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### Effects of Candidate Gender and Assertiveness on Likability and Promotability to A Leadership Position: Comparing Perceptions of U.S. Millennials with Those of Older U.S. Workers

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EFFECTS OF CANDIDATE GENDER AND ASSERTIVENESS ON LIKABILITY AND  
PROMOTABILITY TO A LEADERSHIP POSITION: COMPARING  
PERCEPTIONS OF U.S. MILLENNIALS WITH  
THOSE OF OLDER U.S. WORKERS

By

Vera Alves

A Dissertation

Presented in Partial Fulfillment of Requirements for the

Degree of

Executive Doctor of Business Administration

in the

Crummer Graduate School of Business, Rollins College

2021

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The content and format of the dissertation are appropriate and acceptable for the  
awarding of the degree of Doctor of Business Administration

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## **Abstract**

This study examined the impact of job candidates' gender and assertiveness on millennial and older generations of workers' perceptions of the candidates' likability, competence, and promotability. A 2x2 experimental methodology was used to test 11 hypotheses. Participants watched one of four videos with a male and a female actor displaying assertive and non-assertive styles during an interview for a promotion opportunity.

The results showed that the female candidate was considered slightly less promotable overall. Consistent with past research, perceptions of the candidate's competence and likability were strongly related to promotability. When displaying assertive behaviors, both male and female candidates were rated as less likable. Contrary to previous research, this negative effect of assertiveness on likability was not stronger for the female candidate. Also, contrary to past research, the assertive candidates were not perceived as more competent. Ratings of promotability were not affected by whether the raters were millennials or from older generations. A generational difference in the impact of the candidate's assertiveness on likability was observed, but contrary to the hypothesis, members of older generations perceived the assertive candidates as less likable than millennials did. Consistent with past research, participants who evaluated the candidates as attractive also found them much more likable and competent. This research contributes to the literature on leadership, gender bias, and backlash against assertive women and how these may be changing, particularly as millennials comprise more of the workforce. Overall, the results show less evidence of bias than was seen in studies from earlier decades.

*Keywords:* promotability, assertiveness, likability, competence, attractiveness, millennials, older workers, generation, assertive behavior, gender, gender bias, backlash, leadership

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## **CHAPTER 1 – INTRODUCTION**

The purpose of this study is to investigate the impact of the display of assertive behaviors on perceptions of likability, competence, and promotion recommendations, for male versus female job candidates, taking into account the assessor's generation. This research will contribute to the existing knowledge on gender bias, as it will add the perceptions of millennials related to the display of assertive behaviors by a male and a female candidate for promotion to a leadership position. It also contributes to the understanding of the relationship between likability and competence to promotability. Finally, it contributes to understanding how the millennial generation differs, or not, from older workers in their perceptions of leader gender and assertiveness. This investigation extends the existing literature by adding further knowledge on how gender differences and leader assertiveness may affect promotion decisions made by the millennial generation. As millennials already represent over 50% of the American workforce (Pew Research Center, 2019; Knoema, 2020), leadership positions and choices will be more and more in their hands in the near future. Any differences in their perceptions of female or male leaders, leaders' likability and assertiveness, or millennials' decision-making processes related to leader choices may impact the future representation of women and men in leadership positions.

## **Numbers of Women in Top Leadership Positions**

According to a McKinsey survey, women comprised just 17% of corporate boards and 12% of executive committees in the top-50 G20 companies in 2018 (Devillard et al., 2018). Only 33 of the CEOs of Fortune 500 companies, a mere 6.6%, were women as of May 2019 (Fortune, 2019). Although companies have shown an increasing commitment to promoting diversity, women are not reaching higher levels of leadership in the same numbers as men. The reasons for this gender gap are widely debated but not fully understood.

