. However, individuals who work for an organization but do not have professional responsibilities, such as custodians and maintenance workers, were not included as their professional responsibilities differ.

This study focused on the gender stereotypes held by corporate men and women and the connection to glass ceiling beliefs. The role congruity theory was selected as the theoretical framework because, unlike other traditional theories related to gender stereotypes (e.g., expectations states theory, ambivalent sexism theory, social role theory, etc., this theory provides a context, or explanation, for the stereotypes that exist (Eagly, 2013; Eagly, 2018; Eagly & Carli, 2016; Eagly & Karau, 2002; Eagly & Scezsny, 2009;

Eagly & Wood, 2014). The exploration of perceived suitability for certain roles is critical for understanding how gender inequality hinders opportunities for women in the workplace and society (Eagly, 2013; Eagly, 2018; Heilman, 2012; Hentschel et al., 2019b).

This study did not limit participants in a certain industry as this was measured through supplemental exploratory analysis following data collection. This study used voluntary research participants by using purposive sampling. The findings of this study have the potential to be generalized to corporate professionals in the United States.

Limitations

My target population was male and female professionals from a nonvulnerable population. My main method of data collection was through online surveys. The ability to reach a large audience with online surveying quickly is a benefit, especially for a quick turnaround of data. Disadvantages to this method were possible issues with response rate because the surveys were sent to personal emails and the lack of a physical presence to clarify intent, which could affect reliability.

Gender sensitive research "pays attention to the similarities and differences between men and women's experiences and viewpoints, and gives equal value to each" (Leduc, 2009, p. 1). The position of a researcher in scientific research is not neutral and is influenced by gender, class, ethnicity, age, and a host of other factors. Therefore, my research regarding differences across gender on glass ceiling beliefs and gender stereotypes has bias because I am a woman and have been affected by these phenomena.

However, my goal was to learn more about how each gender perceives these variables and, ultimately, to provide solutions to change their perception if it is biased.

Significance of the Study

Industries are experiencing rapid change due to increased globalization and technological resources and the competition is intense (Chisholm-Burns et al., 2017; Chizema et al., 2015). An organization can gain a competitive advantage if they focus on their employees with the same intensity as they do their profit; the creation of a work environment that is inclusive of diversity among employees and encourages development would optimize the skills of their workers (Chisholm-Burns et al., 2017; Chizema et al., 2015; Kilian et al., 2005; Kochan et al., 2003). Evidence that organizations with gender diverse leadership teams experience benefits is not just limited to the United States. Global studies show important company gains from women in leadership, some of which are innovation, increased financial performance, increased philanthropic pursuits, versatile consumer outreach, and the overall value of the firm (Chisholm-Burns et al., 2017; Cook & Glass, 2014; Diehl & Dzubinski, 2016; Glass & Cook, 2015).

Organizations that leverage the perspectives of their women leaders will open themselves up to experience transformative results from the diverse experiences and perspectives (Cook & Glass, 2014; Glass & Cook, 2015; Powell et al., 2004; Vinkenburg et al., 2011). Women bring a diversity of work and leadership styles to their environment and organizations that promote talented women to senior positions are setting themselves up for a long term success strategy (Brescoll, 2016; Cook & Glass, 2014; Glass & Cook, 2015; London et al., 2018; Pounder & Coleman, 2002). Developing a strategy for

succession planning that includes women moving up the executive ladder shows the organization's commitment to the value women provide and is a beneficial strategy in this competitive landscape (Brescoll, 2016; Cook & Glass, 2014; Glass & Cook, 2015; London et al., 2018; Pounder & Coleman, 2002).

A study by Chisolm-Burns et al. (2017) focused on women board directors found that companies with the highest number of women on their board had a greater return on sales, equity, and invested capital than companies with the lowest number, with three or more women board directors equating to 36% return on equity. Women on corporate boards also correlate with fewer legal issues, such as embezzlement and fraud, perhaps due to more stringent monitoring (Chisolm-Burns et al., 2017). The inclusion of women as leaders and board members increases the diversity of leadership and brings in new perspectives while discouraging the homogeneity of ideas and complacency (Chisholm-Burns et al., 2017; Post & Byron, 2015; Sindell & Shamberger, 2016). Women in the company's lower ranks can envision increased career opportunities when women's representation at the senior level is high, which works to decrease gender discrimination within the company (Cook & Glass, 2014; Glass & Cook, 2015).

Significance to Positive Social Change

The results of this study may provide insight into the issues related to the glass ceiling for women in leadership roles seeking career advancement. The theoretical framework utilized in this study, the role congruity theory, is less than 20 years old; research on how the glass ceiling phenomenon continues to impact women contributes to a greater understanding of agentic and communal stereotypes and their relationship to

gender roles at work. Businesses will continue to pass overqualified women leaders simply because of gender. Addressing this societal issue has the potential to give women encouragement to aspire to senior leadership without fear of dismissal based on gender.

Currently, most of the research on this topic is qualitative and include samples with only women sharing their career experiences. Pinpointing which gender stereotypes are the most prevalent in both genders could allow for the development of ways to overcome those specific stereotypes. If differences are found between men and women on glass ceiling barriers, such findings could provide direction for human resource professionals delivering training to leaders managing high potential women and evaluating them for developmental opportunities, performance management, and promotional decisions. If differences are found between men and women on the importance of particular leadership traits, additional training may be suggested for women seeking executive leadership roles to utilize certain traits and minimize others. Providing training guidance to both potential applicants and leaders could impact the opportunities for women seeking career advancement.

Summary

Although gender inequality is a worldwide issue, the United States rates among the least progressive of the first world countries (WEF, 2018). Gender stereotypes remain pervasive even with positive and numerous examples of women succeeding when in high powered positions. The issue of women leaders automatically viewed as inferior to their male counterparts based on gender stereotypes needs to be rectified in order to equalize pay, the workplace, and society.

This chapter addressed the background of gender stereotypes and glass ceiling beliefs. The purpose and nature of this study was addressed along with the problem statement. An overview of the theoretical foundation was provided as well as research questions developed to help guide the study. A look at the statistical design, scope, and limitations was provided. Last, the contribution to scholarly work and significance of the study was presented. In Chapter 2, there will be a review of the current literature that supports this study. In Chapter 3, the methodology for this study will be discussed. In Chapter 4, the results of this study will be explained, and, in Chapter 5, recommendations will be provided based on the findings.

Chapter 2: Literature Review

For women, a traditional path of career progression often is filled with challenges and obstacles, requiring the navigation of gender stereotypes, institutional discrimination, and even sexual harassment (Koenig et al., 2011; Leicht et al. , 2014; Patel & Biswas, 2016; Powell et al., 2002; Ryan et al., 2011). Numerous organizational, legal, and societal barriers have been identified to explain the discrepancies between men and women in senior executive positions (Abendroth et al., 2014; Hoyt & Murphy, 2016; Sawyer & Valerio, 2018; Valerio & Sawyer, 2016). Organizational barriers include the lack of mentors or role models for women in senior positions (Fitzsimmons & Callan, 2016; Sawyer & Valerio, 2018; Valerio & Sawyer, 2016), work-life imbalance (Bongiorno et al., 2014; Dave & Purohit, 2016; Hoyt & Murphy, 2016), glass ceiling beliefs (Eagly, 2013; Eagly, 2018; Eagly & Carli, 2016; Eagly & Karau, 2002; Eagly & Scezsny, 2009; Eagly & Wood, 2014), an organizational culture that may lend itself to gender stereotyping (Alvesson, 2013; Campuzano, 2019; Ely & Padavic, 2010; Hoyt & Murphy, 2016; Koch et al., 2014; Nanton, 2015; O'Reilly et al., 2014; Walker & Artiz, 2015), and/or having such few women at the top that it is presumed they are there for optics only, also known as tokenism theory (Eagly & Carli, 2016; Elvira & Cohen, 2001; Lyness & Thompson, 2000; Simpson, 2000). Legal barriers include the gender wage gap (Hegeswisch & Hudiburg, 2014; Hegeswisch & Williams-Baron, 2017; Ruggles, 2015) and affirmative action policies that may provide incorrect assumptions of the women who benefit from them (Leslie et al., 2014; Fraser et al., 2015; Oppenheimer, 2016). Societal barriers include pervasive gender stereotypes (Schein, 1973; Schein, 2001; Schein &

Davidson, 1993; Schein & Mueller, 1992; Schein et al., 1989; Schein et al., 1996) and backlash that can result from individuals attempting to dismantle them (Brescoll, 2016; Brescoll et al., 2010; Bongiorno et al., 2014; Fischbach et al., 2015; Katila & Eriksson, 2013; Phelan et al., 2008; Rudman et al., 2012).

The glass ceiling, a metaphor created by journalists in the mid-1980s, represents these various barriers to senior leadership for ambitious women (Eagly, 2013; Eagly, 2018; Eagly & Carli, 2016; Eagly & Karau, 2002; Eagly & Scezsny, 2009; Eagly & Wood, 2014). Eagly (2013) asserted that beyond a ceiling, a better representation is a labyrinth since women have many routes they take to reach the corporate suite. Research on how men and women view these barriers and perceive gender stereotypes will help to further understand the dynamics of women in leadership.

The subsequent literature review will start with the theoretical foundation used to ground this study. Also discussed are the variables and concepts that are related to this study. Additionally, the finding of several studies explaining the relationship between glass ceiling beliefs and gender stereotypes are identified.

Literature Search Strategy

This chapter contains a review of literature concerning barriers and challenges for women seeking to become senior leaders in corporate America and, specifically, stereotypes of gender that overlap with these barriers to negatively affect career advancement. Major online databases used to conduct this review include ScienceDirect, Business Source Complete, Google Scholar, ProQuest Central and EBSCOHost. Keywords used to conduct the search were *promotion, leadership, glass ceiling, gender*

equity, gender stereotype, role congruity theory, glass ceiling, glass cliff, barriers, career development, barriers to promotion, female executives, social theories, succession planning, corporat,* and *quantitative* (limited to subject or abstract terms). The timeframe for most references was between 2014 and 2020 to ensure the most recent literature and research was included in the review. Older research articles were included as seminal research, particularly related to the theoretical foundation. The ScienceDirect database recommended other peer-reviewed, scholarly articles based on my search and some were included in the review. There were also quoted articles whose theories were applicable to the review that were then acquired and incorporated. The primary sources utilized were peer-reviewed, scholarly research articles, government website statistics and articles. Additionally, statistics used to discuss current trends were found utilizing U.S. Government websites hosted by the Bureau of Labor Statistics and World Economic Forum.

Theoretical Foundation

The role congruity theory has been a prominent theory utilized to explain gender perceptions as related to leadership (Eagly, 2013; Eagly, 2018; Eagly & Carli, 2016; Eagly & Karau, 2002; Eagly & Scezsny, 2009; Eagly & Wood, 2014). Unlike other traditional theories related to gender stereotypes, the role congruity theory provides a context, or explanation, for the stereotypes that exist (Eagly, 2013; Eagly, 2018; Eagly & Carli, 2016; Eagly & Karau, 2002; Eagly & Scezsny, 2009; Eagly & Wood, 2014). The exploration of perceived suitability for certain roles is critical for understanding how gender inequality hinders opportunities for women in the workplace and society (Eagly,

2013; Eagly, 2018; Heilman, 2012; Hentschel et al., 2019b). There are several popular theories related to gender perceptions and each is unique in how it relates gender to a larger construct/context (Eagly, 2013, Eagly, 2018; Heilman, 2012; Schein, 1973; Schein, 2010). Stereotypes about gender are embedded within Western culture and affects how individuals perceive the behavior of males and females in certain roles (Eagly, 2013; Heilman, 2012; Koenig, 2018; Koenig & Eagly, 2014; Mensi-Karblach, 2014; Schein, 2010). The expectation states theory proposes gender is also embedded within an organization's culture and hierarchy and has a direct impact on the leadership style of individuals as a result of the rules of gender (Ridgeway, 2001). The shared beliefs about the status of individuals, as defined by their gender, are at the core of gender stereotypes, and individuals working together in a corporation reinforce these stereotypes (Eagly, 2013; Heilman, 2012; Ridgeway, 2001). Influential women with status and power within organizations face disadvantages over their male counterparts due to these beliefs as advantaged groups, whether as a consequence of gender, education, occupation, or ethnicity, are seen as having greater competence (Baskerville-Watkins & Smith, 2014; Ridgeway, 2001; Rudman et al., 2012; Storberg-Walker & Gardiner, 2017).

Continuing with the influence theme, ambivalent sexism theory proposes that men and women have varied social structures and there is interplay between gender attitudes and gender influence (Glick & Fishe, 2001). Hostility is often shown toward women who present a challenge to men's authority and power while simultaneously providing patronizing approval of women that conform to traditional patriarchal gender expectations (Baskerville-Watkins & Smith, 2014; Ridgeway, 2001; Rudman et al., 2012;

Storberg-Walker & Gardiner, 2017). These dual messages help to reinforce inequality among males and females, with evidence that this phenomenon shows up cross-culturally as well (Cuddy et al., 2015; Forsman & Barth, 2017). An example of the theory is the perception of career driven women as pushy, bitchy, or aggressive when displaying similar behaviors to career driven men, who are praised for their aspirations (Cuddy et al., 2015; Forsman & Barth, 2017).

Perception is a key factor for an individual's gender role and congruity with other societal roles and prejudicial behavior. Social role theory explains that individuals form stereotypes of others based on their personal experiences with group members in their expected social roles (Heilman, 2012; Koenig, 2018; Koenig & Eagly, 2014; Mensi-Karblach, 2014). The role congruity theory expands on the social role theory to understand the interplay between perceptions and stereotypes and the subsequent biases women encounter (Eagly, 2013; Eagly, 2018; Eagly & Carli, 2016; Eagly & Karau, 2002; Eagly & Scezsny, 2009; Eagly & Wood, 2014; Koenig & Eagly, 2014; Koenig, 2018). Prejudice against women striving for leadership roles exists simply due to their alignment with the feminine gender role, which research has proven does not align with the stereotypical profile of a leader (Eagly, 2013; Eagly, 2018; Eagly & Carli, 2016; Eagly & Karau, 2002; Eagly & Scezsny, 2009; Eagly & Wood, 2014; Koenig & Eagly, 2014; Koenig, 2018). The amount of success an individual will experience in a position is related to the perceptual fit of the individual's skills and requirements of the job position (Eagly, 2013; Eagly, 2018; Eagly & Carli, 2016; Eagly & Karau, 2002; Eagly & Scezsny, 2009; Eagly & Wood, 2014; Koenig & Eagly, 2014; Koenig, 2018). A manager role, for

example, would provide a poor fit for a woman as she is not seen to possess the masculine traits necessary to be a leader, whereas a man's attributes would be seen as a good fit (Eagly, 2013; Eagly, 2018; Eagly & Carli, 2016; Eagly & Karau, 2002; Eagly & Scezsny, 2009; Eagly & Wood, 2014; Koenig & Eagly, 2014; Koenig, 2018). The role congruity theory, therefore, "transforms [Heilman's] insights into a systematic theory by joining social-cognitive research on stereotyping and prejudice and industrial-organizational research on management and leadership" (Eagly & Karau, 2002, p. 579). The underlying aspects of gender stereotyping is expanded by the combination of the two theories and can account for some moderating conditions, such as perceived attributes, job requirements, goodness of fit, and expectations of success (Eagly & Karau, 2002; Eagly, 2013; Eagly, 2018).

Several studies have utilized the role congruity theory to better understand the lack of women in leadership roles (Balasubramanian & Lathabhavan, 2017; Forsman & Barth, 2017; Hoyt & Burnette, 2013; Koenig & Eagly, 2014; Smith et al., 2012; Whisenant, Lee, & Dees, 2015). role congruity theory provided a context with which to explore perceptions of an individual's role compatibility moderated by gender (Eagly & Karau, 2002; Eagly, 2013; Eagly, 2018). Comprehension of compatibility perceptions of gender for leadership roles, and other career-related constructs such as industry, is key in revealing the limitations of women's opportunity in the workplace (Hoobler et al., 2018; Mendez & Busenbark, 2015; Powell et al., 2004; Yukl, 2013).

Findings from studies utilizing the role congruity theory found that masculine, or *agentic*, traits are considered more suited for leadership roles while other traits, inherently

feminine, or *communal*, are not (Bierema, 2016; Eagly & Karau, 2002; Eagly, 2013; Eagly, 2018; Koenig & Eagly, 2014). The theory concludes these gendered perceptions lead to an individual with feminine traits being considered less ideal for strong leadership roles and reinforcing the existing male-dominated upper ranks of companies (Bierema, 2016; Eagly & Karau, 2002; Eagly, 2013; Eagly, 2018; Koenig & Eagly, 2014). The reflection of gender stereotypes in organization leadership emphasizes the prevalence of social norms and their contribution to the glass ceiling barrier for women in the 21st century (Hoyt & Murphy, 2016; Koenig et al., 2011; Leicht et al., 2014; Patel & Biswas, 2016; Powell et al., 2002; Ryan et al., 2011). This study builds upon previous literature by including both male and female perceptions of gender stereotypes; previous literature mentions male or female perspectives but usually not both.

Literature Review

Since the beginning of the formation of the United States, the country has been a male dominated, or patriarchal, society (McGuire, 2017; Ortner, 2014; Ruggles, 2015). The majority of the history of the country has women with less legal rights and career opportunities than men (Lynn, 2014; Women's International Center, 2016). The historical role of women has been domestic, with a focus on wife and mother, with the man as the breadwinner (Finneman, 2019; Lynn, 2014; Women's International Center, 2016). The first laws including women and work were in 1910 to limit the amount of time women were expected to work; prior, women were expected to work 12-hour days and take care of domestic duties at home (Finneman, 2019; Lynn, 2014; Women's International Center, 2016). Many states prevented women from having supervisory positions and having jobs

where they were expected to lift 15 pounds or more (National Women's History Alliance, 2019; Women's International Center, 2016). These laws perpetuated the idea of women as the weaker sex, incapable of working long days or lifting heavy objects (National Women's History Alliance, 2019). The rights of some women continued to grow and the right to vote was granted in 1920, while the right of women to work at night was granted in 1924 (Finneman, 2019; Lynn, 2014; National Women's History Alliance, 2019). World War II saw women replacing men in jobs at home while they were at war, and following the war, women wanted the same rights they were allowed during the war (National Women's History Alliance, 2019; Women's International Center, 2016). However, it wasn't until the 1960s that bigger strides were made in women's rights.

The Civil Rights Act was passed in 1964, making it "illegal for organizations to engage in employment practices that discriminated against employees on the basis of ethnicity, color, religion, sex and national origin" (Kochanet al., 2003, p. 4). This act focused on the development of procedures and policies for managers hiring in organization from 1964 forward, however it did not address past discretions (Fink, 2018; Kochan et al., 2003). An executive order was passed in 1965 requiring affirmative action by government contractors in an attempt to overcome past discrimination or exclusion (Dworkin et al., 2018; Kochan et al., 2003; Leslie, Mayer, & Kravitz, 2014). There were also other laws that extended the rights of women such as the right to file for divorce and to select not to take maternity leave (National Women's History Alliance, 2019; Siegel, 2018). Women's roles expanded and they were able to have jobs that were previously

only available to men and physical requirements were adjusted so women could do the same jobs as men (Dworkin et al., 2018; National Women's History Alliance, 2019).

According to Wootton (1997), these legal changes led to the creation of three stereotypical types of women in the United States. Wootton stated the original was the mother, wife, and homemaker. The second was a woman who worked and was still responsible for domestic duties. The third is of a woman as the breadwinner and provider, without the responsibility of domestic duties. Although women continued to increase their presence in the workplace and even able to move into management positions, the role of women, overall, in the workplace remained largely unchanged (Schein, 1973; Schein 2001; Eagly, 2013; Wootton, 1997). Women held fewer jobs than men and were not able to move up in organizations to higher positions (Schein, 1973; Wootton, 1997). When women did achieve higher positions, the common perception was that she used sexual acts to seduce her way to the top or had a male benefactor help her get the job, which would indicate she did not really deserve the position (Wootton, 1997). Education, hard work, experience, dedication, or any other positive characteristics associated with an individual seeking to further their career can be overlooked when women receive promotions to senior level positions (Eagly & Wood, 2014).

A feminist movement began in the late 1960s focused on the equality of women and the term androgyny was introduced meaning a combination of agentic and communal traits (Donnelly & Twenge, 2016). During the movement, the focus was to train women to become more agentic by way of workshops and seminars and, ironically, perpetuated the belief that women are deficient in leadership skills (Donnelly & Twenge, 2016). No

matter the efforts, it became clear in the late 1970s to early 1980s the mandates by the government were not enforced and progress for equality was slow and minimal (Donnelly & Twenge, 2016). Companies began to host diversity training sessions to help repair the biased culture and prove the value of a diverse workforce (Donnelly & Twenge, 2016). Business cases demonstrating the positive bottom-line impact of diversity and the creation of a diversity pipeline highlighted the importance of conflict resolution, cohesion, and open communication (Chizema et al., 2015; Kochan et al., 2003). However, these programs did not lead to changes that were long-term.