Female participation in the labor market at the beginning of their careers is about the same as men's (Eagly & Karau, 2002; Ely et al., 2011; Taliento & Madgavkar, 2016). Therefore, there is an equal pipeline of qualified women at entry levels. However, women are not advancing in proportional numbers to leadership positions in large, influential organizations, including corporations (Eagly & Carli, 2012; Eagly et al., 2003; Eagly & Karau, 2002; Ely & Rhode, 2010; Hekman et al., 2017; Taliento & Madgavkar, 2016), and not-for-profit organizations (Taliento & Madgavkar, 2016). A key reason women are still not reaching top leadership positions is that women are not being promoted at the same rates as their male counterparts (Bierema, 2016; Chisholm-Burns et al., 2017; Crites et al., 2015; Devillard et al., 2018; Gipson et al., 2017; Glass & Cook, 2016; Ibarra et al., 2010; Yap & Konrad, 2009; Yavorsky et al., 2019).

There are many steps on the promotional ladder between the entry-level jobs, where males and females are about equally represented, and the highest leadership levels. Yet, there is evidence that the gender gap in organizational leadership starts at the first promotion (Huang et al., 2019) or at the lower levels of the organization hierarchy (Bihagen & Ohls, 2006; Yap & Konrad, 2009). A study by Yap and Konrad (2009) investigated promotability for women and

minorities and looked into personnel records of over 22,000 full-time employees from a Canadian firm. The results indicate significant promotion disadvantages for women and minority women at the middle ranks of the organization (Yap & Konrad, 2009). At entry-level, females faced an 11% disadvantage in being promoted when compared to their white male counterparts (Yap & Konrad, 2009). In an earlier study by Bihagen and Ohls (2006), Swedish longitudinal data from 1979 to 2000 was investigated to better understand differences between men's and women's career opportunities in relation to occupational transitions. The results also indicate that women face the most significant obstacles in career advancement at lower hierarchical levels (Bihagen & Ohls, 2006).

A recent McKinsey (2019) survey indicates that the first step up to management is still the biggest obstacle to women's parity (Huang et al., 2019). The data on people hired or promoted to first-level managers show that there are only 72 women for every 100 men in these critical first management roles (Huang et al., 2019). More women are kept at the entry level, and this early inequality impacts the whole chain up to the C-suite. As a result, there are fewer women to be either hired or promoted to senior managers as their careers progress (Huang et al., 2019). Huang et al. (2019) emphasize the impact of this phenomenon when they state, "if women are promoted and hired to first-level manager at the same rate as men, we will add one million more women to management in corporate America over the next five years" (p. 5).

To investigate possible reasons for these differences, this work will look into factors related to promotion decisions and how they might differ in the case of male and female candidates. Research shows that two factors account for over 90% of the positive or negative judgments people make about others – competence and warmth (Cuddy et al., 2011; Cuddy et al., 2013). They are universal dimensions of social judgment (Cuddy et al., 2011; Fiske, 2015;

Thomas et al., 2019), even when controlling for differences in perceivers, stimuli, and culture (Cuddy et al., 2011). Emotions and behaviors such as admiration, help, and association are elicited when people are judged as both warm and competent, and leaders are also frequently judged in terms of both attributes (Cuddy et al., 2013; Varghese et al., 2018). When people perceive others as lacking in warmth and competence, they react negatively, such as with contempt, neglect, and attack (Cuddy et al., 2011; Thomas et al., 2019). Warmth is judged before competence and carries more weight in terms of affection and behavioral reactions: “Warmth judgments are primary” (Cuddy et al., 2008, p. 89).

Warmth and likability are closely related constructs. Fiske et al. (2007) argue that “cutting-edge studies of social cognition firmly established that people everywhere differentiate each other by liking (warmth, trustworthiness) and by respecting (competence, efficiency)” (p. 77). According to their study, the warmth dimension captures traits associated with perceived intent, including friendliness (Fiske et al., 2007; Thomas et al., 2019). Likewise, Abele (2003) argues that liking depends on warmth.