The 1990s saw an increase of women in the workforce, but it was more a result of additional jobs created and not reflective of the male to female ratio (Wootton, 1997). The government created the Federal Glass Ceiling Commission as part of the Title II of the Civil Rights Act of 1991 (U.S. Glass Ceiling Commission, 1995). The 21 bipartisan member committee was tasked with understanding barriers for minorities and women to advancement into management and supplying recommendations to eliminate identified barriers (U.S. Glass Ceiling Commission, 1995). The report issued by the commission in 1995 affirmed the inequality of women in Fortune 500 companies with only 3 to 5% of senior management positions filled by women and with lower compensation than their male counterparts (Johns, 2013; U.S. Glass Ceiling Commission, 1995). The commission outlined four major barriers to the success of minorities and women in senior roles: governmental, societal, internal business, and business structural (Johns, 2013; U.S. Glass Ceiling Commission, 1995). Each of these barriers will be discussed in the sections

below with internal business and business structural combined as structural/organizational.

Gender Barriers: Government

Gender Wage Gap

Although women are well represented in the workforce, the equity they may hope to find is not present. Title VII of the Civil Rights Act of 1964 and the Equal Pay Act of 1963 made workplace discrimination illegal, yet 55 years later, the wage gap between genders still exists. In fact, the uncontrolled wage gap, the ratio of median earnings of all women to all men, is perhaps the most tangible evidence of the glass ceiling with women earning 82 cents for every dollar a man earns (Payscale, 2021). Even considering a controlled gender pay gap, controlling for factors such as years of experience and job title so the only difference is gender, women still earn less than men in almost all careers where a salary comparison by gender is provided (Payscale, 2021).

As the pay gap between men and women widens, women will lag behind their male colleagues in the same industries with similar experience and qualifications (Hegeswisch & Hudiburg, 2014). In the finance and insurance profession, women comprise 53% of the workforce but have one of the largest uncontrolled pay gaps measured in the 2021 study, earning 76 cents for each dollar earned by a man (Payscale, 2021). Ironically, women earning advanced degrees will face the largest discrepancy; women with MBAs are the group with the largest uncontrolled pay gap as of 2021, earning 76 cents for each dollar earned by a man with the same education level (Payscale, 2021). Organizations and society are sending the message to women that their value is

not as important as that of a man; with repeated examples of this, the self-esteem and career aspirations of women in corporate positions may be negatively affected (Hegeswisch & Hudiburg, 2014; Storberg-Walker & Gardiner, 2017).

Affirmative Action

Advocates of EEO laws, which mandated affirmative action policies and laws, sought to address organizational discrimination based on race and gender by promoting status equalizing strategies (Leslie et al., 2014; Oppenheimer, 2016). Equal opportunity initiatives were created with the intent of providing a level playing field for individuals to receive equal treatment under the law (Leslie et al., 2014; Oppenheimer, 2016). Affirmative action laws, however, were designed to proactively achieve fairness and prohibit structural barriers to equality in organizations (Leslie et al., 2014; Fraser et al., 2015; Oppenheimer, 2016). The EEOC was tasked with monitoring organizational performance and punished the noncompliant companies with financial penalties (Oppenheimer, 2016).

Two positive ongoing outcomes from affirmative action policies and laws have been reported from studies conducted within the last three decades (Oppenheimer, 2016). The first is an increase in the number of female employees across a range of middle-management occupations (Fraser et al., 2015). The second was organizations that promote and conform to affirmative action policies employ significantly higher numbers of women than organizations without reference to those programs (Fraser et al., 2015). Although there were positive outcomes, the underlying message was that women who benefitted from the policies only did so because of their gender and not their abilities,

which unfortunately helped to perpetuate an existing negative and powerful stereotype (Leslie et al., 2014; Fraser et al., 2015).

Gender Barriers: Societal

Gender Stereotypes

Virginia Schein and Sandra Bem led two historical research streams on gender and leadership stereotypes. Schein posited gender stereotyping led to the majority of barriers for working women; stereotyping by gender role prevented women from promotion to management roles (Schein, 1973; Schein, 2001; Schein & Davidson, 1993; Schein & Mueller, 1992; Schein et al., 1989; Schein et al., 1996). A sex typed role is defined as a large majority of one sex is in an occupation and there are expectations that this is the societal norm (Schein, 1973). Research confirmed that managerial roles are considered masculine roles, as agentic qualities are deemed necessary to succeed and, in 1973, Schein concluded women faced barriers when applying for promotion since traits of a successful manager were considered masculine (Schein, 1973). A replication study conducted by Schein and colleagues fifteen years later sought to find if the manager role was still sex-typed as masculine (Schein et al., 1989). This newer study found some women did not sex-type the role as masculine but men still saw the manager role as masculine (Schein et al., 1989).

Schein and Mueller (1992) expanded the previous study to other countries to see if the results would reflect the views of the US. The expanding globalization of the marketplace called for international views to be explored (Schein & Mueller, 1992). The countries selected were England, Germany and the United States and the results were

consistent across all three: men felt the manager role is sex-typed as masculine, while women shared a similar view with the caveat that some feminine traits are required under certain circumstances (Schein & Mueller, 1992). In 1996, the study was expanded to include China and Japan and the findings were, again, similar to the original study in 1989. Chinese men and women found the manager role to be sex-typed as masculine, with women finding exception to feminine traits in certain circumstances. Japanese men and women, however, both found the manager role is sex-typed as masculine without any exceptions. The think manager-think male statement was coined by Schein to reflect the findings of the study and showed this is not only a national phenomenon but a global one that requires further study to create equal promotional and employment opportunities for women (Schein et al., 1996).

Sandra Bem also created an assessment in the 1970s called the Bem Sex Role Inventory (BSRI), which featured feminine, masculine, and neutral items, allowing masculinity and femininity to be evaluated on their own and not as opposing dimensions (Bem, 1974; Bem, 1981; Donnelly & Twenge, 2016). The masculine and feminine qualities were selected by Stanford undergraduate students generating a list of 200 socially desirable traits for each gender and Bem selecting 40 (20 masculine, 20 feminine) for inclusion in the BSRI (Bem, 1974). The correlations found in the data from the initial testing had implications for the future of gender equality studies – men and women can experience both masculine and feminine traits, and these are not mutually exclusive (Bem, 1974; Donnelly & Twenge, 2016). Bem created the BSRI to allow for

the possibility of a neutral, or androgynous, rating that introduced the concept a person could have both masculine and feminine traits (Bem, 1974).

Social science research on gender beliefs in the 21st century has continued to build on the foundation of Schein and Bem and proposes those beliefs are rooted in our nation's culture and, further, stereotypes around gender are as well (Eagly & Sczesny, 2009; Ibarra et al., 2013; Pfaff et al., 2013). An individual develops three types of schemata: cognitive generalizations, self-schema, and gender schema (Olsson & Walker, 2003). Gender schema will shape and define how the individual processes and perceives information along dimensions of gender (Choi & Park, 2014; Grabill et al., 2005; Kerevel & Atkeson, 2015; Pfaff et al., 2013). In Western culture, females have the flexibility to adopt feminine, androgynous, or masculine characteristics, whereas men tend to adopt masculine or androgynous characteristics (Choi & Park, 2014; Grabill et al., 2005; Kerevel & Atkeson, 2015; Pfaff et al., 2013). Feminine characteristics, within Western culture, are rejected by men as discordant to the male gender role and those who adopt them could experience ostracism and rejection (Choi & Park, 2014; Grabill et al., 2005; Kerevel & Atkeson, 2015; Pfaff et al., 2013).

Eagly and Sczesny (2009) stated these stereotypes and attitudes about gender, and even expanding to social groups, underlie gender discrimination. Cultural meanings associated with gender such as beliefs of appropriate behavior by women and men reveal society's expectations of what it should be and what it is realistically. Research has shown that gender is the first personal characteristic one is judged by, above age and race and gender stereotypes are most easily activated (Eagly & Karau, 2002). Prejudice can

occur when an individual believes a stereotype about a certain group that does not match characteristics thought to equate to success in a certain role. Organizational decisions involving leadership ability and skills are filled in by stereotypical views when there is limited information (Eagly & Karau, 2002; Pfaff et al., 2013). Therefore, when women apply for senior leadership positions, and the person in charge of hiring does not view women as motivated or capable of leadership at a high level, the evaluation of that woman for that role will not be equal to that of a male counterpart (Eagly & Karau, 2002; Pfaff et al., 2013).

Descriptive beliefs are expectations of group member's actual characteristics while prescriptive beliefs outline expectations of what a group member should be (Eagly & Sczesny, 2009; Heilman, 2012; Koenig, 2018; Sabharwal, 2015). Therefore, descriptive stereotypes would reflect expectations that people belonging to a certain group are exhibiting certain behaviors that are consistent with those stereotypes. Eagly and Sczesny (2009) assert gender expectations are linked to two predominant beliefs - agency and communal. Agentic beliefs are associated with control and assertiveness and align with stereotypical male qualities such as dominance, self-confidence, ambition, and ability to lead (Eagly & Sczesny, 2009; Koenig & Eagly, 2014; Koenig et al., 2011). Communal beliefs are associated with compassion and align with stereotypical female qualities such as friendly, kind, and sympathetic (Eagly & Sczesny, 2009; Koenig & Eagly, 2014; Koenig et al., 2011). Eagly and Sczesny (2009) provided several references that provide evidence of national survey and poll results where people ascribe women and men to communal and agentic beliefs, respectively. Although leadership expectations

can depend on the environment, the general belief is that leaders possess several agentic qualities, such as self-confidence and ambition, and less communal qualities (Eagly, 2018; Eagly & Sczesny, 2009).

Communion and agency are both prescriptive and descriptive beliefs, with men and women able to exhibit some of the stereotypical qualities of the other without social disdain; however, people generally prefer the communal and agentic qualities to be confined to the stereotypical gender from which they originated (Eagly & Sczesny, 2009; Heilman, 2012; Koenig, 2018; Sabharwal, 2015). Negative qualities, such as weak or gullible as feminine traits, are seen as unacceptable in men; similarly, promiscuity and stubbornness are found unacceptable in women (Eagly & Sczesny, 2009; Heilman, 2012; Koenig, 2018; Sabharwal, 2015). Research has shown individuals align successful managers with men more than women on several agentic traits (e.g., aggressive, objective) and these results are not limited to the United States; many first world countries, such as the United Kingdom, Japan and China were found to replicate the findings (Eagly & Karau, 2002; Heilman, 2012; Koch et al., 2015). Women in high positions (vice president level and above) agree by 72% that stereotypes about women's abilities are a barrier to career advancement (Koenig et al.,2011).

Table 1

Gender Characteristics

Masculine (Agency)	Feminine (Communal)	Androgynous
Dominant	Affectionate	Conscientious
Independent	Sensitive	Conceited
Aggressive	Emotional	Adaptable

Rational	Warmth	Friendly
Logical	Intuitive	Conventional
Analytical	Cooperative	Happy
Confident	Nurturant	Inefficient
Decisive	Receptive to ideas	Likeable
Assertive	Helpful	Jealous
Impersonal	Loyal	Solemn
Opportunistic	Gentle	Unsystematic
Ambitious	Empathetic	Unpredictable

Note. Information used to create this table came from Bem (1974, p.156) and Eagly and Karau (2002, p. 574).

Gender Stereotype Backlash

Women being more skilled at interpersonal relationships than their male counterparts and scoring high marks on manager assessments does not equate to equal representation in senior management (Yuki, 2002). Traits such as modesty, sensitivity, warmth, and others displayed in Table 1 above are expected of women to embody, however, they often place women at a disadvantage for leadership roles because of their inconsistency with the leader prototype (Bongiorno et al., 2014; Fischbach et al., 2015; Katila & Eriksson, 2013). The prototype of a leader is an individual that is results oriented, confident, and willing to take risks; women not perceived of fitting into this leader prototype are not considered for leadership roles and receive negative evaluation of their performance (Brescoll et al., 2010; Eagly & Wood, 2014; Koch et al., 2015; Mastracci & Arreola, 2016). Women applying for leadership roles that display favorable traits of job applicants such as confidence and ambition can be viewed as qualified for the role but suffer negative consequences socially and economically (Eagly & Karau, 2002; Heilman, 2012; Phelan et al., 2008; Rudman et al., 2012). Backlash effects have been found to occur when women ignore stereotypically feminine traits (communal) and

display those aligned with leadership (agentic; Eagly & Karau, 2002; Heilman, 2012; Phelan et al., 2008; Rudman et al., 2012). Women who display agentic traits are rated as highly capable leaders but men and women view these same competent leaders as socially deficient, which Phelan et al. (2008) proposed leads to hiring penalties. When women leaders were perceived as successful, participants would describe them more hostile and less rational than their male counterparts (Eagly & Karau, 2002). Self-promoting female applicants were rated low on social skills and their hireability decreased while their male counterparts were viewed as likeable and hireable (Phelan et al.,, 2008; Rudman et al., 2012). Backlash does not end at the hiring stage; all stages can be affected with salary negotiations, evaluations of performance and decisions regarding promotions at risk (Brescoll et al., 2010; Eagly & Wood, 2014; Koch et al., 2015; Mastracci & Arreola, 2016). Results of several studies found agentic women received backlash whether applying for a leadership position in a female-dominated or male-dominated industry; the resistance was more prominent if the position emphasized stereotypically feminine traits, such as interpersonal skills (Baskerville-Watkins & Smith, 2014; Rudman, Moss-Racusin, Phelan, & Nauts, 2012; Storberg-Walker & Gardiner, 2017). Women leaders are confined with a choice to either conform to gender norms and risk underperformance or conforming to their role as leader and ignore gender norms (Eagly & Karau, 2002; Heilman, 2012; Phelan et al., 2008; Rudman et al., 2012).

Eagly and Karau (2002) proposed leader prejudice toward women take two routes - the first is a lower confidence in a woman's ability to lead compared to that of a man because leadership capability is associated with the male gender and the second are lower

rating of women leaders compared to males because leadership competencies are less desirable in women. This prejudice will not only result in less access to leadership roles for women but also more obstacles to success in these roles (Eagly & Karau, 2002; Heilman, 2012; Phelan et al., 2008; Rudman et al., 2012). Leader role expectations could be feminine and cause men to experience prejudice if they are seeking placement into the position; however, most leader roles call for agentic traits, which are considered masculine, therefore prejudice against males would be rare (Eagly & Karau, 2002; Heilman, 2012; Phelan et al., 2008; Rudman et al., 2012).

Gender Barriers: Structural/Organizational

Women seeking executive positions does not equal acceptance into the higher ranks (Adams, 2016; Chizema et al., 2015; Chu & Posner, 2013; Eagly, 2018; Post & Byron, 2015). Women have a significant presence in the workforce, comprising approximately 45% of the workforce and almost 37% of the mid-level managers and officers in S&P 500 companies (Catalyst, 2019). However, the percentages keep decreasing the higher one goes on the corporate ladder with 26.5% as senior level managers, 21% holding board positions, and only 5% as CEOs (Catalyst, 2019). Despite the advantage women have in mid-level management, women are continually not represented equally in executive positions.

Organizational Culture and Gender

Historically, research on differences between the sexes have largely excluded the impact the culture of an organizational could have on career variables (Alvesson, 2013; Campuzano, 2019; Ely & Padavic, 2010; Hoyt & Murphy, 2016; Koch et al., 2014;

Nanton, 2015; O'Reilly et al., 2014; Walker & Artiz, 2015). A meta-analysis by Ely and Padavic (2010) reviewed twenty years of studies and found several trends in the research, with the first being the terms 'sex' and 'gender' are used interchangeably, disallowing the fact that social aspects could influence an individual's gender. Second, much of the research point to an individual's childhood as the place where gender norms and expectations were formed, negating the possibility that gender roles and expectations continue to develop throughout adulthood (Ely & Padavic, 2010; Heilman, 2012; Koenig, 2018; Koenig & Eagly, 2014; Mensi-Karblach, 2014). Another observation was the assumption that differences between men and women are due to reasons other than gender (Ely & Padavic, 2010).

Beliefs held by a society regarding customs, behaviors, values and even gender encompass the definition of culture (Alvesson, 2013; Campuzano, 2019; Ely & Padavic, 2010; Hoyt & Murphy, 2016; Koch, D'Mello, & Sackett, 2014; Nanton, 2015; O'Reilly et al., 2014; Schein, 2012; Walker & Artiz, 2015). A highly regarded definition of culture by Schein (1992) is:

> A pattern of shared basic assumptions that the group learned as it solved its problems of external adaptation and internal integration, which has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems. (p. 12)

The word assumption is interesting as it implies we move forward with our thoughts and actions based on things that may or may not be true. Further, we then share these assumptions with others in the group, whether personal or professional. Culture,

therefore, is a shared social pattern that reveal how individuals are feeling, thinking, and behaving along with rules, unspoken practices, and norms (Alvesson, 2013; Campuzano, 2019; Ely & Padavic, 2010; Hoyt & Murphy, 2016; Koch et al., 2014; Nanton, 2015; O'Reilly et al., 2014; Walker & Schein, 2012; Artiz, 2015).

Organizational culture is created through a similar process; employees go through a process of making sense of their environment, through interactions with each other and, eventually, develop a shared truth (Hoyt & Murphy, 2016; Taylor, Sturm, Atwater, & Braddy, 2016; Walker & Artiz, 2015). Organizations have historically been male-dominated, especially at senior levels, and have led to the perception of leadership as equivalent to males and masculinity (Alvesson, 2013; Campuzano, 2019; Ely & Padavic, 2010; Hoyt & Murphy, 2016; Koch et al., 2014; Nanton, 2015; O'Reilly et al., 2014; Walker & Artiz, 2015). If an organization's culture is male-dominated and comprised of a male majority, shared values and underlying assumptions will likely be traditional and masculine, with less culture change occurring (Alvesson, 2013; Campuzano, 2019; Ely & Padavic, 2010; Hoyt & Murphy, 2016; Koch et al., 2014; Nanton, 2015; O'Reilly et al., 2014; Walker & Artiz, 2015). Training that goes against cultural beliefs of a strong culture is generally not effective because of this resistance to change (Hoyt & Murphy, 2016; Koch et al., 2014). Understanding the potential intractable nature of an organization's culture can help form a conceptual understanding of how and why the glass ceiling persists.

Glass Ceiling

The term “glass ceiling” was originally a metaphor created by journalists in the mid-1980s to symbolize an impenetrable, hidden barrier to women’s career aspirations (Eagly, 2013; Eagly, 2018; Eagly & Carli, 2016; Eagly & Karau, 2002; Eagly & Scezsny, 2009; Eagly & Wood, 2014; Koenig & Eagly, 2014; Koenig et al., 2011; Johns, 2013; U.S. Glass Ceiling Commission, 1995). The barrier, invisible and unanticipated, is see-through, in that women are aware of the career opportunities available to their male counterparts but they continually ‘bump their head’ on the glass ceiling when trying to move into these higher positions (Eagly, 2013; Eagly, 2018; Eagly & Carli, 2016; Eagly & Karau, 2002; Eagly & Scezsny, 2009; Eagly & Wood, 2014; Koenig & Eagly, 2014; Koenig et al., 2011). Eagly (2013). Some have dismissed the idea of the glass ceiling because it is limiting in how career barriers for women are seen; the assumption is that only senior level positions are unattainable (Eagly & Carli, 2016; Eagly & Scezsny, 2009). Women generally take longer than men to achieve senior positions, with men following a vertical track to senior management and women having a slower progression and making horizontal moves hoping to make progress (Eagly & Carli, 2016; Eagly & Scezsny, 2009). However, at all stages in a woman’s career, there are challenges not equal to those of men (Abendroth et al., 2014; Hoyt & Murphy, 2016; Sawyer & Valerio, 2018; Valerio & Sawyer, 2016).

Tokenism Theory

New industries based on technology developed in the late 20th century and early 21st century and are not generally bound by traditional masculine cultures of older

organizations (Eagly & Carli, 2016). Companies such as Xerox, eBay, Hewlett-Packard, and Alcatel-Lucent were represented within the last 20 years by female CEOs (Eagly & Carli, 2016). Because few women have broken through the glass ceiling, the ones that have achieved executive suite status are often called *tokens* (Eagly & Carli, 2016; Elvira & Cohen, 2001; Lyness & Thompson, 2000; Simpson, 2000). This label is not positive and is often aligned with incompetence; however, developing good relationships, being proactive about setting goals for their career, having a good track record and having a good mentor are ways women can rise about the label (Eagly & Carli, 2016; Elvira & Cohen, 2001; Lyness & Thompson, 2000; Simpson, 2000). In a study of 90 women, both token and non-token women reported feeling isolated from the 'men's club' and named it as the largest barrier they faced at work (Simpson, 2000). Simpson (2000) found that token women, however, reported an extra barrier with developing relationships with male colleagues. This social isolation can lead to job dissatisfaction and an overall poor work experiences (Brescoll et al., 2010; Elvira & Cohen, 2001; Lyness & Thompson, 2000; Simpson, 2000). Individuals prefer to work with similar people, and women report less positive work experiences than men when in the minority at an organization (Brescoll et al., 2010; Elvira & Cohen, 2001; Lyness & Thompson, 2000; Simpson, 2000).

Glass Cliff

Women have also been found to be offered leadership positions when the organization is in a crisis; if the risk of failure is larger, women have more of a chance for the position (Acar, 2015; Bruckmuller, Ryan, Rink, & Haslam, 2014; Kulich, Loreniz-Cioldi, Iacoviello, Faniko, & Ryan, 2015; Ryan & Haslam, 2005; Ryan, Haslam, Hersby,

& Bongiorno, 2011; Ryan, Haslam, & Postmes, 2007; Sabharwal, 2015; Smith, 2015). Evidence has been found for women leadership becoming more likely if the company is in a financial crisis, the chances of losing a legal case is high, and in IT organizations where there are organizational issues that are troublesome (Bruckmuller et al., 2014; Ryan & Haslam, 2005; Ryan et al., 2011; Ryan et al., 2007; Smith, 2015). Women entering leadership positions by way of risk to the organization is termed the *glass cliff* (Acar, 2015; Bruckmuller et al., 2014; Kulich et al., 2015; Ryan & Haslam, 2005; Ryan et al., 2011; Ryan et al., 2007; Sabharwal, 2015; Smith, 2015). Women may be chosen for the leadership position in these precarious times in an organization because they are thought to have the skills necessary to manage such a situation; competencies such as intuition and creativity that are often attributed to women would be needed and necessary (Acar, 2015; Bruckmuller et al., 2014; Kulich et al., 2015; Ryan & Haslam, 2005; Ryan et al., 2011; Ryan et al., 2007; Sabharwal, 2015; Smith, 2015). Men, on the other hand, may pass on such opportunities because the risk of failure is higher than the chance of a reward (Smith, 2015). This selectivity may be reinforced by the mentorship of other male mentors who could encourage them toward other developmental opportunities, whereas women do not often have that luxury (Smith, 2015).

Ryan and Haslam (2005) conducted a study examining whether media claims of decreased stock prices as a result of women appointed to corporate office and board positions was accurate. The study looked at the financial trends of 100 organizations prior to and after the recent appointment of a female to their board of directors. Many of the organizations were already struggling before the women were appointed and the authors

found, in some cases, the stock prices rose slightly higher after the appointment. “In a time of general downturn in the stock market, there was evidence of the glass cliff, such that [companies] that made the female board appointments had experienced consistently poor performance in the months preceding the appointment” (Ryan et al., 2007, p. 183). Therefore, the blame was unfairly placed on the appointments of women and bias toward the promotion of women was further enforced by the media coverage, possibly making other organizations wary of appointing women to senior positions.

In a follow-up to their prior research, Ryan et al.(2011) conducted an experimental study that provided participants with a job description and three potential candidates. Two candidates were male, one of whom was qualified and the other was not, and a female candidate that was qualified for the job. The findings were that females were more likely to be appointed as board members or corporate officers if the organization was experiencing financial troubles (Ryan et al., 2011). Therefore, depending on the outcome, a female leader accepting a position to lead an organization out of a crisis could either positively or negatively affect the perception of women holding senior leadership positions.

Glass Labyrinth

The barriers women face in organizations cause men and women to use different strategies to climb the corporate ladders (Abendroth et al., 2014; Hoyt & Murphy, 2016; Lyness & Thompson, 2000; Sawyer & Valerio, 2018; Valerio & Sawyer, 2016). There is a deeper complexity to the obstacles that face women, whether related to family, promotion, gender stereotypes or a myriad of other factors (Bongiorno et al., 2014; Dave

& Purohit, 2016; Hoyt & Murphy, 2016; Schein, 1973; Schein, 2001; Schein & Davidson, 1993; Schein & Mueller, 1992; Schein et al., 1989; Schein et al., 1996). If relocation becomes a variable in progression within the organization, women have been found less likely to move than men due to family conflicts (Bongiorno et al., 2014; Dave & Purohit, 2016; Hoyt & Murphy, 2016). Long workdays for individuals in senior management, common to Western culture, are harder for women because of domestic obligations (Bongiorno et al., 2014; Dave & Purohit, 2016; Hoyt & Murphy, 2016). Organizational barriers rooted in the company culture are seen as preventing women from advancing to corporate officer positions as quickly or as often as men (Alvesson, 2013; Campuzano, 2019; Ely & Padavic, 2010; Hoyt & Murphy, 2016; Koch et al., 2014; Nanton, 2015; O'Reilly et al., 2014; Walker & Artiz, 2015). An updated metaphor, glass labyrinth, was created to precisely identify the various barriers and challenges and is more representative of the many routes women take to reach the corporate suite (Eagly, 2013; Eagly & Carli, 2016; Eagly & Scezsny, 2009).

Work-Life Balance

Women continue to align with the social norms of most Western societies by fulfilling expectations of childcare and a homemaker, extending the perception of women in a lowered status than men (Bongiorno et al., 2014; Dave & Purohit, 2016; Hoyt & Murphy, 2016). Women typically have more time dedicated to family responsibilities than men and are assumed to put work aside for children and family demands; this assumption can lead to limited to positions of lower authority and power for women with families (Abendroth et al., 2014; Hoyt & Murphy, 2016). Workplace discrimination

exists due to supervisors' believing that women have more family conflict and are therefore less suited to management positions (Eagly, 2013; Dworkin et al., 2018; Leslie et al., 2014). Although no evidence to support that has been found in studies, supervisors take this into account whether the women currently have families or not, meaning the assumption is not based on verified facts but bias beforehand (Eagly, 2013; Dworkin et al., 2018; Leslie et al., 2014). Marginalization of women in the workplace creates a significant barrier for women and occurs as a result of women assigned to less challenging projects and the perception their opinion is not valued (Allen, French, & Poteet, 2016; Baker & Cangemi, 2016; Chisholm-Burns et al., 2017; Vial et al., 2016). Lack of policies that aid in work-life balance leads to lowered participation in both formal and informal leadership roles and perpetuate the stereotype of women choosing family over career (Chisolm-Burns et al., 2017; Nanton, 2015; Vial et al., 2016).

The stereotype that men are open to sacrificing their personal lives and family for their career and women are not able or willing to do the same may lead to less promotional opportunities for women with families (Berggren & Lauster, 2014; Cook & Glass, 2014). Some women choose to attempt to meet the demands of both work and home, creating a potentially unhealthy imbalance, rather than selecting one over the other (Bongiorno et al.,, 2017; Dave & Purohit, 2016). However, returning to the workforce after having a family can be a stressful transition and women can feel undervalued and discouraged (Abendroth et al., 2014; Eagly, 2013). Women who do choose to leave the workplace for a period of time (longer than allotted maternity leave) can experience difficulties when they return; loss of wages while off (due to lack to benefits coverage), and lower pay and

lost career opportunities when returning to the workforce after a hiatus are examples of lasting effects of a career hiatus (Abendroth et al., 2014; Dworkin et al., 2018; Fitzsimmons et al., 2014). The loss of status women may experience from the career hiatus can also lead to an increase of negative stereotyping; an exception to this scenario are women with advanced education (Berggren & Lauster, 2014; Dworkin et al., 2018; Vial et al., 2016).

Women with advanced education are considered as having a higher status, even when there is not a specific training or degree required for the position and tend to experience lowered barriers when reentering the workforce should they opt to take some time to raise family or for any other reason to step away from employment, than women with less education (Berggren & Lauster, 2014; Dworkin et al., 2018). A career hiatus often comes with the perception there may be a loss of skills or knowledge; women are, at times, hesitant to return or may purse a different career path, which can create additional barriers (Berggren & Lauster, 2014; Dworkin et al., 2018). Organizations that included fathers in policy discussions about family leave, or an organizational culture that promoted a positive view of work-life balance provided a more successful re-entry for women returning from a career hiatus (Abendroth et al., 2014; Dworkin et al., 2018; Munn & Greer, 2015). While women are affected in their pursuit of leadership positions by motherhood, fathers do not suffer similar barriers (Dworkin et al., 2018; Magnusson & Nermo, 2017). This double standard serves to highlight gender inequality and its influence in the workplace.

Women in Leadership

Perceptions of Leadership

Although definitions of leadership often include mostly agentic traits, there is much variation across industry, such as education, health, military, and politics, across levels of leadership, such as line leaders, middle management and senior management, and even across functional areas, such as production, human resources and finance (Acar, 2015; Arvate et al., 2018; Leicht et al., 2014; Pillemer et al., 2014; Vinkenburg et al., 2011). Various researchers have examined individuals' perceptions of leadership characteristics by level (lower, middle, executive) and have found increasing levels of skills and competencies as the level increases (Chizema et al., 2015; Fitzsimmons & Callan, 2016; Sanchez & Lehnert, 2018). Lower level managers rated abilities such as leading and managing conflict, as important, while middle managers reported the need for increased human relations skills and training and developing employees (Evans, 2014; Sanchez & Lehnert, 2018). Executive level managers expressed that planning for the organization's future, acting as a liaison and communication management were important at their level; all characteristics at this level, while highly agentic, also increased in agency as the position became more senior (Evans, 2014; Sanchez & Lehnert, 2018). If highly agentic qualities are more likely to be expected in executive or senior level positions, women leaders are going to be perceived as the most incongruous at the highest level of leadership while lower levels of management would likely either align or appear as a better fit (Evans, 2014; Sanchez & Lehnert, 2018).

The gender of the perceiver has also been shown to affect views of leadership. In studies measuring speech tentativeness, male audiences were more likely to rate a tentative woman speaker as more trustworthy than women that were confident speakers; women audiences preferred the opposite, confident female speakers (Eagly & Karau, 2002). Eagly and Karau (2002) concluded that men, not women, found a resistance to confident women and preferred the timidness of the tentative speakers. A comparison study of stereotypes of management and gender in the 1970s compared to the 2000s showed results indicating male managers, with an average age of 48 years old, rated women as more assertive and ambitious than in the past; however, male students, with an average age of 21 years old, continued to hold gender stereotypes similar to those of male managers in the 70s (Duehr & Bono, 2006). A study measuring visual dominance, an agentic behavior, produced similar results. Visual dominance is the behavior of eye contact with an individual during verbal contact; study results showed male visual dominance, not female, was aligned with the influence of others (Eagly & Karau, 2002). Another study focused on self-promotion, measured by a male or female speaking directly and emphasizing past successes, made females less attractive, likeable, and hireable as a partner for a game whereas it did not affect men (Eagly & Karau, 2002). This behavior was found to have a higher disapproval among female participants, unlike the other scenarios where men reacted more negatively to women displaying agentic behavior (Eagly & Karau, 2002).

Singularly female characteristics, such as pregnancy and feminine dress, can work to emphasize the access an individual has to the female stereotype and make women

seem less favorable for a leadership position (Brescoll, 2016; Eagly & Karau, 2002). Further evidence for the role congruity theory presented itself in the scenario where women dressed in masculine-typed clothes (suit) for an interview were also evaluated more negatively (Eagly & Karau, 2002). Eagly and Karau (2002) also pointed out another harmful scenario of women being in the extreme minority within an industry like the military, or within an organization level, such as executive leadership. With fewer examples of women in such roles, the tendency would be to perceive the roles as more masculine and hire more men as a reinforcement of that stereotype (Eagly & Karau, 2002; Fitzsimmons & Callan, 2016).

Stereotypes related to agency extend to research on group tasks in a mixed gender team; men are perceived as being more competent and possessing leadership ability than the women on task oriented tasks (Eagly & Karau, 2002). Participants were more influenced by men and perceived them as more competent, thereby requiring women to essentially prove their competency in a way men did not (Eagly & Karau, 2002). Further, the standard for women was lower than the minimum standard reflecting the belief of lowered competency in women (Eagly & Karau, 2002). If women have to do more than men to prove their competency, then women are still considered as the ‘weaker sex’ (Pew Research Center of Social & Demographic Trends Project, 2015). If women are capable of outperforming men, the expectation seems to be automatic that men are more capable, causing women to go beyond the standards to which men are held (Eagly & Wood, 2014).

Carli (2001) asserted the influence or power an individual has is dependent on their gender. Women having lower status within organizations decreases their potential influence over others and, even when they do have a higher status, their default lowered societal status can still make them less influential than men (Carli, 2001; London, Bear, Cushenberry, & Sherman, 2017). In a group primarily composed of women, women tend to participate more than a group where men are in the majority (Carli, 2001). Carli (2001) surmised men are more resistant to women in power than women are because influential women are a threat to their own sense of power.

Women can gain recognition for competency, however it may not have the same effect towards perception of leadership ability as it would for men (Eagly & Karau, 2002; Meister, Sinclair, & Jehn, 2017). In mixed gender groups, higher task competency was shown to help men gain influence more than women; further, the men were more liked and recognized for said competency than their female counterparts (Eagly & Karau, 2002). Assertiveness and confidence are often two characteristics associated with leadership and individuals who display these characteristics may gain influence throughout the organization and eventually move to a leadership position (Leicht et al., 2014; Meister et al., 2017). However, research has shown negative reactions to women that display these characteristics, in particular when dealing with men, furthering the role congruity theory stance of agentic characteristics not aligning with the female gender stereotype (Eagly & Karau, 2002; Leicht et al., 2014; Meister et al., 2017).

There are conditions where competent, confident women can be viewed as influential besides highlighting their accomplishments to others (Adams, 2016; Chizema

et al., 2015). Challenges recognized by women can create an opportunity to develop alternative strategies to address barriers and conflicts (Amon, 2017). Women pairing their agentic behavior with communal traits lessens prejudice by offsetting the incongruity of their gender role (Eagly & Karau, 2002; Evans, 2014; Fitzsimmons et al., 2013). Eagly and Karau (2002) highlighted three studies that showed evidence of this being effective: the first showed women achieving more success on influencing a group of men by adopting a supportive and friendly style over a self-confident, emotionally distant style. The second showed females were more likeable and influential when they agreed with their partner in an experimental interaction versus men, who were still likeable and influential whether they agreed or disagreed (Eagly & Karau, 2002). In an experiment where students of both genders viewed video of female and male speakers delivering a persuasive message, the male participants were less influenced by a task-oriented, competent style shown by female speakers and even judged them to be more threatening and less likeable than the male speakers (Eagly & Karau, 2002). However, when the female speakers displayed a competent style paired with friendliness, the male participants were more inclined to rate the speaker positively (Eagly & Karau, 2002).

A direct correlation was found that linked acknowledgment of diversity and providing diversity training and having a diversified leadership team (Adams, 2016; Barrett & Beeson, 2002; Chizema et al., 2015). A significant study by Catalyst (2007) found organizational leaders both underutilized and undervalued the talent of women leadership due to gender stereotypes. Catalyst researchers studied 1,231 senior executives in the United States and Europe and examined perceptions of male and female leaders.

The majority of participants in the study revealed that men are the default leaders and women are considered atypical leaders (Catalyst, 2007). Regardless of the leadership behavior, the majority of the participants felt women leaders were in violation of the acceptable norms of leadership. The study concluded there are three, double-bind scenarios created from this perceived male leadership standard:

1. Extreme Perceptions: If women go against gender stereotypes, they are viewed as too tough; acting consistent with stereotypes resulting in being considered too soft.
2. The high competence threshold/lower rewards: Women leaders consistently face higher expectations than their male counterparts and lower recognition.
3. Competent but disliked: Although women leaders tend to exhibit leadership behaviors traditionally viewed as valuable, such as assertiveness, they are often viewed as competent but disliked. Women leaders that display a more feminine style are liked but not viewed as competent (Catalyst, 2007, p. 12).

Even with these scenarios, women are often praised, more than men, in the United States for having exceptional leadership skills by organizational leaders (Brescoll, 2016; Meister et al., 2017; Powell & Butterfield, 2014). This praise, however, has not resulted in the equal hiring of women into executive positions (Brescoll, 2016; Meister et al., 2017; Powell & Butterfield, 2014). Individuals have also stated their preference would be to have a male boss over a female boss, so organizational bias exists both structurally and individually (Eagly, 2007; Powell & Butterfield, 2014). The simple act of hiring more women into leadership positions will not resolve the issue; executive leadership must

work to minimize prejudicial stereotypes within the organization by creating an awareness of bias and addressing it (Catalyst, 2007; Fitzsimmons & Callan, 2016).

Feminine Leader Roles

The majority of Americans believe that women leaders are capable and qualified to lead in business and politics (Chisholm-Burns et al., 2017; Kulich et al., 2015; Sanchez & Lehnert, 2018; Pillemer et al., 2014; Vinkenburg et al., 2011). Respondents in a study by Chisholm-Burns et al. (2017) believed men and women were equally honest, innovative, decisive, ambitious, and intelligent; the aforementioned traits were also rated highly as important for leadership (Chisholm-Burns et al., 2017). This is contradictory to traditional views of prejudice where there are negative attitudes toward a specific group, which then can lead to behaviors that prevent that group from equitable treatment (Eagly, 2013). The prejudice toward women, however, occurs not as a result of an overall negative view of the gender but because of the view that women have favorable qualities, such as kindness, that are best utilized in certain industries and roles and are not important for leadership roles (Acar, 2015; Eagly, 2013; Sanchez & Lehnert, 2018).

Researchers have analyzed rifts in the glass ceiling to find what types of companies promote women to top positions and difference from them and other organizations (Fitzsimmons et al., 2013; Goodman, Fields & Blum, 2003). The study conducted by Goodman et al. (2003) hypothesized if an organization had more women in lower management, then they would also have more women in upper management; lower management salaries would mean more women managers; newer, younger companies would see women in top management; and higher turnover rates would be seen with

women in higher management. The findings were consistent with the hypotheses - women who were in management positions were in less desirable organizations and, subsequently, faced gender stereotyping.

Leadership positions likely to be populated with women are disproportionately in "feminine" areas such as health and human services, education, and women's rights (Catalyst, 2019a; Fitzsimmons et al., 2013; Smith, 2015). This likelihood is known as the glass wall and it has existed since women entered the workforce (Jackson, 2001). Smith (2015) explained this may be due to the emotional labor, or regulation or leveraging of emotions to facilitate work, that is expected in such areas; women are expected to provide the majority of emotional labor within organizations. While emotional expression is seen as a positive within some field and at some career levels, executive level positions are often seen as requiring more logical or rational thought, therefore women are not viewed as suitable (Eagly & Carli, 2016; Heilman, 2012; Koenig, 2018; Koenig & Eagly, 2014; Koenig et al., 2011; Schein, 1973; Schein, Mueller, & Jacobson, 1989). The metaphor 'glass wall' hinges on the thought that men and women participate in a division of labor and, as the division is blurred or eliminated, the glass wall may be permeable (Eagly & Carli, 2016).

Smith (2015) proposed the leadership categorization theory as a way to describe hiring women leaders to lead "feminine" organizations; the theory suggests a leader's success depends on followers' perceptions that are largely based on gender stereotypes. Therefore, if "feminine" organizations require more emotional labor skills, and women are likely to have these skills, then women will be seen as strong leader choices for those

positions; in fact, women have been found to be moderately more effective than men in industries such as government, education and health and human services (Eagly & Karau, 2002; Fitzsimmons et al., 2013; Smith, 2015). Additional evidence for this theory is found in other fields where women are more likely to manage where maintaining good client relationships will provide a competitive advantage or the positions involved dealing with others in the organization, such as human resources (Smith, 2015).

Mentorship and Role Models

Mentorship is generally seen as important for leadership success; mentors are higher ranking and knowledgeable employees at a senior level that can provide support to employees at a lower level (Fitzsimmons & Callan, 2016; Lakshmi & Peter, 2015; Sawyer & Valerio, 2018; Valerio & Sawyer, 2016). The purpose of mentorship is to provide facilitation of the development of skills and abilities that will lead to career advancement for a subordinate (Fitzsimmons & Callan, 2016; Lakshmi & Peter, 2015:Valerio & Sawyer, 2016). There is a significant need for organizations to develop a formal mentoring program to provide support to women seeking executive positions (Fitzsimmons & Callan, 2016; Lakshmi & Peter, 2015; Valerio & Sawyer, 2016). As most employees seeking mentors do so along gender lines, there is a shortage of female mentors in top positions; it is important to have executive level mentors for female leaders seeking promotion to help develop the skills necessary to be successful in high-level roles and share their experiences (Kilian, et al., 2015).