Likability and warmth have been previously used interchangeably by Ho and MacDorman (2010), Thomas et al. (2019), and William and Tiedens (2016). Warmth and likability are considered synonyms in this study, and the latter will be the selected term in this dissertation. Likability is defined as “an ability to create positive attitudes in other people through the delivery of emotional and physical benefits” (Sanders, 2006, p. 33). It derives from the adjective ‘likable,’ which means “easy to like,” and some synonyms provided by the Cambridge Online Dictionary (n.d.) are “agreeableness, cordiality, warmth.” Likability directly influences different aspects in the work environment: the choice of work partners (Wei et al., 2017), team performance (McAllister et al., 2019), and hiring and promotion (Heilman et al.,



2004). Research indicates that being disliked negatively impacts career outcomes, including overall evaluations, salaries, job opportunities, and promotion recommendations (Heilman et al., 2004). It is also important to consider the impact of gender on perceptions of likability and competence, as women are generally expected to demonstrate warmth, while men should be assertive and firm (Williams & Tiedens, 2016). Although leaders can aim at balancing assertiveness and warmth (Varghese et al., 2018), stereotypical behaviors expected from women and men are extensively described in previous research (Agut et al., 2021; Eagly & Karau, 2002; Ely & Rhode, 2010; Williams & Tiedens, 2016; ) and will be further detailed in the next section and in Chapter 2.

### **The Double Bind**

Women have long suffered from a “double bind” in their exercise of authority (Eagly & Karau, 2002; Ely & Rhode, 2010; Weiner & Burton, 2016). The double bind is defined as the negative reaction by both men and women to women in leadership roles, both when they demonstrate a feminine style, which is often liked but frequently not respected (Eagly & Karau, 2002; Ibarra et al., 2013), or when they display assertive behaviors expected of a leader, which are considered abrasive when enacted by a woman, but completely acceptable when demonstrated by men (Eagly & Karau, 2002; Ely & Rhode, 2010)

Across different cultures, the ideal leader is described as decisive, assertive, and independent, characteristics frequently associated with men (Ibarra et al., 2013). Women, on the other hand, are expected to be nice, unselfish, and caretaking, which are conventionally feminine qualities (Eagly & Karau, 2002; Ibarra et al., 2013). In addition, research indicates that women who excel in domains that are traditionally considered more masculine are often viewed as less

likable than men in the same circumstances (Eagly & Karau, 2002; Ely & Rhode, 2010; Ibarra et al., 2013; Williams & Tiedens, 2016).

According to the Social Role Theory, societies have consensual beliefs about characteristics that are related to men and women, as well as to how they are expected to behave (Eagly et al., 2003; Eagly & Wood, 2011; Weiner & Burton, 2016; Williams & Tiedens, 2016). While behaviors and traits such as dominance, competence, and assertiveness are commonly associated with men and with leaders, women are expected to demonstrate warmth, social sensitivity, and people-centeredness (Williams & Tiedens, 2016). A result is the establishment of gender roles, which derive from observing both male and female behaviors (Eagly & Wood, 2011). Heilman et al. (2004) refer to the same phenomena as gender stereotypes and argue that they are both descriptive and prescriptive, meaning that gender stereotypes denote differences both in how women and men *are* and establish norms about suitable behaviors for each, i.e., how they *should* be.

Gender roles, or stereotypes, contribute to a double bind (Carli & Eagly, 2011; Eagly & Karau, 2002; Ibarra et al., 2013; Weiner & Burton, 2016). Women leaders who are more stereotypically feminine in their behavior, compassionate, warm, and likable, are commonly criticized for not being assertive, self-reliant, and confident enough to be competent leaders (Carli & Eagly, 2011; Eagly & Karau, 2002; Ibarra et al., 2013). These critical competence-related leadership characteristics are stereotypically male traits (Carli & Eagly, 2011; Eagly & Karau, 2002; Williams & Tiedens, 2016). On the other hand, female leaders who display those behaviors are criticized for not being sufficiently feminine and for not showing the warm and compassionate behaviors that are socially expected of women, and therefore they are considered less likable (Carli & Eagly, 2011; Eagly & Karau, 2002).