Mentorship is not only a tool for leadership success but for impacting inclusion and diversity as well, even more so than diversity training according to Sawyer and

Valerio (2018). Elacqua et al. (2009) reported employees that were mentored saw themselves as likely to be promoted and females in top positions referenced mentors as having a strong influence on their career. Mentorship from senior males has also been shown to improve job satisfaction and increase pay, especially for women employed in industries that are predominantly male (Sawyer & Valerio, 2018; Valerio & Sawyer, 2016). The issue becomes when there is a lack of high-ranking female leaders at an organization since individuals prefer to have mentors of the same gender (Chisholm-Burns et al., 2017; Elacqua et al., 2009; Kossek et al., 2016). There is also evidence that women may have issues seeking a mentoring relationship with men in careers that tend to be male dominated (Chisolm-Burns et al., 2017; Elacqua et al., 2009; Sawyer & Valerio, 2018; Valerio & Sawyer, 2016). With men more likely to have access to senior ranking males, access to valuable organizational information such as job openings and pending projects can also come as a benefit (Elacqua et al., 2009; Sawyer & Valerio, 2018; Valerio & Sawyer, 2016). Research also shows women managers' visibility within the organization may be hindered by assignments with lower prestige than their male counterparts, who are more likely to be approached first with high profile assignments (Elacqua et al., 2009).

Sawyer and Valerio (2018) presented a unique perspective of ally mentality; men that are mentors to women need to also have knowledge of barriers faced by women in leadership and would ideally want to help reduce bias and have a positive impact on inclusivity. Their concept of male champions includes the ally mentality along with tasking these same champions with increasing gender inclusivity within the organization

(Sawyer & Valerio, 2018). The assignment of males to a champion role can also shift the focus from coaching women on leadership behaviors to an inclusive environment, preventing male employees from feeling alienated, which could result in an unintended backlash to gender inclusiveness (Sawyer & Valerio, 2018).

In additional to mentorship, women in organizations have also been shown to benefit from having a role model within the organization to inspire them to senior roles (Chisholm-Burns et al., 2017; Kossek et al., 2016). The fewer women in leadership positions, the less likely women may be to picture themselves in senior roles. The repercussions of the lack of role models or mentors that are female can lead to a self-fulfilling prophecy in women where feelings of inferiority are reinforced and may cause psychological harm (Hoyt & Murphy, 2016; Kossek et al., 2016).

Leadership Style of Women

The terms ‘leadership’ and ‘leader’ are often used interchangeably to describe the collective and the individual in Western culture (Hoyt & Murphy, 2016; Koenig et al., 2011; Powell et al., 2002). An individual capable of influencing others to make choices or behave in ways consistent with their intention is considered a leader (Vinkenburg et al., 2011; Volckmann, 2005). The leadership role adjusts depending on organizational needs and skill sets imperative to company objectives. Women leaders tend to be more collaborative, empathetic, and relationship-oriented while men are more direct and goal oriented (Arvate et al., 2018; Deaconu & Rasca, 2015; Evans, 2014; Leicht et al., 2014; London et al., 2017; Ryan & Haslam, 2007). The ability of women leaders to encourage two-way communication with coworkers and employees allows productive engagement

internal and external to the organization (Hoobler et al., 2018; Mendez & Busenbark, 2015; Powell et al., 2004; Yukl, 2013). Female managers, more than their male counterparts, also self-reported they act out of interest for the organization more than self-interest and consider others' viewpoints (Arvate et al., 2018: Pillemer et al., 2014). Women may lead differently than men but the assumption that women are inferior to men in leadership abilities is incorrect and prejudicial (Arvate et al., 2018: Pillemer et al., 2014). A large study conducted by Gallup (2015) of 195 countries with 2.5 million manager-led teams measured the engagement of 27 million employees and found a significant link between engagement and productivity and profitability. Female managers outperformed male managers on employee engagement measures by 6% (Deaconu & Rasca, 2015) reinforcing certain positions, departments and industries may benefit from having a female leader (Hoobler et al., 2018; Mendez & Busenbark, 2015; Powell et al., 2004; Yukl, 2013).

Research prior to the 1990s did not emphasize gender differences in leadership styles, however the past two decades have shown a shift toward transformational leadership style and women's tendency to employ it when in leadership positions (Evans, 2014; Vinkenburg et al., 2011). Transformational leadership style is often utilized by women leaders and fits modern organizations because of the correlation to leadership traits employees value (Chisholm-Burns et al., 2017; Pounder & Coleman, 2002; Vinkenburg et al., 2011). The tendency toward the transformational style of leadership has been attributed to the socialization process women undergo and the values and characteristics developed as a result (Brescoll, 2016; London et al., 2018; Pounder &

Coleman, 2002). Female leaders particularly outperform men on individual consideration, an aspect of transformational leadership that focuses on mentorship and relationships with subordinates, which aligns with stereotypically feminine traits (Chisholm-Burns et al., 2017; Vinkenburg et al., 2011). The transformational leadership style is more associated with the feminine gender stereotype and gender role congruence suggests women leaders will be rated or judged more favorably when utilizing this style (Powell & Butterfield, 2014; Powell, Butterfield, Alves, & Bartol, 2004; Vinkenburg et al., 2011). If a male or female leader behave differently, it can potentially cause subordinates to see the leader as unnatural or inappropriate (Eagly & Sczesny, 2009; Powell & Butterfield, 2014; Vinkenburg et al., 2011).

Previous studies had limitations such as a narrow definition of variables or sample size, so Kabacoff (1998) conducted a study focused on addressing these limitations. The study had 900 female and 900 male participants that completed 360-degree evaluations from 143 different organizations. The results of the study were unexpected in that previous studies indicated males would rank higher than females on management and dominance variables, however, the opposite was shown to be true. Similarly, females should have rated high on consensual issues and cooperation, but the opposite was true here as well. Men and women also rated the same on general effectiveness with the exception being strategic vision. The general thought is women are not trained on the development of strategic plans, which would create a barrier for women to hold high level, senior positions (Kabacoff, 1998).

Kabacoff followed his previous study with a 2000 study focused on addressing limitations of previous research and distributing the Leadership Effectiveness Analysis (LEA), with the self-analysis version going to 215 senior executives and the observer version to 622 peers and 784 direct reports (Kabacoff, 2000). Participants reported restrained emotional expressions from male senior executives where direct reports rated female executives as more emotional but able to keep employees motivated. Male senior executives were viewed as more traditional and focused on minimizing risk while their female counterparts were known for setting more deadlines for direct reports, which was interpreted as higher expectations (Kabacoff, 2000). The varied behaviors shown by the executive leaders did not affect their effectiveness ratings but participants did indicate a preference for involvement by their leader, which aligns closer to the female leadership behavior/style (Kabacoff, 2000).

Benefits of Women Leadership

Industries are experiencing rapid change due to increased globalization and technological resources and the competition is intense (Chisholm-Burns et al., 2017; Chizema et al., 2015). An organization can gain a competitive advantage if they focus on their employees with the same intensity as they do their profit; the creation of a work environment that is inclusive of diversity among employees and encourages development would optimize the skills of their workers (Chisholm-Burns et al., 2017; Chizema et al., 2015; Kilian et al., 2005; Kochan et al., 2003). Women are increasing their numbers in every level of organizations and focusing on developing them as leaders is both necessary and beneficial (Chisholm-Burns et al., 2017; Chizema et al., 2015; Fitzsimmons &

Callan, 2016; Lakshmi & Peter, 2015; Sawyer & Valerio, 2018; Valerio & Sawyer, 2016).

Women currently holding leadership positions tend to experience more success when provided support from their organization (Hoobler et al., 2018; Powell et al., 2004; Wooldridge & Bender, 2016). Employee resource groups allow women to network and creates a platform to discuss issues with career development and plan resolutions, such as the development of training programs (Valerio & Sawyer, 2016; Wooldridge & Bender, 2016). Wooldridge and Bender (2016) found top companies selected high potential female leaders to design workshops focused on various business topics with a direct effect on women like unconscious gender bias and business views.

Evidence that organizations with gender diverse leadership teams experience benefits is not just limited to the United States. Global studies show important company gains from women leadership, some of which are innovation, increased financial performance, increased philanthropic pursuits, versatile consumer outreach, and the overall value of the firm (Chisholm-Burns et al., 2017; Cook & Glass, 2014; Diehl & Dzubinski, 2016; Glass & Cook, 2015). Organizations that leverage the perspectives of their women leaders will open themselves up to experience transformative results from the diverse experiences and perspectives (Cook & Glass, 2014; Glass & Cook, 2015; Powell et al., 2004; Vinkenburg et al., 2011). Women bring a diversity of working and leadership styles to their environment and organizations that promote talented women to senior positions are setting themselves up for a long-term success strategy (Brescoll, 2016; Cook & Glass, 2014; Glass & Cook, 2015; London et al., 2018; Pounder &

Coleman, 2002). Developing a strategy for succession planning that includes women moving up the executive ladder shows the organization's commitment to the value women provide and is a beneficial strategy in this competitive landscape (Brescoll, 2016; Cook & Glass, 2014; Glass & Cook, 2015; London et al., 2018; Pounder & Coleman, 2002).

Another study focused on women board directors found that companies with highest number has a greater return on sales, equity, and invested capital than companies with the lowest number, with three or more women board directors equating to 36% return on equity (Chisholm-Burns et al., 2017; Post & Byron, 2015; Sindell & Shamberger, 2016). Women on corporate boards also correlate with fewer legal issues, such as embezzlement and fraud, perhaps due to more stringent monitoring (Chisolm-Burns, et al., 2017). The inclusion of women as leaders and board members increases the diversity of leadership and brings in new perspectives while discouraging the homogeneity of ideas and complacency (Chisholm-Burns et al., 2017; Post & Byron, 2015; Sindell & Shamberger, 2016). Women in the company's lower ranks can envision increased career opportunities when women's representation at the senior level is high, which works to decrease gender discrimination within the company (Cook & Glass, 2014; Glass & Cook, 2015).

Summary and Conclusions

The hierarchical structure of 20th century organizations, which were focused on a control and command model, have been replaced by the flatter structure of the 21st century, with a premium placed on teamwork, cross-cultural interaction, and

demographic diversity (Kaiser & Wallace, 2016). The collaborative environment this creates in the workplace should lend itself to female leadership, as empathy and inclusiveness are traits often associated with women leaders (Hoobler et al., 2018; Kaiser & Wallace, 2016; Yukl, 2013). Explanations for the lack of women leadership, outside of the glass ceiling, is that there is generally a lack of qualified women; this has been dubbed the "pipeline problem" (Brescoll et al., 2010; Chizema et al., 2015; Kilian et al., 2005; Spencer et al., 2018). The inclusion of women in corporate succession planning would help to close this gap and ensure fairness in the competition for top paying positions (Kilian et al., 2005; Nanton, 2015; Spencer et al., 2018).

Workplace discrimination that has failed to be addressed ultimately may lead to preconceptions and stereotypes woven into the fabric of the organization (Heilman, 2012; Hentschel et al., 2019b; Kilian et al., 2005). While there have been significant efforts by organizations to be more inclusive of women, such as policies addressing family leave (Dworkin et al., 2018; Hoyt & Murphy, 2016), flexible work hours and mentoring programs (Fitzsimmons & Callan, 2016; Sawyer & Valerio, 2018; Valerio & Sawyer, 2016), there is still a significant gap in women reaching the executive suite (Diehl & Dzubinski, 2016). Gender barriers, however, exist on several layers within society and culture all the way to personal and interpersonal interactions (Diehl & Dzubinski, 2016; Elacqua et al., 2009; Heilman, 2012; Koenig, 2018; Koenig & Eagly, 2014; Mensi-Karblach, 2014). Barriers at the societal level are often unintentional and so entrenched within our society through gender practices and norms that they are often invisible to both genders; however invisible, they still present an obstacle to women advancing to the

top levels of their field (Diehl & Dzubinski, 2016; Heilman, 2012; Mastracci & Arreola, 2016; Storberg-Walker & Gardiner, 2017). These unconscious biases have been used to explain the lack of women in mathematics, engineering, technology, and science careers and can even impact the way women are evaluated and perceived within the organization, determining the course of their career (Kaiser & Wallace, 2016; Schuster & Martiny, 2017). Studies published from 2000 to current have focused on singular issues, such as mentorship, gender stereotyping, women as the primary caregiver and insufficient negotiation skills as reasons for the lack of female leadership, however the bigger issues are the concepts of gender in society that cannot be fixed with a training or seminar (Diehl & Dzubinski, 2016; Heilman, 2012; Koenig, 2018; Koenig & Eagly, 2014; Mensi-Karblach, 2014). This study, with both male and females from varying industries but absent of a shared organizational culture, intends to provide detailed insight for why women are not advancing equally to men in C suite positions and how gender stereotypes fit into the equation.

This chapter reviewed the literature relating to the study of gender stereotypes and glass ceiling beliefs. The review began with discussing the history of gender stereotypes and theoretical foundations that shape this study. Then, the primary variables of this study were examined. The next chapter will provide details about the method in which this study will be carried out.

Chapter 3: Research Method

In the previous chapters, an introduction to the relationship between glass ceiling barriers and advancement to senior leadership for women was presented. This included a discussion of the relationship between perceptions of gender as it relates to leadership qualities – a relationship that continues to be debated in the literature – as well as a discussion about gender stereotypes and their effect on women in the corporate world. More recent studies have been mostly qualitative or focused strictly on the viewpoint of women, either aspiring to leadership or currently in leadership positions (Smith et al., 2012). Three research questions guided this study design, including the collection of data, and subsequent data analysis. The purpose of this quantitative study was to compare the viewpoints of males and females on glass ceiling barriers and gender stereotypes, identify taxonomies of distinct viewpoints regardless of gender, and then determine if the taxonomies are independent of gender. The purpose of this chapter is to provide a methodology description for this research. Specifically, this chapter contains the research design, sample, data collection methods, instruments, research questions, data analysis procedures, validity threats, and ethical considerations.

Research Design and Rationale

The first objective was to compare the viewpoints of men and women on glass ceiling barriers and gender stereotypes, which corresponds to a static group comparison (Campbell & Stanley, 1963) with gender as the dependent variable and the four subscales of the Career Pathways Survey (Smith et al., 2012) that assess glass ceiling barriers and the 14 subscales of gender stereotypes as the independent variables (Hentschel et al.,

2019a; Hentschel et al., 2019b). The second objective was to identify taxonomies of glass ceiling barriers and gender stereotypes regardless of participant's gender, which corresponds to a correlational design (Campbell & Stanley, 1963) with the four Career Pathways Survey subscales and 14 Gender Stereotype Scale subscales as the independent variables and the emergent taxonomies as the dependent variable. The third objective was to determine if the taxonomies were independent of gender, which corresponds to a static group comparison (Campbell & Stanley, 1963) with gender as the independent variable and the emergent taxonomies as the dependent variable.

Design Rationale

There is a lack of quantitative research on how gender stereotypes and glass ceiling beliefs are related to the career advancement of women in the United States to senior leadership positions. There is an abundance of quantitative research relating to gender stereotypes or qualitative research relating to glass ceiling beliefs; however, lacking is empirical research focused on the relationship between gender stereotypes (agency and communal) and endorsement of the four career pathway domains, and the extent to which males and females' beliefs differ on these stereotypes (Festing et al., 2015; Spencer et al., 2018; Smith, et al., 2012). The structure of the research questions and their associated research designs specifically addressed the gap in scholarly research on the relationship between gender and viewpoints on glass ceiling barriers and gender stereotypes, identification of taxonomies of glass ceiling barriers and gender stereotypes, and determination of independence between taxonomies and gender.

Secondary Designs and Rationale

In addition to the variables and research questions of primary interest, secondary variables included age, level of workplace responsibility, and the 20 major industry categories in the 2017 North American Industry Classification System (NAICS; United States Executive Office of the President, Office of Management and Budget, 2017). Exploratory analyses of the relationship between age and scores on the glass ceiling and Career Pathways Survey subscales was conducted (a correlational design), as well as age differences across the emergent taxonomies (a static group comparison). These same analyses were conducted replacing age with level of workplace responsibility. For NAICS categories with sufficient number of cases for statistical analyses, differences in glass ceiling and Gender Stereotypes Scale subscale scores were examined (a static group comparison), as well as independence between NAICS categories and the emergent taxonomies (also a static group comparison design). Finally, relationships between glass ceiling and Career Pathways Survey subscale scores were examined (a correlational design). All variables for this study are operationalized in more detail in the instrumentation section of this chapter.

Methodology

Population, Sampling, and Sampling Procedures

The target population for this study were men and women employed in professional organizations in the United States. The inclusion criteria were meant to ensure participants had significant experience in a professional, corporate environment. The inclusion criteria were (a) at least 10 years of work experience and (b) experience

working in a professional environment in the United States. According to the National Bureau of Labor Statistics (2019), the number of business professionals employed as of 2019 was 21.5 million. However, there are other areas, such as education and healthcare, that would qualify for the study, so the exact number would be difficult to precisely define. Nonrandom, purposive sampling was used for the study to ensure respondents fit the criteria and to help with gathering a robust sample (Daniel, 2012). The primary analyses included a discriminant function analysis, cluster analysis, and chi square analysis. A sample size of 124 was sufficient in discriminant function analysis to detect a medium-size $f^2(V)$ based on Pillai V at alpha = .05 and power = .80 with 18 independent variables (G*Power; Faul et al., 2016). A sample of 124 was also sufficient in chi square at alpha = .05 and power = .80 to detect medium sizes of Cohen's w = .25 (for two taxonomy groups) or .31 (for five taxonomy groups; G*Power; Faul et al., 2009).). G*Power screenshots are in Appendix A. Power analysis was not available for cluster analysis and there was no accepted rule of thumb for sample size (Siddiqui, 2013), however a sample of 124 was sufficient to ensure variation for the capture of meaningful clusters (C. T. Diebold, personal communication, July 13, 2020).

Procedures for Recruitment, Participation, and Data Collection

A nonprobability sample was recruited from my professional network (e.g., LinkedIn, Facebook) and my personal network (former coworkers). A message explaining the participation requirements and purpose of the study was placed on these sites and emailed to qualified individuals to attract participants. Inclusion criteria for the survey were participants that have been employed in a corporate environment for a

minimum of 10 years. To supplement these efforts, the snowball sampling method was used which consisted of participants providing referrals to the researcher for individuals they think will meet the study criteria and can be added to the sample.

Selected participants received an email invitation to participate in the study via SurveyMonkey. The email included a URL link to the informed consent information and survey along with a request to share the recruitment message/email to those in their network with an interest in participating. The voluntary nature of the survey was emphasized in the informed consent form and communication with participants was through email only. Study participants received an email once a week for four weeks.

Data was collected using SurveyMonkey in order to protect respondents' anonymity. When the participant clicked on the survey, the information for informed consent was provided and they could only proceed by agreeing to participate. The approximate time for each participant to complete the survey was 30 minutes. Follow-up emails were utilized to remind original email recipients to complete the survey and contained similar wording as the original email. The communication schedule had four parts: (a) the initial invitation, (b) the first reminder, (c) the second reminder, and (d) the final reminder. The communication plan was as follows:

1. Participants received an email invitation via SurveyMonkey.
2. I monitored the results of the survey every 72 hours through the survey tool.
3. A reminder was sent to the participants every seventh day for four weeks.

4. A final email was sent to participants thanking them for their contribution and included contact information for those wanting to receive results upon the close of the study.

Participation

The inclusion criteria outlined above was established to ensure participants were eligible for the study. Participants were required to have (a) at least 10 years of work experience and (b) experience working in a professional environment in the United States. Participants were asked demographic questions for potential use in future research. Demographic questions included age, career level, and NAICS category (to identify primary career industry). This information was collected to identify insight into how variances in certain areas, say career level or STEM industries, may relate to glass ceiling barriers or harboring of certain gender stereotypes (Amon, 2017; Smith et al., 2012). Research has already established a clear gender gap in C suite corporate positions (Spencer et al., 2018; Valerio, 2018) and these qualifiers could reveal the degree to which factors, such as tenure and industry, influence advancement for women in their career (Festing et al., 2015; Spencer et al., 2018; Smith, et al., 2012).

Data Collection

A quantitative research design using Survey Monkey for the collection data enabled the investigation of the relationship between gender stereotypes and glass ceiling beliefs of corporate men and women. The online survey included the (a) informed consent and demographic questions (see Appendices A and F); (b) the Gender Stereotypes Scale (Hentschel et al., 2019); (c) the Career Pathways Survey (Smith et al.,

2012). The cross-sectional survey was time-bound and data was captured in a moment in time (Curtis et al., 2016). The participants were able to save and restart their survey at any time while the survey is open and could exit at any time. The participants were informed there is no compensation for participation. A summary of the research results was provided to the survey participants through the information provided in the final page of the survey thanking them for their participation.

Instrumentation and Operationalization of Constructs

Career Pathways Survey

The Career Pathways Survey, developed by Smith et al. (2012), is a 38-item questionnaire utilizing a 7-point Likert scale with anchors 1 (*strongly disagree*) to 7 (*strongly agree*). The Career Pathways Survey was created with the intent of identifying employees' views of the effect of the glass ceiling (Smith et al., 2012). The role congruity theory was utilized as a basis for the creation of the survey, with the authors indicating survey questions stemming from the research of Carli and Eagly (2007), the latter of which created the role congruity theory, the theoretical framework utilized in the current study (Smith et al., 2012). A recent search on Google Scholar indicated 108 articles cited the instrument. Although the questionnaire allows for both subjective and objective data with a section for written responses, only objective data was used for the purposes of this study.

The researchers originally created an instrument with 40 items utilizing a sample size of 243 women from varying levels of management; this was followed by an updated version consisting of 38-items and administered to a new sample of 307 women (Smith et

al., 2012). The Career Pathways Survey contains constructs of promotional advancement disparities and is, therefore, appropriate for studies of both men and women's attitudes towards gender inequality in organizational leadership (Smith et al., 2012). There is an additional benefit in the potential identification of workplace sexism from the female and male perspective. Sample questions related to perceptions of promotional advancement and gendered stereotypes are as follows:

- Women and men have to overcome the same problems at the workplace.
- Even women with many skills and qualifications fail to be recognized for promotions.
- Women face no barriers to promotions in most organizations.
- Higher education qualifications will help women overcome discrimination.
- Motherhood is more important to most women than career development
- Women are capable of making critical leadership decisions.

The Career Pathways Survey contains four subscales: resignation, acceptance, resilience, and denial (Smith et al., 2012). The resignation items (10) contain statements related to women rejecting or failing at promotional opportunities because of organizational and social obstacles. Examples include: "Women know that work does not provide the best source of happiness in life"; "Smart women avoid careers that involve intense competition with colleagues". Denial items (10) address beliefs that the glass ceiling is non-existent or a myth. Examples include: "Talented women are able to overcome sexist discrimination"; "Women face no barriers to promotions in most

organizations". Resilience items (11) are statements intended to show motivation of women to persist in their career, regardless of obstacles. Examples include: "The more women seek senior positions, the easier it will be for those who follow"; "Successful organizations seek and want to retain talented female staff". Acceptance items (seven) are statements implying women are satisfied not seeking senior positions. Examples include: "Women prefer a balanced life more than gaining highly paid careers"; "Women have the same desire for power as men do". The researchers conducted two studies, with the first as a pilot study for the preliminary, 40 item questionnaire and the second, a follow up study testing new items with high face validity and the eventual final 38 item version (Smith et al., 2012). Resilience and denial are considered optimistic glass ceiling beliefs, while resignation and acceptance are considered pessimistic (Smith et al., 2012). Coefficient alpha reliability estimates revealed high reliability for each scale: denial (.81), resilience (.70), resignations (.71), and acceptance (.72; Smith et al., 2012). Permission to use the Career Pathways Survey is in Appendix C and the items are in Appendix D.

Gender Stereotypes Scale

The Gender Stereotypes Scale, developed by Hentschel et al. (2019a, 2019b), is a 78 item questionnaire utilizing a 7 point Likert-type scale with anchors 1 ("*not at all*") to 7 ("*very much*"). The Gender Stereotypes Scale was created with the intent of providing "an assessment of contemporary gender stereotypes and their impact on characterizations about others and self" (Hentschel et al., 2019b, p. 5). A recent search on Google Scholar indicated 9 research articles cited the instrument.

The researchers constructed the scale in a four step procedure. The first step was to identify agentic and communal attributes measured previously by researchers, including adjectives, descriptors, and traits; a list of 74 attributes was identified (46 agentic and 28 communal; Hentschel et al., 2019b). The attributes were pulled from several sources, including that of Diekman and Eagly (2000), the latter of which created the role congruity theory, the theoretical framework utilized in the current study (Hentschel et al., 2019b). The second step was to sort the attributes into categories based on the similarity of their concepts. Agreement was reached regarding the number of categories necessary to capture the distinctions between attributes, and any category that did not have consensus was eliminated (Hentschel et al., 2019b). A total of seven categories were then identified, three representing communality (sociability, concern for others, and emotional sensitivity) and four representing agency (leadership competence, independence, assertiveness, and instrumental competence; Hentschel et al., 2019b). The third step had three psychology graduate students act as independent judges and sort the attributes remaining from step two into the identified categories to confirmed those previously identified. Any attributes that did not match the classification from the original set of judges was eliminated. In the fourth and final step, the researchers used confirmatory factor analysis to eliminate all items that were determined as a low fit within the category. The remaining items were 15 agency attributes and 11 communal attributes. Each of the seven scales had coefficient alphas exceeding .75.

The four scales related to agency were: leadership competence, instrumental competence, independence, and assertiveness (Hentschel et al., 2019a). Leadership

competence items (3) focused on leader performance. Examples include: “Men, in general, have leadership ability” or “Women, in general, are skilled in business matters”. Instrumental competence is focused on performance executions. Examples are “I am competent” or “Women, in general, are productive”. Assertiveness concerns taking charge. Examples are “Men, in general, are assertive” or “I am competitive”. Independence concerns acting free of others’ influence. Examples are “Women, in general, desire responsibility” or “Men, in general, are independent”.

The three scales related to communality were: sociability, emotional sensitivity, and concern for others (Hentschel et al., 2019a). Sociability and concern for others both involve other individuals, but concern for others is a one-way transaction whereas sociability is transactional and focused on building relationships. Examples of sociability are “Men, in general, are collaborative” or “I am communicative”. Examples of concern for others are “Women, in general, are compassionate” or “I am kind”. Emotional sensitivity implies a focus on feelings and can either be viewed as an orientation or consequence of interacting with others. Examples are “Men, in general, are sentimental” or “I am emotional”. A final confirmatory analysis tested the factor structure of the communality and agency scales and determined that creating dimensions for each scale were more suitable than measuring all the attributes together under the scale name. The items and permission to use are in Appendix E.

Demographic Items

Smith et al. (2012) collected several demographic variables from participants in their study including age, education level, marital status, and career level. For the

purposes of this study, questions regarding gender identity, age, career level (level of responsibility), and job category were included in the survey to collect additional background data from participants. Participants chose between male and female for gender identity. The age of the participant was presented as a fill-in-the-blank question. Career level was defined as the last position held, whether currently or formerly, and was presented with five options: (a) individual contributor (no direct reports); (b) supervisor/manager; (c) director; (d) executive (VP, President, CFO, COO, etc.); and (e) CEO or Founder. Job category/industry was presented according to NAICS codes as follows: (a) Accounting/Finance; (b) Insurance Professional; (c) Administrative Support; (d) Banking, Real Estate, or Mortgage Professional; (e) Construction; (f) Customer Service; (g) Education; (h) Engineer; (i) Food Services/Hospitality; (j) Human Resources; (k) Information Technology; (l) Science, Engineering and Mathematics; (m) Legal; (n) Manufacturing; (o) Marketing; (p) Sales; (q) Healthcare; (r) Transportation, Distribution and Logistics; (s) Law, Safety, Corrections and Protective Services; (t) Self-Employed; and (u) Other.

Research Questions and Analysis Plan

RQ1: In a discriminant function analysis, what combination of the four career pathway's subscales (resignation, acceptance, resilience, and denial) and the seven gender stereotypes scales (leadership competence, instrumental competence, independence, assertiveness, sociability, emotional sensitivity, and concern for others) best discriminates between males and females?

RQ2: In a cluster analysis, what are the number and nature of distinct groups of individuals with common patterns of scores across the four career pathway's subscales (resignation, acceptance, resilience, and denial) and the seven gender stereotypes scales (leadership competence, instrumental competence, independence, assertiveness, sociability, emotional sensitivity, and concern for others)?

RQ3: To what extent are the cluster analysis taxonomies dependent on being male or female?

Examination of relationships among gender and the 18 scales will be conducted in three ways. Firstly, a discriminant function analysis was conducted to determine what combination of the 18 variables best differentiate males from females, creating a profile (RQ1). Secondly, a cluster analysis was conducted to examine the number and nature of distinct groups of individuals with common patterns of scores across the 18 variables, creating taxonomies (RQ2). Finally, a chi square test of independence was conducted to determine if particular taxonomies are more common for males or females (RQ3). All statistical analyses were conducted using IBM SPSS.

Prior to any of these analyses, standard practices as outlined in Tabachnick and Fidell (2019) and Diebold (2019) were followed to identify and address missing values, univariate normality, univariate and multivariate outliers, and collinearity and multicollinearity. In addition, reliability analysis was conducted and reported for each of the 18 subscales to include Cronbach's alpha and minimum, average, and maximum inter-item correlations. After cleaning and screening, by group (male and female) and overall sample descriptive statistics for each of the 18 subscale scores, age, and level of

workplace responsibility were reported, including mean, standard deviation, minimum and maximum values, and skewness and kurtosis. Also, frequencies and percentage of cases in NAICS categories were reported.

For discriminant function analysis, all 18 subscale scores will be entered. Because the criterion variable, gender, is dichotomous, there was only one discriminant function. For descriptive purposes only, the equality of group means on all subscales was reported. The squared canonical correlation represented the proportion of variance in the discriminant function scores associated with being male or female. The omnibus chi square value and significance test was reported, but the primary interpretation was based on examination of group centroids and function and structure coefficients. Coefficients ≥ .32 are generally considered to contribute, but it is also recommended to assess the relative distribution of coefficients to determine importance of predictors (Tabachnick & Fidell, 2019). If some predictors have near zero function and structure coefficients, they may be eliminated and the analysis rerun.

To answer the second research question, a two-step cluster analysis with outlier handling (Norusis, 2012) was conducted. All 18 subscale scores will be standardized to establish a common metric. Because cluster analysis is sensitive to noncontributing variables (Hair & Black, 2000), cluster mean differences and eta squared for each of the subscales were examined to determine the final set of cluster variables. The number of clusters is automatically determined by relative change in the Schwarz Bayesian Criterion. The silhouette value was reported as an index of model fit. Kaufman and Rousseeuw (1990) considered values > .5 as good and values < .2 as having little to no

structure. The number and percentage of cases in each cluster was reported, and the defining characteristics of each cluster was interpreted with respect to cluster centroids across the set of variables and predictor importance output.

For the third research question, analysis focus was on Cohen's *w* effect size, the standardized residuals, and the statistically expected and actual number of cases in each cell. Focus on the effect size is in keeping with recommendations by Wilkinson and the Task Force on Statistical Inference (1999) instead of simply on the observed *p*-value. *P*-values can have a wide range based on the actual data and a single experiment would not be sufficient to determine if a true effect exists (Szucs & Ioannidis, 2017). Sullivan and Feinn (2012) stated with a large enough sample, statistical tests are likely to produce a significant difference unless the effect size is zero. Traditionally, H_0 is set as predictive of zero effect, but H_1 is often not quantitatively defined, leading to an absence of the calculation of pre-experimental power (Gliner, Leech, & Morgan, 2002; Szucs & Ioannidis, 2017). Researchers, according to the authors, will rely on a significant p-value, no matter whether small or larger, at the exclusion of their knowledge of the variables (Szucs & Ioannidis, 2017). Therefore, if a specific value is not indicated in H_1, an ambiguous difference between groups could be the result of a study, without providing any insight into the true interaction of variables (Gliner et al., 2002; Szucs & Ioannidis, 2017). The reliance of significance tests on both sample and effect size confounds the *p*-value and could, ultimately, only indicate the researchers utilized a large sample size (Gliner et al., 2002; Sullivan & Feinn, 2012; Szucs & Ioannidis, 2017). McGrath (2011) noted that the accept-reject approach of null hypothesis statistical testing (NHST) is

flawed and that “it is reasonable to conclude that NHST is simply not the best choice for an inferential model” (p. 90).

Original concepts for alternative hypothesis were introduced by Neyman and Pearson in the pursuit of resolving quality control problems within an industrial setting (Szucs & Ioannidis, 2017). When testing exact measurements of objects for quality, it is simple to assess the statistical significance of a machine that can detect a specific metric deviation versus another ineffective one (Szucs & Ioannidis, 2017). The minimum effect size is easy to identify and sample size can be controlled as machine parts are easily produced (Szucs & Ioannidis, 2017). Conversely, controlling effect size and sample size are rarely this simple in most research settings, specifically within the social sciences (Schuele & Justice, 2006; Szucs & Ioannidis, 2017). True effect sizes are mostly unknown and setting a minimum effect size is mostly subjective (Schuele & Justice, 2006; Szucs & Ioannidis, 2017). The measurement of the smallest difference of interest between two groups would be difficult to accurately determine without a large sample size, and sample sizes in social sciences research are limited by circumstance (Szucs & Ioannidis, 2017). Implications of incorrect assumptions based on rigid data rules around effect sizes could result in incorrect assumptions of people’s preferences of medical treatments or inflating false narratives with low-powered studies could waste research funding and mislead the general public (Gliner et al., 2002; Schuele & Justice, 2006; Szucs & Ioannidis, 2017).

Supplemental Exploratory Level of Analysis

Exploratory analyses were conducted by examining demographic data of age, career level, level of workplace responsibility, and NAICS category. Specifically, correlations between age and scores on the Gender Stereotypes Scale and Career Pathways Survey subscales were conducted, as well as an ANOVA to examine age differences across the emergent taxonomies. These same analyses were conducted, replacing age with level of workplace responsibility. For NAICS categories with sufficient number of cases for statistical analyses, ANOVAs were conducted as recommended by Smith et al. (2012) to examine differences in glass ceiling and gender stereotype subscale scores, as well as a chi square test of independence between NAICS categories and the emergent taxonomies. Finally, correlations between glass ceiling and Career Pathways Survey's subscale scores were examined.

Threats to Validity

Selection Bias

Selection bias is a risk to generalizability (external validity) because of the purposive and snowball sampling strategy (Boston University, 2015). Participation was voluntary and anonymity was offered through the survey tool. Participants were made aware in the informed consent form of their right to stop the survey at any point.

Sample Size

As discussed earlier in the chapter, the number of business professionals in the United States was 21.5 million as of 2019, therefore surveying 124 business professionals may not represent the population's glass ceiling beliefs. Choosing to limit participants to

a minimum of 10 years work experience in a corporate environment was an attempt to mitigate this risk with the assumption that have a good idea about the corporate environment (Boston University, 2015).

Participant Characteristics

Participants were screened to include only corporate professionals with at least 10 years of work experience in the United States. Additional variables such as age, career level and industry were collected through a demographic section of the survey. Choosing participants with these characteristics should allow for them to have a good idea about the corporate environment and perhaps have had training or exposure to diversity training. They may not, however, have been exposed to hiring or promotional practices within the organizations they have worked for, leading to a potential limitation (Boston University, 2015).

Differential Selection

Differential selection may have been an internal validity threat with the male and female participants agreeing to complete the surveys for differing reason that may affect item response (Boston University, 2015). The interpretation of their responses could then lead to incorrect conclusions.

Confounding Variables

Confounding variables are extraneous variables that affect the dependent variable (Boston University, 2015). Glass ceiling beliefs concern promotional opportunities that differ for men and women workers where, with all things being equal, there is a higher likelihood that a man will get promoted than the woman. Participants may have confused

the lack of women in higher positions for phenomenon other than the glass ceiling such as succession management issues or a general lack of qualified women applicants. A description of the term "glass ceiling" was included in the introduction of the study to mitigate this risk.

Construct Validity

Construct validity is an evaluation of whether the instrument is actually measuring the construct intended (Boston University, 2015). The Career Pathways Survey was created in 2012 and is a relatively new instrument only used in a few studies to date (e.g., Balasubramanian & Lathabhavan, 2017; Mohammadkhani & Gholamzadeh, 2016; Smith et al., 2012). The Gender Stereotypes Scale is even newer and has not been used in any studies aside from the original, created in 2019. Nonetheless, each instrument's constructs are theoretically sound and their subscales have good reliability (Hentschel et al., 2019; Smith et al., 2012). For both instruments, the researchers removed or added questions as necessary to increase the construct validity as outlined earlier in the chapter (Hentschel et al., 2019; Smith et al., 2012).

Attrition

Participants dropping out of the study is a threat to validity (Boston University, 2015). The participants completed two surveys that will take approximately 30 minutes. If participants were interrupted during the survey process, they may not have completed the survey. Participants may have felt conflicted about their personal experiences when completing the survey and may have dropped out for these reasons. Although participation in the survey was voluntary and they could submit anonymously, I allowed

participants the opportunity to share their contact information for follow-up on the study's results. This provided me with an avenue to contact them if their survey is incomplete.

Ethical Procedures

The proposal for this research was submitted to the Institutional Review Board to ensure ethical procedures are properly outlined (see Appendix A). Concerns related to this study are (a) anonymity, (b) right to privacy, and (c) fair treatment. The informed consent all participants agreed to prior to participation stated they had the choice to withdraw from the study at any time. The four ethical standards of (a) justice, (b) respect, (c) beneficence, and (d) research and merit integrity were considered when creating this study (Wallace & Sheldon, 2014). Participants received (a) the initial study invitation, (b) a letter of informed consent, and (c) detailed instructions to ensure minimal risk, provide clarity, and ensure compliance. These measures were taken to ensure (a) anonymity is maintained, (b) risk is minimized and (c) damages are limited. Risk of harm to potential participants was considered low due to the nature of the study and data collection procedures. The dataset is stored on a password-protected laptop and will be kept in a password-protected file for a 5 year period.

Gender sensitive research "pays attention to the similarities and differences between men and women's experiences and viewpoints, and gives equal value to each" (Leduc, 2009, p. 1). The position of a researcher in scientific research is not neutral and is influenced by gender, class, ethnicity, age, and a host of other factors. Therefore, my research regarding differences across gender on glass ceiling beliefs and gender

stereotypes will have bias because I am a female and affected by these phenomena. However, my goal is to learn more about how each gender perceives these variables and, ultimately, to provide solutions to change their perception if it is biased.

Summary

This quantitative study was designed to compare the viewpoints of males and females on glass ceiling barriers and gender stereotypes, identify taxonomies of distinct viewpoints regardless of gender, and then determine if the taxonomies are independent of gender. The nature of this study is nonexperimental and quantitative and data was collected using two online surveys. The target population for this study was men and women with at least 10 years work experience employed in professional organizations in the United States and a sample size of 124 has been determined as adequate to provide statistically significant results. The variables of glass ceiling barriers (dependent variable), gender stereotypes (dependent variable), and gender (independent variable) was analyzed first by using a discriminant function analysis to determine what combination of the 18 variables best differentiate males from females, creating a profile. Secondly, a cluster analysis was conducted to examine the number and nature of distinct groups of individuals with common patterns of scores across the 18 dependent variables, creating taxonomies. Finally, a chi square test of independence was conducted to determine if particular taxonomies are more common for males or females. Risk of harm to potential participants was considered low due to the nature of the study and data collection procedures. The results of this study may provide insight into issues related to

the glass ceiling for women in leadership roles seeking career advancement. The next chapter will provide the data analysis and results from this study will be explained.

Chapter 4: Results

The purpose of this quantitative study was to compare the viewpoints of men and women on glass ceiling barriers and gender stereotypes, identify taxonomies of distinct viewpoints regardless of gender, and then determine if the taxonomies were independent of gender. In this chapter, I review the data collection procedures, describe how the data were handled and analyzed, and summarize the significant findings from the analyses. The research questions were as follows:

RQ1: In a discriminant function analysis, what combination of the four career pathway's subscales (resignation, acceptance, resilience, and denial) and the seven gender stereotypes scales (leadership competence, instrumental competence, independence, assertiveness, sociability, emotional sensitivity, and concern for others) best discriminates between males and females?

RQ2: In a cluster analysis, what are the number and nature of distinct groups of individuals with common patterns of scores across the four career pathway's subscales (resignation, acceptance, resilience, and denial) and the seven gender stereotypes scales (leadership competence, instrumental competence, independence, assertiveness, sociability, emotional sensitivity, and concern for others)?

RQ3: To what extent are the cluster analysis taxonomies dependent on being male or female?

Data Collection

A nonprobability sample was recruited from my professional network (e.g., LinkedIn, Facebook) and my personal network (former coworkers). A message

explaining the participation requirements and purpose of the study was placed on these sites and emailed to qualified individuals to attract participants. Inclusion criteria for the survey were participants that had been employed in a corporate environment for a minimum of 10 years. To supplement these efforts, the snowball sampling method was used, which consisted of participants providing referrals to me for individuals they thought would meet the study criteria and could be added to the sample. Data collection was five weeks and an additional 20 participants completed the survey over the recommended sample size of 124.

The inclusion criteria outlined above was established to ensure participants were eligible for the study. The target population for this study were men and women with at least 10 years work experience employed in professional organizations in the United States and a sample size of 124 was determined as adequate to provide statistically significant results. Participants were asked demographic questions for potential use in future research. All survey participants met the eligibility criteria.

Data Screening and Cleaning

The Career Pathways Survey subscale items of denial and acceptance had a negative loading and were reverse coded to be consistent with the direction of the constructs, for example, "1 = *Strongly disagree*" are "7 = *Strongly disagree*" in the reverse coded version.

Missing Data

Of the 144 participants who accessed the survey, 20 had missing data on all of the Gender Stereotypes Scale items and were eliminated from further analysis. One other

participant had missing data on 4 of the 10 Career Pathways Survey denial subscale items and was also eliminated from further analysis, resulting in a valid *N* of 123 participants. Three participants had one item of missing data on the Gender Stereotypes Scale subscales of female instrumental competence and female concern for others, or the Career Pathways Survey acceptance subscale. Each participants' mean on the other items that made up the subscale was imputed for the missing data.

Univariate and Multivariate Outliers

Initial scores were computed for each of the four Career Pathways Survey subscales (denial, resignation, resilience, acceptance) and each of the seven Gender Stereotypes Scale subscales (instrumental competence, leadership competence, assertiveness, independence, concern for others, sociability, emotional sensitivity), but separately for ratings of males and ratings for females (i.e., 14 total Gender Stereotypes Scale subscales). Multivariate outliers were assessed following Tabachnick and Fidell (2019) as stipulated in Chapter 3. With a random variable regressed on all 18 subscales, cases with Mahalanobis values that exceed the critical value of 42.312 (i.e., for $df = 18$ at alpha = .001) are potential multivariate outliers. Two participants were found to be extreme multivariate outliers and were eliminated from further analysis, leaving a valid *N* of 121 participants. Removal of the two cases also resolved initial issues with univariate outliers.

Reliability Analysis

A reliability analysis was completed on each of the 18 subscales; the results are outlined in Table 2. Of the 18 scales, the male Gender Stereotypes Scale subscales had

the highest average reliability at α =.88, while the female subscales had an average of α = .86. The Career Pathways Survey had a reliability average of α = .81.

Table 2

Reliability of the Career Pathways Survey and Gender Stereotypes Scale Subscales

			Inter-Item correlations		
Scale/Subscale	α	# Items	*M*	Min	Max
Career Pathways Survey					
Denial	.86	10	.39	.17	.62
Resignation	.77	8	.30	.08	.49
Resilience	.78	11	.28	.01	.59
Acceptance	.81	7	.39	.16	.65
Gender Stereotypes Scale					
Male					
Instrumental competence	.94	4	.80	.72	.86
Leadership competence	.90	3	.76	.72	.78
Assertiveness	.93	4	.77	.70	.88
Independence	.92	4	.74	.68	.82
Concern for others	.90	4	.70	.58	.82
Sociability	.87	3	.69	.65	.72
Emotional sensitivity	.71	2	.56		
Female					
Instrumental competence	.86	4	.64	.51	.86
Leadership competence	.84	3	.64	.58	.74
Assertiveness	.79	4	.49	.34	.64
Independence	.80	3	.58	.49	.64
Concern for others	.95	4	.81	.67	.91
Sociability	.89	4	.66	.62	.71
Emotional sensitivity	.89	3	.73	.66	.86

Note. α = Cronbach's alpha.

Two of the four Career Pathways Survey subscales, denial, and acceptance, were reliable (α = .86 and α = .81 respectively). Although the resignation subscale appears to have acceptable reliability (Cronbach's α = .74), the correlation matrix indicated several pairs of negative or near zero correlations, which violates the additive assumption for a scale. Q21 ("Even very successful women can quickly lose their confidence") and Q22

("Women know that work does not provide the best source of happiness in life") appeared not to fit with the other items. An exploratory alpha factor technique was conducted to determine the items that loaded on a common primary factor and the results confirmed that Q21 and Q22 did not share common variance with the other items. Reliability analysis of the remaining 8 resignation items were reliable ($\alpha = .77$) with average inter-item correlations of .30, ranging from .08 to .49. The resilience subscale was also reliable ($\alpha = .78$) although Q26 ("Higher education qualifications will help women overcome discrimination") did not fit particularly well; but reliability would not have been substantially approved if deleted.

The Gender Stereotypes Scale subscales overall were reliable with Cronbach alpha ranging from $\alpha = .71$ to $\alpha = .95$. The Gender Stereotypes Scale female independence subscale appeared acceptable at first glance ($\alpha = .72$), but Q81 ("Women are, in general, emotionally stable") did not fit well. It was suspected the reliability could be substantially improved if deleted and the revised subscale had higher reliability as predicted ($\alpha = .80$). The 3-item male emotional sensitivity subscale had poor reliability ($\alpha = .56$). The output indicated a 2-item scale of just Q65 ("Men are, in general, emotional") and Q67 ("Men are, in general, sentimental") would suffice and the revised scale produced an acceptable reliability ($\alpha = .71$).

Results

Demographic Statistics

Demographic information about survey participants was collected for potential use in future research. Participants' gender, career level, job category, and age are noted

in Table 3 below. Women accounted for 56.2% of the survey respondents, with men participating at a lower rate of 43.8% and the average age of participants was 41.6 years old. According to the Bureau of Labor Statistics (2021), the median age of men in the workforce is 41.5, while the median age of women is 42, so the study's participants aligned well with the national average. Women are 51.8% of professional occupations with men representing 48.8; the percentage of men and women participating in the study was comparable to the national average (BLS, 2021). The most common career level of participants was "Individual Contributor (no direct reports)" and the industries most represented were education and healthcare (both at 14%) followed by customer service (9.9%).

Table 3

Participant Demographics: Sex, Career Level, Job Category

Demographic	Frequency	Valid Percent
Sex		
Male	53	43.8
Female	68	56.2
Career level		
Individual contributor (no direct reports)	48	40.0
Supervisor/manager	38	31.7
Director	14	11.7
Executive (President, VP, CFO, COO, etc.)	11	9.2
CEO of Founder	9	7.5
Job category/industry		
Accounting/finance	7	5.8
Insurance professional	0	0.0
Administrative support	0	0.0
Banking, real estate, or mortgage professional	7	5.8
Construction	2	1.7
Customer service	12	9.9
Education	17	14.0
Engineer	1	0.8
Food services/hospitality	4	3.3
Human resources	7	5.8
Information technology	1	0.8
Science, engineering, and mathematics	6	5.0
Legal	6	5.0
Manufacturing	5	4.1
Marketing	2	1.7
Sales	8	6.6
Healthcare	17	14.0
Transportation, distribution, and logistics	0	0.0
Law, safety, corrections, and protective services	2	1.7
Self-employed	8	6.6
Other	9	7.4

Subscale Descriptive Statistics

Each of the 18 subscales were evaluated to determine the overall average response of participants, with the results below in Table 4. Of the four subscales from the Career

Pathways Survey, resilience had the highest mean score (M = 5.73), while acceptance had the lowest (M = 3.01). Resilience items reflected motivation of women to persist in their career, regardless of obstacles, with participants tending to agree; acceptance items reflected the implication women are satisfied not seeking senior positions, with participants unsure or somewhat disagreeing with those statements. For the Gender Stereotypes Scale, assertiveness (*M* = 5.44) had the highest mean score for males, while the concern for others had the lowest mean score (*M* = 4.11). The assertiveness scale is related to agency, or masculine traits, with participants agreeing that males are generally assertive; concern for other scale reflects communality, or feminine traits, with participants unsure or somewhat disagreeing that males are general concerned for others. For females, instrumental competence had the highest mean score (*M* = 5.85) and assertiveness had the lowest mean score (*M* = 4.71). Instrumental competence is related to agency, with participants agreeing that women, generally, are focused on performance executions; assertiveness is also an agentic trait, with participants unsure or somewhat agreeing that women are generally assertive.

Table 4

Descriptive Statistics of the Career Pathways Survey and Gender Stereotypes Scale Subscales

Scale/Subscale	*M*	*SD*	Mdn	Min	Max	*S*	*K*
Career Pathways Survey							
Denial	3.13	1.13	3.00	1.00	6.00	0.38	-0.69
Resignation	3.41	1.04	3.38	1.13	6.38	0.01	-0.14
Resilience	5.73	0.73	5.82	2.45	6.91	-1.34	3.12
Acceptance	3.01	1.07	3.00	1.00	5.57	0.25	-0.63
Gender Stereotypes Scale							
Male							
Instrumental competence	5.21	1.52	5.25	1.00	7.00	-0.50	-0.57
Leadership competence	5.19	1.46	5.33	1.00	7.00	-0.42	-0.57
Assertiveness	5.44	1.37	5.75	2.00	7.00	-0.69	-0.30
Independence	4.80	1.49	4.75	1.00	7.00	-0.03	-0.85
Concern for others	4.11	1.29	4.00	1.00	7.00	-0.12	-0.37
Sociability	4.37	1.42	4.00	1.00	7.00	0.09	-0.66
Emotional sensitivity	3.38	1.26	3.50	1.00	7.00	0.03	-0.47
Female							
Instrumental competence	5.85	0.98	6.00	2.00	7.00	-0.90	0.93
Leadership competence	5.78	0.98	6.00	2.00	7.00	-0.82	0.84
Assertiveness	4.71	0.97	4.75	2.00	7.00	-0.01	0.06
Independence	5.53	0.93	5.67	2.00	7.00	-0.80	0.86
Concern for others	5.81	1.06	6.00	2.00	7.00	-0.83	0.34
Sociability	5.74	1.05	6.00	2.00	7.00	-0.57	-0.04
Emotional sensitivity	5.68	1.09	6.00	2.00	7.00	-0.51	-0.44

Note. *S* = skewness; *K* = kurtosis. Possible min-max range of scores from 1.00 to 7.00.

The correlations between the scales/subscales are shown below in Table 5. Among the three scales, the female Gender Stereotypes Scale subscales had the highest correlation across all scales, with emotional sensitivity as the highest correlated item with significant correlation across 15 scales. The lowest correlated scale was denial, which addressed beliefs that the glass ceiling is a myth.

Table 5

Correlations Among the Career Pathways Survey and Gender Stereotypes Scale Subscales

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1		-.33	.08	.44	.24	.32	.19	.37	.29	.30	.06	.03	.08	.12	-.02	.13	.21	.28
2	.000		-.13	.01	-.30	-.30	-.18	-.34	-.37	-.36	-.07	-.24	-.16	-.11	-.08	-.08	-.13	-.14
3	.190	.076		.00	.35	.34	.28	.36	.14	.27	-.12	.40	.30	.11	.26	.38	.48	.37
4	.000	.471	.479		.21	.27	.33	.42	.26	.26	-.19	-.06	.00	-.06	-.05	.22	.23	.29
5	.004	.000	.000	.011		.84	.63	.73	.63	.70	.11	.63	.58	.35	.36	.47	.55	.57
6	.000	.000	.000	.001	.000		.72	.82	.63	.70	.07	.64	.61	.28	.36	.57	.63	.55
7	.017	.023	.001	.000	.000	.000		.78	.44	.53	-.11	.57	.58	.24	.46	.68	.64	.62
8	.000	.000	.000	.000	.000	.000	.000		.65	.74	.01	.53	.52	.30	.34	.59	.65	.58
9	.001	.000	.056	.002	.000	.000	.000	.000		.77	.32	.36	.35	.24	.26	.31	.38	.34
10	.000	.000	.001	.002	.000	.000	.000	.000	.000		.28	.49	.41	.29	.25	.40	.48	.45
11	.261	.239	.087	.019	.124	.237	.108	.445	.000	.001		-.01	-.07	.18	-.03	-.16	-.06	-.19
12	.388	.004	.000	.264	.000	.000	.000	.000	.000	.000	.443		.81	.43	.64	.66	.71	.62
13	.204	.036	.000	.499	.000	.000	.000	.000	.000	.000	.225	.000		.54	.70	.68	.68	.68
14	.101	.109	.110	.264	.000	.001	.004	.000	.004	.001	.027	.000	.000		.58	.47	.51	.44
15	.420	.184	.002	.275	.000	.000	.000	.000	.002	.003	.380	.000	.000	.000		.63	.64	.63
16	.071	.195	.000	.008	.000	.000	.000	.000	.000	.000	.043	.000	.000	.000	.000		.88	.76
17	.012	.077	.000	.006	.000	.000	.000	.000	.000	.000	.254	.000	.000	.000	.000	.000		.79
18	.001	.061	.000	.001	.000	.000	.000	.000	.000	.000	.021	.000	.000	.000	.000	.000	.000	

1	CPS Denial
2	CPS Resignation
3	CPS Resilience
4	CPS Acceptance
5	Male GSS Instrumental competence
6	Male GSS Leadership competence
7	Male GSS Assertiveness
8	Male GSS Independence
9	Male GSS Concern for others
10	Male GSS Sociability
11	Male GSS Emotional sensitivity
12	Female GSS Instrumental competence
13	Female GSS Leadership competence
14	Female GSS Assertiveness
15	Female GSS Independence
16	Female GSS Concern for others
17	Female GSS Sociability
18	Female GSS Emotional sensitivity

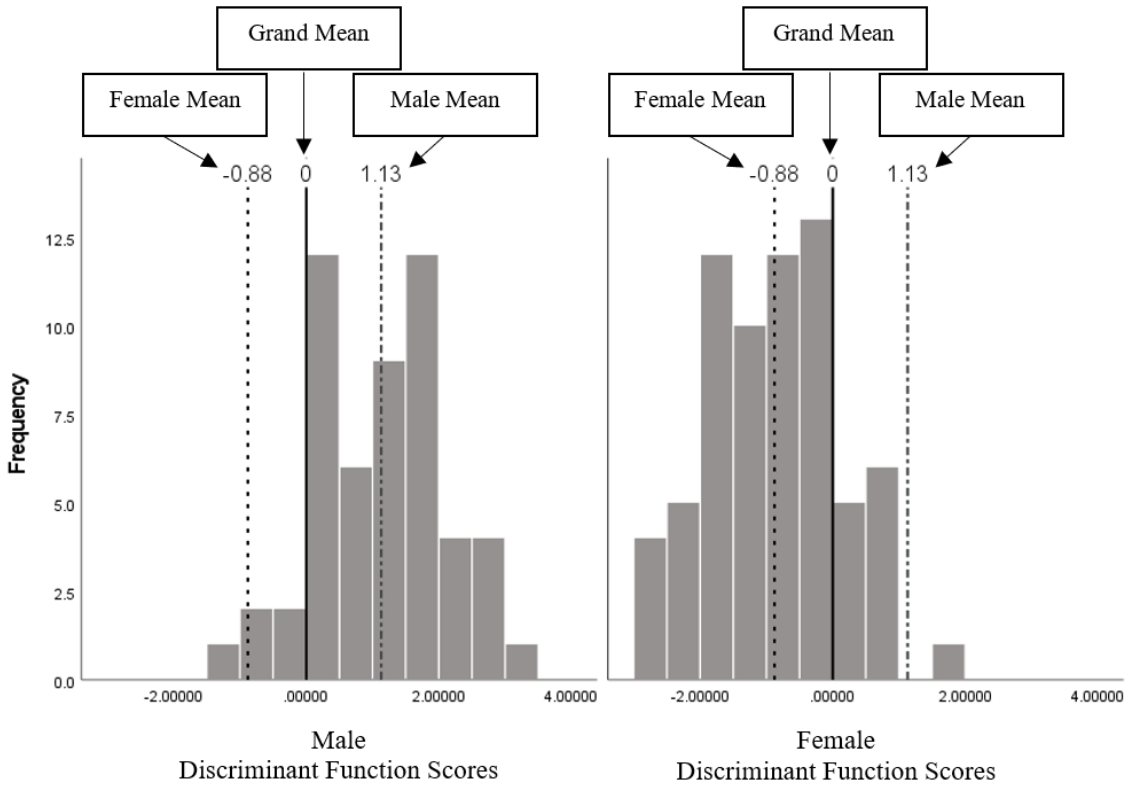
Note. Upper diagonal contains Pearson correlations, lower diagonal contains *p* values. Interpret *p* values of .000 as < .001. CPS = Career Pathways Survey. GSS = Gender Stereotype Scale.

Discriminant Function Analysis Results

The set of Career Pathways Survey and Gender Stereotypes Scale predictors statistically significantly differentiated males and females, Wilks's $\Lambda = .497$, $\chi^2(18, N = 121) = 76.95$, $p < .001$, canonical-$R = .709$. Sex accounted for 50.3% of the variance in the set of predictors. As depicted below in Figure 1, the centroid for males was 1.13 standard deviations above the overall mean, while the centroid for females was -0.88 standard deviations below the mean. Figure 1 makes visually evident that the distribution of male function scores was predominately above the overall mean; just 5 of the 53 (9.4%) males had a score below zero (the overall mean). Similarly, the distribution of female function scores was predominately below the overall mean, with only 12 of 68 (17.6%) females with a score above zero.

Figure 1

Distribution of Male and Female Discriminant Function Scores



A comparison of male and female means on each subscale and the discriminant function and structure coefficients are listed below in Table 6. Of the univariate results, males and females' opinions, as expressed by their survey answers, statistically significantly differed on all subscales except GSS male emotional sensitivity, GSS female independence, GSS female instrumental competence, and GSS female leadership competence. Females scored higher on CPS resignation and on all other statistically significant subscales females scored lower than males.

Table 6

Subscale Univariate Means and Discriminant Function and Structure Coefficients

Subscale	Univariate Means						Discriminant	
	Male M	*SD*	*Female M*	*SD*	*p*	η^2	F	S
CPS Denial	3.66	0.92	2.71	1.10	.000	.175	**.22**	**.46**
CPS Resignation	3.15	1.11	3.61	0.95	.014	.050	-.08	-**.23**
CPS Resilience	5.96	0.62	5.55	0.76	.002	.079	**.29**	**.29**
CPS Acceptance	3.50	1.00	2.63	0.97	.000	.166	**.22**	**.44**
Male GSS Instrumental competence	6.07	1.29	4.55	1.35	.000	.246	**.49**	**.57**
Male GSS Leadership competence	6.01	1.26	4.55	1.28	.000	.249	**.24**	**.57**
Male GSS Assertiveness	6.06	1.24	4.95	1.28	.000	.162	.11	**.44**
Male GSS Independence	5.74	1.28	4.07	1.20	.000	.313	**.22**	**.67**
Male GSS Concern for others	4.75	1.16	3.62	1.17	.000	.190	-.04	**.48**
Male GSS Sociability	5.14	1.44	3.78	1.09	.000	.227	.18	**.54**
Male GSS Emotional sensitivity	3.47	1.09	3.31	1.38	.483	.004	.03	.06
Female GSS Instrumental competence	5.98	1.08	5.75	0.89	.202	.014	**-.85**	.12
Female GSS Leadership competence	5.94	1.05	5.65	0.90	.097	.023	**-.25**	.15
Female GSS Assertiveness	4.92	0.84	4.55	1.03	.038	.036	.18	.19
Female GSS Independence	5.65	0.83	5.44	0.99	.211	.013	.14	.12
Female GSS Concern for others	6.14	1.07	5.56	0.99	.002	.076	-.17	**.29**
Female GSS Sociability	6.17	1.03	5.40	0.96	.000	.130	**.34**	**.39**
Female GSS Emotional sensitivity	6.11	1.08	5.34	1.00	.000	.123	.04	**.37**

Note. F = standardized discriminant function coefficient. S = discriminant structure coefficient. Bold values in F-column indicate substantial contribution to the function score, bold values in the S-column indicate substantial correlation with the function score. Values of .000 in the *p*-column should be interpreted as < .001.

The subscales that most influenced the discriminant function scores while controlling for all other subscales were, in decreasing level of magnitude (significant scores are listed in parentheses below):

- GSS female instrumental competence: males rated low; females rated high.
- GSS male instrumental competence: males rated high (6.07); females rated low (4.55).
- GSS female sociability: males rated high (6.17); females rated low (5.40).
- CPS resilience: males rated high (5.96); females rated low (5.55).
- GSS female leadership competence: males rated low; females rated high.
- GSS male leadership competence: males rated high (6.01); females rated low (4.55).
- GSS male independence: males rated high (5.74); females rated low (4.07).
- CPS denial: males rated high (3.66); females rated low (2.71).
- CPS acceptance: males rated high (3.50); females rated low (2.63).

Two-Step Cluster Analysis Results

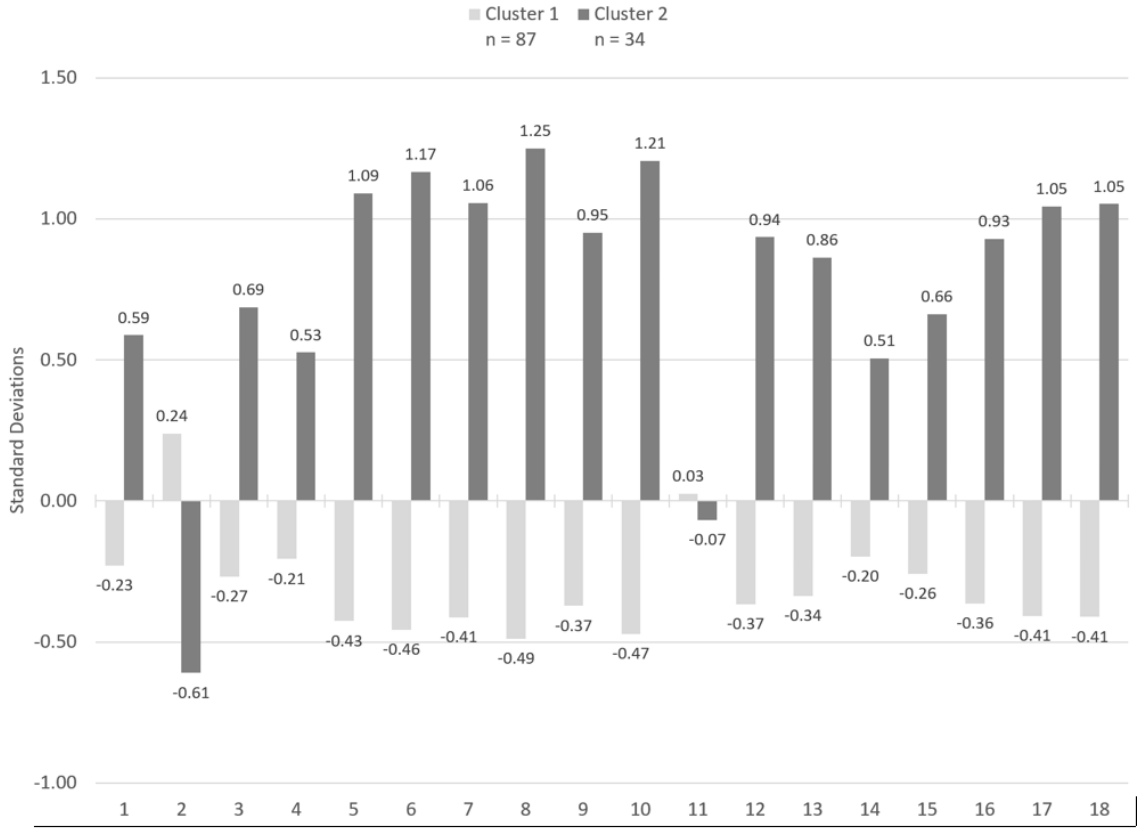
The two-step cluster analysis resulted in two distinct groupings of participants with common scoring profiles across the set of Career Pathways Survey and Gender Stereotypes Scale subscales. Cluster quality, as indexed by the silhouette measure, was .50 indicating a fair-to-good fit. Participants in Cluster 1 (n = 87) tended to score high on all subscales except CPS resignation on which they scored low, and on GSS male emotional sensitivity on which they scored near the mean. Participants in Cluster 2 (n = 34) tended to score low on all subscales except CPS resignation on which they scored high, and on GSS male sensitivity on which they scored near the mean (see Figure 2).

The 10 most important subscales are ranked in Figure 2 below. GSS male independence was the most important in differentiating the clusters with a separation of

1.74 standard deviations. Both clusters had GSS male emotional sensitivity scores near the mean. Across all other GSS male subscales, the two clusters were separated by more than one standard deviation, ranging from 1.32 to 1.74. Least important of the GSS female subscales were assertiveness and independence. The other five GSS female subscales had separation between the two clusters ranging from 1.20 to 1.46 standard deviations. All of the Career Pathways Survey subscales had a cluster separation of less than one standard deviation.

Figure 2

Cluster Scoring Profiles Across the CPS and GSS Subscales



Subscale #	Subscale	Importance
1	CPS Denial	
2	CPS Resignation	
3	CPS Resilience	
4	CPS Acceptance	
5	Male GSS Instrumental competence	4
6	Male GSS Leadership competence	3
7	Male GSS Assertiveness	5
8	Male GSS Independence	1
9	Male GSS Concern for others	8
10	Male GSS Sociability	2
11	Male GSS Emotional sensitivity	
12	Female GSS Instrumental competence	9
13	Female GSS Leadership competence	
14	Female GSS Assertiveness	
15	Female GSS Independence	10
16	Female GSS Concern for others	
17	Female GSS Sociability	7
18	Female GSS Emotional sensitivity	6

Chi Square Test of Independence

Sex was statistically significantly associated with cluster membership, $\chi^2(1, N = 121) = 37.93$, $p < .001$, accounting for 31.4% of the variance. Of the 34 participants in Cluster 2, 30 (88.2%) were male, and 64 of the 68 (94.1%) females were in Cluster 1. These results show males tended to answer survey questions similarly and females tended to answer survey questions similarly as well.

Supplemental Analyses

Supplemental analyses were conducted to examine the correlation of age with each of the Career Pathways Survey and Gender Stereotypes Scale subscales, age differences by cluster membership, differences in Career Pathways Survey and Gender Stereotypes Scale subscale scores by career level, and association between cluster membership and career level. Age was statistically significantly negatively correlated with male GSS emotional sensitivity, $r(119) = -.24$, $p = .010$. Older participants tended to disagree that males were emotionally sensitive. Age approached statistical significance on the CPS denial subscale, $r(119) = -.17$, $p = .064$; and on female GSS assertiveness, $r(119) = -.17$, $p = .061$. Older participants tended to disagree with the denial items and tended to disagree that women were assertive. There were no statistically significant age differences between the two clusters, $F(df1, df2) = 0.559$, $p = 0.456$, and none of the subscale scores statistically significantly differed across career level (significance values ranged from $p = .12 – .95$). Additionally, cluster memberships were not found to be associated with career level, $\chi2(4, N = 120) = 7.53$, $p = .110$, Cramer's $V = .251$.

Summary

The Career Pathways Survey and Gender Stereotypes Scale predictors statistically significantly differentiated males and females with sex accounting for 50.3% of the variance in the set of predictors. Of the univariate results, males and females statistically significantly differed on all subscales except GSS male emotional sensitivity, GSS female independence, GSS female instrumental competence, and GSS female leadership competence. Females scored higher on CPS resignation and, on all other statistically significant subscales, females scored lower than males.

Further, a two-step cluster analysis found two distinct groupings of participants with common scoring profiles across the set of Career Pathways Survey and Gender Stereotypes Scale subscales. Among these groupings, Cluster 1 contained 94.1% of females while Cluster 2 contained 88.2% of males. GSS male independence was the most important in differentiating the clusters; least important of the GSS female subscales were assertiveness and independence.

Supplemental analyses were conducted to examine the correlation of age with each of the Career Pathways Survey and Gender Stereotypes Scale subscales, age differences by cluster membership, differences in Career Pathways Survey and Gender Stereotypes Scale subscale scores by career level, and association between cluster membership and career level. A statistically significant correlation was found between age and the subscales with older participants tending to disagree that males were emotional sensitive, disagree with the denial items and that females were assertive. I will discuss these findings further in Chapter 5.

Chapter 5: Discussion, Conclusions, and Recommendations

The purpose of this study was to examine the relationship between gender stereotypes and the glass ceiling barriers to career advancement for professional women. Glass ceiling barriers include denial, resignation, acceptance, and resilience and gender stereotypes include agentic and communal traits (Hentschel et al., 2019a; Smith et al., 2012). Two separate instruments, the Career Pathways Survey and the Gender Stereotypes Scale, were used to measure glass ceiling beliefs and gender stereotypes as these variables are not currently measured within a single instrument. In this study, I utilized a quantitative, nonexperimental design with discriminant function analysis, cluster analysis, and chi square analysis of the data. This study was conducted to compare the viewpoints of males and females on glass ceiling barriers and gender stereotypes, identify taxonomies of distinct viewpoints regardless of gender, and then determine if the taxonomies are independent of gender using Eagly and Karau's (2002) theory of role congruity as a theoretical framework. Data was collected from 144 participants using two online surveys and the results of these analyzes indicated gender accounted for 50.3% of the variance in the set of predictors.

Interpretation of the Findings

A discriminant function analysis was conducted to determine the combination of 18 subscales that best differentiated between men and women. The findings of this study showed gender is a statistically significant variable for glass ceiling beliefs and gender stereotypes, with sex accounting for 50.3% of the variance in the set of predictors. This finding was expected given the current disparity of viewpoints of men and women on

women's leadership ability in recent research (Eagly, 2013; Eagly, 2018; Eagly & Carli, 2016; Eagly & Karau, 2002; Eagly & Scezsny, 2009; Eagly & Wood, 2014). They will be discussed below in order of decreasing level of magnitude.

Female instrumental competence (GSS) had the highest gap between men and women, with men rating this item low and women ratings trending high. Instrumental competence refers to performance execution; survey items included statements about productivity and competence. Traditionally, men and women have viewed women leaders as less competent than male leaders (Eagly, 2013; Eagly, 2018; Eagly & Carli, 2016; Eagly & Karau, 2002; Eagly & Scezsny, 2009; Eagly & Wood, 2014). Men are historically viewed as "natural leaders" as they are seen as having agentic characteristics that good leaders should possess (Eagly, 2013; Eagly, 2018; Eagly & Carli, 2016; Eagly & Karau, 2002; Eagly & Scezsny, 2009; Eagly & Wood, 2014). Within the last few decades, however, those views have been shifting; women have proved their competence in leadership roles and more women have supported the idea of women leadership (Chisholm-Burns et al., 2017; Kulich et al., 2015; Sanchez & Lehnert, 2018; Pillemer et al., 2014; Vinkenburg et al., 2011). Men, on the other hand, have lagged behind in their support (Balasubramanian & Lathabhavan, 2017; Forsman & Barth, 2017; Hoyt & Burnette, 2013; Koenig & Eagly, 2014; Smith et al., 2012; Whisenant et al., 2015) and this was evident in the survey results. While female instrumental competence was the item with the highest gap between men and women, male instrumental competence (GSS) was second, interestingly showing that men fully support men as competent and productive leaders, but women do not agree and rated men low on this variable.

In a study by Hopkins et al. (2021) measuring gendered leadership assessments, women were negatively impacted by both traditional leadership behaviors, such as achievement-oriented leadership styles, and modern leadership behaviors, such as relational skills. When women leaders were observed as engaging others, which is typically a praised leadership behavior, they were penalized in their performance assessment (Hopkins et al., 2021). Women leaders who were observed displaying the behavior of directing others were also penalized in their assessment while male leaders displaying the same behavior were rated more positively (Hopkins et al., 2021). However, the study by Hopkins et al. (2021) included all male direct supervisors' assessment for both the men and women. In this dissertation study, men and women were asked to rate each other and themselves on gender stereotypes and women rated other women positively on leadership traits.

Research has suggested, however, that women supporting other women in the workplace has not always been a given (Babic & Hansez, 2021). A phenomenon known as the queen bee syndrome describes women who have attained a high level of success in their career feeling as though they worked hard to get the top and should not or do not help other women forge a similar path (Babic & Hansez, 2021). Women with the queen bee syndrome tend to define their success in terms of their accomplishment and underplay the existence of glass ceiling barriers once they have reached a highpoint in their own career (Babic & Hansez, 2021). Another perspective on why senior women do not advocate for other women is that women leaders pushing for diversity are oftentimes viewed as less confident and their performance is rated lower than their fellow male

leaders (Baskerville-Watkins & Smith, 2014; Rudman et al., 2012; Storberg-Walker & Gardiner, 2017). In recent research, a trend of women supporting other women has been uncovered and is showing promise of overshadowing the queen bee syndrome (Kubu, 2017). Women are building networks and forming alliances within their own organizations, industries, and fields to promote and push each other toward their career goals (Kubu, 2017). This dissertation study's findings support this recent trend and could provide evidence that women are no longer viewing each other as a barrier to success.

The next significant item was female sociability (GSS), where men rated this item high and women rated it low. The sociability survey item inherently includes interaction with other individuals and building relationships through collaboration or communication. The idea that men view women as sociable is not surprising as men often praise women for this traditional, communal behavior (Arvate et al., 2018; Deaconu & Rasca, 2015; Evans, 2014; Leicht et al., 2014; London et al., 2017; Ryan & Haslam, 2007). Interestingly, women did not rate women in general as high on this item almost, seemingly, in an attempt to sideline the stereotype of women as friendly and talkative. Recent research from the last two decades have shown a desire for women to be viewed by agentic qualities – this may be an attempt to support that view shift and to move away from more traditional feminine traits, in the workplace at least (Eagly & Karau, 2002; Heilman, 2012; Phelan et al., 2008; Rudman et al., 2012).

The next item, resilience (Career Pathways Survey) had high ratings from men but low ratings from women. Resilience items were created with the intent to show women persisting in the advancement of their career despite obstacles (Adams, 2016;

Chizema et al., 2015; Chu & Posner, 2013; Eagly, 2018; Post & Byron, 2015). However, some of the items referred to the internal motivation of women but also the organization itself; for example, one item stated, "The more women seek senior positions, the easier it will be for those who follow", while another was "Successful organizations seek and want to retain talented female staff". While these statements are optimistic in nature and most likely represent the published goals of most modern organizations, the reality is that, even in organizations that have senior women in top positions, there is still not an equitable split in C-level positions (Catalyst, 2019). Men working in corporate positions have likely heard or even promoted these same views while women have seen the idealistic viewpoints fail in the reality of their and others' careers (Heilman, 2012; Hentschel et al., 2019b; Kilian et al., 2005).

The creation and implementation of equal opportunity laws and policies have given the perception that the workplace is a fair and balanced environment for men and women – the reality of the situation is that, since 2016, manager promotions for women is at lower rates than men, which leads to an uneven talent pipeline to senior positions (Brescoll et al., 2010; Chizema et al., 2015; Kilian et al., 2005; McKinsey, 2021; Spencer et al., 2018). Subtle and persistent obstacles such as unconscious or conscious discriminatory practices and gender stereotypes have limited the access women have to top management positions (Babic & Hansez, 2021; Eagly & Sczesny, 2009; Ibarra et al., 2013; Pfaff et al., 2013). Therefore, organizations must work to implement proactive diversity and inclusion policies that will break the pattern of reinforcing the glass ceiling

through ignoring its existence (Heilman, 2012; Hentschel et al., 2019b; Kilian et al., 2005; McKinsey, 2021).

The next significant items are related to leadership competence (GSS); males rated women low on leadership competence and themselves high while the converse was true for women, who rated themselves high and men as low. The leadership competence item focused specifically on leadership performance referencing leadership ability and skillfulness in business matters. Historically, the male ratings in this study align with the prevailing research – men feel they are more capable and adept in leadership roles than women (Bongiorno et al., 2014; Fischbach et al., 2015; Katila & Eriksson, 2013). The surprising result, similar to the male instrumental competence rating, was women rating men as low on this measure. Male independence (GSS), which followed leadership competence in significance, had similar results with males rating this item as high while females rate it low. The independence item focused on an individual acting free of others' influence, with a focus on the desire for responsibility and general independence.

Research as recent as within the last decade indicated that some women feel men are better leaders than women and there are examples in society that show this as well (presidential elections, state elections, etc. (Brescoll et al., 2010; Eagly & Wood, 2014; Koch et al., 2015; Mastracci & Arreola, 2016). The literature review in this study discussed the historical view of leadership traits as masculine (agentic) traits henceforth the perspective that men make better leaders than women (Eagly & Karau, 2002; Heilman, 2012; Phelan et al., 2008; Rudman et al., 2012). Additionally, glass ceiling beliefs held by some include the premise that women do not want leadership

responsibilities (Eagly & Karau, 2002; Heilman, 2012; Phelan et al., 2008; Rudman et al., 2012). Chamorro-Premuzic (2020) suggests that confidence is a key factor as well; males display more confidence than females and that confidence is often equated to competence. Research findings with groups that have no assigned leader are more likely to select a overconfident, self-centered, narcissistic male as a leader. However, overconfidence and arrogance are traits consistently shown to be negatively related to ideal leaders; inspiring others and working toward a shared goal are behaviors typically associated with women (Chamorro-Premuzic, 2020). Female managers are more likely to communicate their vision properly, mentor and empower their employees, and creatively solve problems; conversely, male managers are less likely to bond with employees and are less likely than women to reward performance (Arvate et al., 2018: Chamorro-Premuzic, 2020; Pillemer et al., 2014). Women are encouraged to adopt more agentic traits while being simultaneously praised for maintaining their communal traits (Chamorro-Premuzic, 2013, 2020). The research in this dissertation study could be interpreted as women viewing other women leaders as positively displaying agentic traits (which aligns with the statistically preferred transformational leadership style) and viewing male leaders as mediocre or not as desirable as female leaders.

The final two significant items are denial and acceptance (Career Pathways Survey) where men rated both items high and women rated both low. The denial items are related to the idea that the glass ceiling does not exist or is a myth with the acceptance items implying women are satisfied not seeking senior positions. For men to accept both of these positions as accurate means they agree with the idea that “women don’t have

barriers to promotions in most organizations" and "women would prefer a balanced life more than gaining highly paid careers" (Bongiorno et al., 2014; Dave & Purohit, 2016; Hoyt & Murphy, 2016). This confirms the traditional viewpoint of men as not embracing the complications of the glass ceiling for women professionals and, therefore, generally not pushing for stronger reform in the talent management divisions of the companies to understand why there are such glaring gender discrepancies in the C-suite (Brescoll et al., 2010; Chizema et al., 2015; Kilian et al., 2005; Spencer et al., 2018). Women rating these items low confirm they agree with the concept of the glass ceiling and do not place the onus on women's lack of pursuit of senior roles or desire for motherhood for the C-suite gender discrepancies but on a more complicated interplay of society, political laws and policies and organizational culture/structure (Heilman, 2012; Hentschel et al., 2019b; Kilian et al., 2005).

The two-step cluster analysis resulted in two distinct groupings of participants with common scoring profiles across the set of Career Pathways Survey and Gender Stereotypes Scale subscales. A chi square test of independence revealed the two distinct groups were overwhelming separated by gender, with Cluster 1 represented by mostly women (94.1%) and Cluster 2 represented by mostly men (88.2%). These results show males tended to answer survey questions similarly and females tended to answer survey questions similarly as well. Male independence (GSS) was the most important in differentiating the clusters with a separation of 1.74 standard deviations, indicating the two distinct groups did not agree on males' ability to act free of others' independence. They did, however, agree on male emotional sensitivity, which was rated by both groups

as unsure and somewhat disagreeing with the statements of men interacting with others from an emotional perspective. This is consistent with the prevailing gender stereotype of men being more logical and less emotional than women (Eagly & Sczesny, 2009; Koenig & Eagly, 2014; Koenig et al., 2011).

Supplemental analyses were conducted to examine the correlation of age with each of the Career Pathways Survey and Gender Stereotypes Scale subscales, age differences by cluster membership, differences in Career Pathways Survey and Gender Stereotypes Scale subscale scores by career level, and association between cluster membership and career level. Of the variables assessed in the supplemental analyses, age was the only variable with statistically significant results. Older participants tended to disagree that males were emotional sensitive ($r(119) = -.24$, $p = .010$), disagree with the denial items ($r(119) = -.17$, $p = .064$), and the idea that women are assertive ($r(119) = -.17$, $p = .061$). While the disagreement with denial items indicate they believe in the existence of the glass ceiling, the viewpoint that men are not emotionally sensitive and women are not assertive reflected prevailing gender stereotypes that could lead to viewing men as more competent in leadership roles (Eagly & Sczesny, 2009; Koenig & Eagly, 2014; Koenig et al., 2011). None of the subscale scores differed across career level, indicating that the gender differences in glass ceiling beliefs and gender stereotypes are not more prevalent, the higher or lower one moves up in career status but could be simply innate. This is an important finding as it provides support for the idea of organizations implementing training, coaching and policy reform to advocate for women leadership at every level to overcome what is not necessarily organizational culture bias

but societal bias. Specific recommendations for the creation and implementation of such policy reform are in the Recommendations section later in the chapter.

Limitations

A limited sample size could have affected the research study that was conducted. The number of business professionals in the United States was 21.5 million as of 2019, therefore surveying 124 business professionals may not represent the population's glass ceiling beliefs. Choosing to limit participants to a minimum of 10 years work experience in a corporate environment is an attempt to mitigate this risk with the assumption that have a good idea about the corporate environment and perhaps have had training or exposure to diversity training (Boston University, 2015). They may not, however, have been exposed to hiring or promotional practices within the organizations they have worked for, leading to a potential limitation (Boston University, 2015).

Purposive sampling could have also decreased the generalizability of the findings. Women accounted for 56.2% of the survey respondents, with men participating at a lower rate of 43.8% and the average age of participants was 41.6 years old. The most common career level of participants was "Individual Contributor (no direct reports)" and the industries most represented were education and healthcare (both at 14%) followed by customer service (9.9%). None of the subscale scores were found to be statistically different across career level, however, representation from other industries, such as STEM fields, that are traditionally more difficult for women to ascend to leadership roles may have produced different results (Fitzsimmons et al., 2013; Goodman et al., 2003).

Certain criteria were also used to evaluate the data and the application of different criteria that may have resulted in a different evaluation. For example, the survey asked the participants to think of their current work environment. However, participants may have worked at several different companies and it is not known which they were thinking of when completing the survey.

The Career Pathways Survey is a relatively new instrument used in a few studies to date (e.g., Balasubramanian & Lathabhavan, 2017; Mohammadkhani & Gholamzadeh, 2016; Smith et al., 2012), created in 2012, and the Gender Stereotypes Scale is even newer and has not been used in any studies aside from the original, created in 2019. Nonetheless, each instrument's constructs are theoretically sound and their subscales have statistical reliability (Hentschel et al., 2019; Smith et al., 2012).

This study was conducted in the midst of the global pandemic of 2020 and could have affected participant responses. The visibility or lack thereof of leadership promotions or specific career development could have been low due to most corporate positions being moved to remote workspaces. Depending on the participant's position in a corporation, they may not have had access to truly understand the company's stance on women in leadership. Furthermore, it's hard to know if the participants, when taking this survey, were in a calm relaxed state or under stress. Many workers are not only working from home but balancing the challenges of teaching their children, managing the household, etc. The paradigm of the person's current situation may have influenced the results.

Finally, the study focused on glass ceiling barriers and gendered beliefs with the perspective that women are at a disadvantage in the corporate world. The study's researcher is a woman and there is an inherent gender bias that may exist. However, the surveys were delivered electronically and the quantitative research method was utilized to reduce researcher bias throughout the data collection process.

Recommendations

Broadening the research method used to collect data (e.g., using a mixed methods approach) could help gain further insight into gendered glass ceiling beliefs. Conducting focused qualitative interviews with company employees at varying senior levels, such as board members or others part of the C-suite, could facilitate further understanding of the barriers facing women climbing the corporate ladder. Interview data might provide further insight into the justification of the candidate selection process and promotional decisions. A mixed methods approach could also offer additional insight into the relationship between the independent and dependent variables examined in the study, particularly the reasons behind the significant gap in how men and women scored areas such as leadership competence and denial of the existence of the glass ceiling.

Recommendations for Company Executives

The findings from this study confirmed the differences in gender perspectives of glass ceiling beliefs. In the report on the glass ceiling conducted by the Federal Glass Ceiling Commission (U.S. Glass Ceiling Commission, 1995), the glass ceiling barrier is a structural one stemming from the organization and, therefore, has the possibility to be mitigated from within an organization. The Federal Glass Ceiling Commission made

several recommendations within that report to assist organizations in disabling those structural barriers that enable the glass ceiling phenomenon's existence. Specifically, it was recommended that organizations mandate training focused on diversity for all employees to show diversity objectives were part of the company's strategic plan to promote equal opportunities (U.S. Glass Ceiling Commission, 1995). Business leaders should, by inference, enforce those diversity objectives affecting the company's operating policy and would, ideally, eliminate the barriers of the glass ceiling with compliance with those policies.

As this study has attempted to show and as was discussed earlier in the literature review, senior executives wanting to eliminate, or at the least mitigate, the effects of the glass ceiling phenomenon must realize there is more than just one factor contributing to the glass ceiling (e.g., glass labyrinth). Further, business leaders must come to realize that more obvious types of gender discrimination have been substituted by more indirect forms of discrimination and the cessation of these will not be straightforward or easy. Each company will have different challenges to address; there will not be a one-size-fits-all approach that can be used as discrimination can be on an individual level as well as structural and even cultural. Therefore, each company's business leaders will need to specifically identify their own glass ceiling barriers that exist within their organization and address them as necessary.

A general recommendation that can be made from this study is business leaders should incorporate the Federal Glass Ceiling Commission's (U.S. Glass Ceiling Commission, 1995) recommendations for the glass ceiling into their strategic operating

plan. Specifically, the results from this study indicate the following would be useful to incorporate in their operating policies:

1. The promotion of training for diversity for senior-level employees.
2. The inclusion of female candidates for the promotion to senior level positions.
3. The inclusion of all qualified candidates in the pool for senior level positions based on merit and ability.
4. The active mentorship of female employees.
5. The inclusion of women in both informal and formal networking opportunities and decision-making processes.
6. Holding executive leaders accountable to enforce diversity initiatives through compliance policies for which the leaders are responsible for implementation and execution of said policies.

Implications

Social Change

Walden University's objective is to assist student practitioners in "[reinforcing] and [expanding] Walden's internal and core capabilities to support the development of social change thought-and-practice leaders" (Walden University, 2020). This study fulfills Walden's mission in three ways. First, the study addresses a literature gap relating to gendered perspectives of the glass ceiling and gender stereotypes. Second, the findings of this study add to the general body of knowledge on the glass ceiling and gender stereotypes. Third, the study addresses a real issue in society involving women and organizational management.

Conclusion

Glass ceiling barriers and gender bias are constant barricades to women seeking promotions to executive-level positions in organizations. This study's findings are important because the current literature was absent of gendered perspectives of these barriers, specifically the male perspective. Insight into gendered perspectives of both glass ceiling beliefs alongside gender bias could fill a gap in the literature. The findings from this study may provide insight into, and subsequent support for, the necessity of the promotion of women to executive level positions. The evolution of organizational structures in corporate environments echoes the existing economic and social conditions. Yet, traditional leadership styles remain agentic, or masculine, in nature and dominate the current corporate environments. The findings from this study may help with the recognition of the need to develop policies and practices that would aid in the lessening of the glass ceiling barriers that continue to prevail. The removal, or at the very least reduction, of these barriers could lead to executive-level hiring of an increased number of women.

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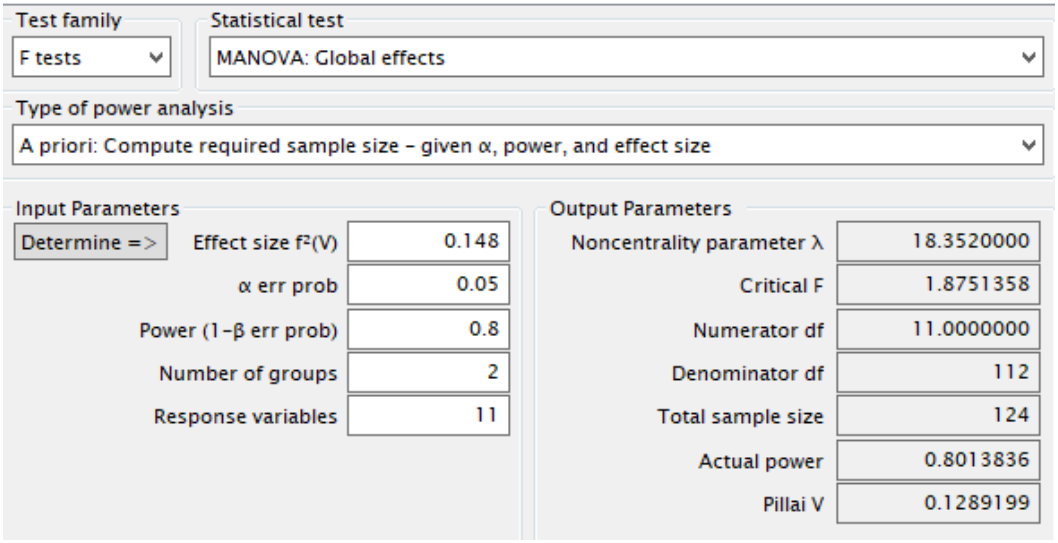
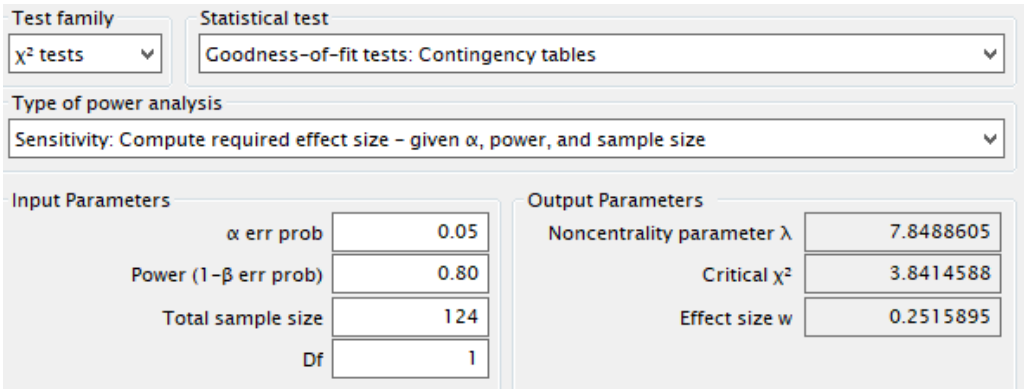
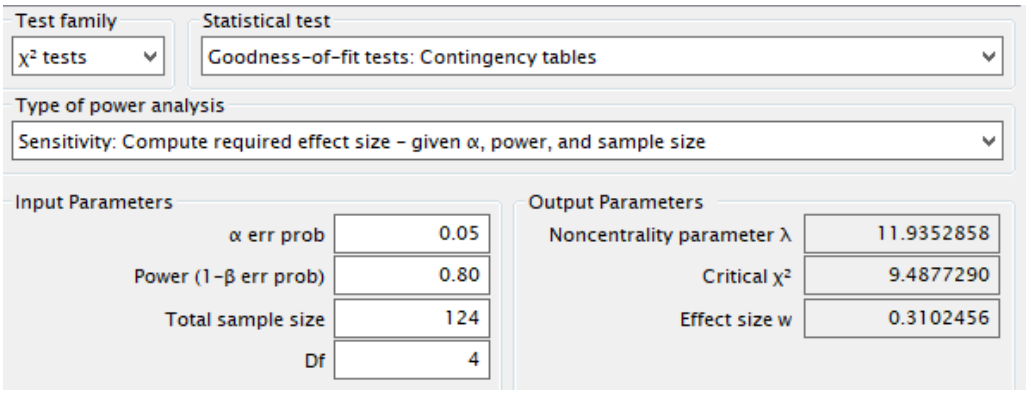
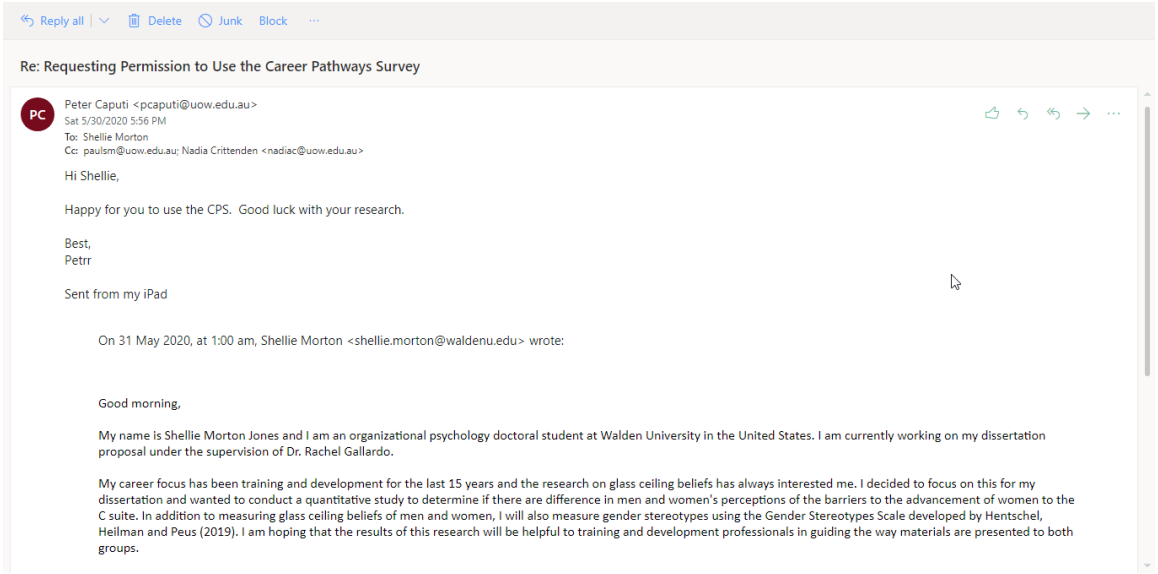
Appendix A: G*Power Screenshots







Appendix B: Permission to use Career Pathways Survey



Reply all | Delete | Junk | Block

Re: Requesting Permission to Use the Career Pathways Survey

PC

Peter Caputi <pcaputi@uow.edu.au>
Sat 5/30/2020 5:56 PM
To: Shellie Morton
Cc: paulsm@uow.edu.au; Nadia Crittenden <nadiac@uow.edu.au>

Hi Shellie,

Happy for you to use the CPS. Good luck with your research.

Best,
Petrr

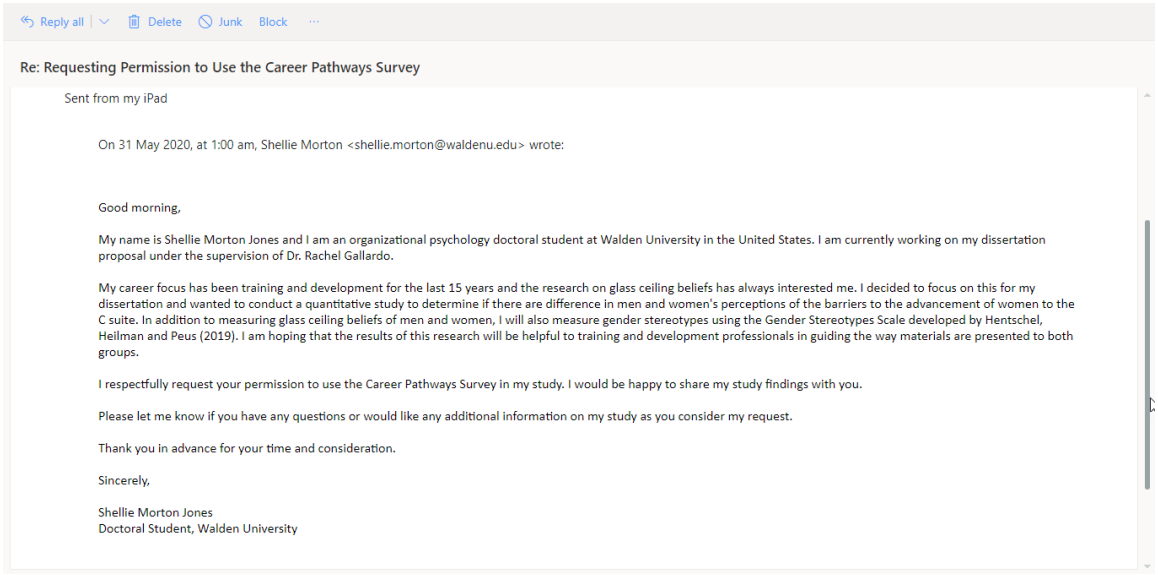
Sent from my iPad

On 31 May 2020, at 1:00 am, Shellie Morton <shellie.morton@waldenu.edu> wrote:

Good morning,

My name is Shellie Morton Jones and I am an organizational psychology doctoral student at Walden University in the United States. I am currently working on my dissertation proposal under the supervision of Dr. Rachel Gallardo.

My career focus has been training and development for the last 15 years and the research on glass ceiling beliefs has always interested me. I decided to focus on this for my dissertation and wanted to conduct a quantitative study to determine if there are difference in men and women's perceptions of the barriers to the advancement of women to the C suite. In addition to measuring glass ceiling beliefs of men and women, I will also measure gender stereotypes using the Gender Stereotypes Scale developed by Hentschel, Heilman and Peus (2019). I am hoping that the results of this research will be helpful to training and development professionals in guiding the way materials are presented to both groups.



Reply all | Delete | Junk | Block

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Sent from my iPad

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I respectfully request your permission to use the Career Pathways Survey in my study. I would be happy to share my study findings with you.

Please let me know if you have any questions or would like any additional information on my study as you consider my request.

Thank you in advance for your time and consideration.

Sincerely,

Shellie Morton Jones
Doctoral Student, Walden University

Appendix C: Career Pathways Survey

Item No.	Item content	Factor Loadings 1	2	3	4
Denial					
30	Women starting careers today will face sexist barriers.	-.69			
9	Women and men have to overcome the same problems at the workplace.	.59			
39	It will take decades for women to reach equality with men in high level management positions.	-.59			
10	Even women with many skills and qualifications fail to be recognized for promotions.	-.58			
13	Women have reached the top in all areas of business and politics.	.56			
1	Women face no barriers to promotions in most organizations.	.55			
11	Women leaders are seldom given full credit for their successes.	-.52			
15	Women in senior positions face frequent putdowns of being too soft or too hard.	-.45			
7	Women who have a strong commitment to their careers can go right to the top.	.49			
4	Talented women are able to overcome sexist discrimination.	.39			
Resignation					
36	Women executives are very uncomfortable when they have to criticise members of their teams.		.60		
26	Women leaders suffer more emotional pain than men when there is a crisis within their teams.		.53		
37	Being in the limelight creates many problems for women.		.49		
20	Women are more likely to be hurt than men when they take big risks necessary for corporate success.		.48		
31	Women believe they have to make too many compromises to gain highly paid positions.		.42		
8	Jealousy from co-workers prevents women from seeking promotions.		.40		
34	Even very successful women can quickly lose their confidence.		.40		
35	Women know that work does not provide the best source of happiness in life.		.34		
18	If women achieve promotions they might be accused of offering sexual favours.		.33		
5	Smart women avoid careers that involve intense competition with colleagues.		.32		
Resilience					
38	The more women seek senior positions, the easier it will be for those who follow.			.60	
33	Higher education qualifications will help women overcome discrimination.			.51	
27	Women have the strength to overcome discrimination.			.50	
40	When women are given opportunities to lead they do effective jobs.			.47	
24	Daughters of successful mothers are inspired to overcome sexist hurdles.			.47	
6	Women are capable of making critical leadership decisions.			.41	
21	A supportive spouse/partner or close friend makes it easier for a woman to achieve success in her career.			.38	
32	Successful organizations seek and want to retain talented female staff.			.37	
16	The support of a mentor greatly increases the success of a woman in any organization.			.36	
25	Women's nurturing skills help them to be successful leaders.			.35	
3	Networking is a smart way for women to increase the chances of career success.			.31	
Acceptance					
19	Women are just as ambitious in their careers as men.				-.76
12	Women have the same desire for power as men do.				-.62
23	Motherhood is more important to most women than career development.				.46
22	Women are less concerned about promotions than men are.				.44
2	Women prefer a balance life more than gaining highly paid careers.				.43
28	Women reject the need to work incredibly long hours.				.36
14	Women commonly reject career advancement as they are keener to maintain a role raising children.				.33

Appendix D: Gender Stereotypes Scale

PsycTESTS®

Gender Stereotypes Scales

Note: Test name created by PsycTESTS

PsycTESTS Citation:
Hentschel, T., Heilman, M. E., & Peus, C. V. (2019). Gender Stereotypes Scales [Database record]. Retrieved from PsycTESTS. doi: https://dx.doi.org/10.1037/t71506-000

Instrument Type:
Inventory/Questionnaire

Test Format:
Respondents were asked either to rate men in general, women in general, or themselves on the attribute inventory representing various dimensions of agency and communality. The attributes were presented in differing orders to participants, randomized by the survey tool. Ratings were made using a 7-point scale with responses ranging from 1 ("not at all") to 7 ("very much").

Source:
Reproduced by permission from: Hentschel, Tanja, Heilman, Madeline E., & Peus, Claudia V. (2019). The multiple dimensions of gender stereotypes: A current look at men's and women's characterizations of others and themselves. Frontiers in Psychology, Vol 10, 0. doi: https://dx.doi.org/10.3389/fpsyg.2019.00011

Gender Stereotypes Scales

Items
Instrumental competence
Competent
Effective
Productive
Task-Oriented
Leadership competence
Leadership ability
Achievement-oriented
Skilled in business matters
Assertiveness
Dominant
Bold
Assertive
Competitive
Independence
Indpendent
Desires responsibility
Emotionally stable
Self-reliant
Concern for others
Understanding
Kind
Compassionate
Sympathetic
Sociability
Communicative
Collaborative
Relationship-oriented
Likeable
Emotional sensitivity
Emotional
Intuitive
Sentimental

Note. Ratings are made using a 7-point scale with responses ranging from 1 ("not at all") to 7 ("very much").

Appendix E: Demographic Items

Instructions: Participants will provide demographic information below that will be used to enhance the result findings and aid in determining predictive relationships.

IMPORTANT TO REMEMBER: All responses to the survey questions below are provided on a voluntary basis and any information given is anonymous.

Gender Identity

Male

Female

What is your age in years? _____

Career Level (last position held)

1 = Individual Contributor (no direct reports)

2 = Supervisor/Manager

3 = Director

4 = Executive (VP, President, CFO, COO, etc.)

5 = CEO or Founder

Job Category/Industry

1 = Accounting/Finance

2 = Insurance Professional

3 = Administrative Support

4 = Banking, Real Estate, or Mortgage Professional

5 = Construction

6 = Customer Service

7 = Education

8 = Engineer

9 = Food Services/Hospitality

10 = Human Resources

11 = Information Technology

12 = Science, Engineering, and Mathematics

13 = Legal

14 = Manufacturing

15 = Marketing

16 = Sales

17 = Healthcare

18 = Transportation, Distribution and Logistics

19 = Law, Safety, Corrections, and Protective Services

20 = Self-Employed

21 = Other; if Other, specify here (free text)