To be perceived as effective, women need to demonstrate strength and sensitivity, while male leaders only need to demonstrate the former (Johnson et al., 2008). In an experimental study by Johnson et al. (2008), while male leaders only needed to display qualities related to competence, such as confidence, self-reliance, dominance, and assertiveness, to be considered effective, women had to additionally show warmth-related characteristics such as compassion, likability, and kindness. Williams and Tiedens' (2016) meta-analysis, including 63 studies, also indicates that men were able to display explicit assertive behaviors (loud voice, openly dominant requests, lowered eyebrows, etc.) without being considered less likable. The same was not true about women who acted explicitly assertively. There was a penalty in the form of reduced likability for these women. However, this negative effect against women's assertiveness was only true in the case of explicit assertiveness. A negative assessment was not observed when women demonstrated implicit assertiveness (indirect influence attempts, more submissive faces, dominant requests low in explicitness, etc.). Therefore, women "might need to be strategic about how they convey their assertiveness." (Lease, 2018, p. 3).

Women leaders are criticized both when they are considered too aggressive, which makes them not likable, and when they are not aggressive enough, which makes them seem weak and lacking in determination (Ely & Rhode, 2010). Either way, women "may leave the impression that they don't have 'the right stuff for powerful jobs'" (Eagly & Carli, 2012 p.1),

The negative reaction to the display of dominant, assertive behaviors by women leaders compared to male leaders is called *backlash* (Williams & Tiedens, 2016). This is the double-bind for women leaders. Women are expected to be warm and friendly to be likable, but leaders are expected to be authoritative, strong, assertive, and dominant to be perceived as competent leaders. When women display these competence behaviors expected of leaders, their likability is

negatively impacted. This double bind puts women leaders in a no-win situation that makes it difficult for them to be promoted through the leadership ranks.

### **Shifting Expectations**

Expectations regarding the role of women in society, in the workplace, and societal expectations for how women *should* behave evolve over time, and the pace of that change has advanced over the past years (Eagly et al., 2019; Eagly et al., 2000). Therefore, research on the effects of gender and gender expectations needs to take temporal shifts into account, as such shifts may affect people's perceptions of sex differences that do or should exist between males and females (Wood & Eagly, 2015).

Women's career aspirations and achievements have become more similar to men's (Ely & Rhode, 2010), and the roles of men and women have changed, particularly since the mid-20<sup>th</sup> century (Eagly et al., 2019). For example, women have increased their preference for careers that provide authority (Eagly & Wood, 2011; Konrad et al., 2000), and educational advances have contributed to women's entry into occupations with both prestige and cognitive demands similar to men's occupations (Cortes & Pan, 2018; Eagly et al., 2019; Lippa et al., 2014).

Women's increasing employment is especially observed in the service, education, and health care industries (Cortes & Pan, 2018; Eagly et al., 2019). However, Levanon and Grusky (2016) argue that despite women taking more roles as lawyers and managers, which typically demand characteristics more associated with men (assertiveness, agency, etc.), internal segregation of women into more communal variants of these roles persists. Some examples are women in the medical profession opting for "female-dominated ghettos" such as pediatrics; in road construction, personnel practices that direct women to positions that are less physically demanding, or more people-oriented, such as flagman; and in the legal industry, female lawyers

being allocated into family practice or other specialties that are essentially female (Levanon & Grusky, 2016, p. 581). Nonetheless, changes have occurred, and women “are more willing to see themselves as having characteristics associated with authority” (Ely & Rhode, 2010, p. 384). Younger women have achieved significant educational gains in recent years. According to the World Economic Forum (2021), gender gaps in educational attainment are nearly closed, with 95% of the gap closed globally and 37 countries already at parity. In the U.S., women earn more bachelor’s, master’s, and doctoral degrees than do men (Eagly et al., 2019; Okahana & Zhou, 2018). More women have entered careers previously occupied mainly by men (Cortes & Pan, 2018; Eagly et al., 2019; Eagly et al., 2000).

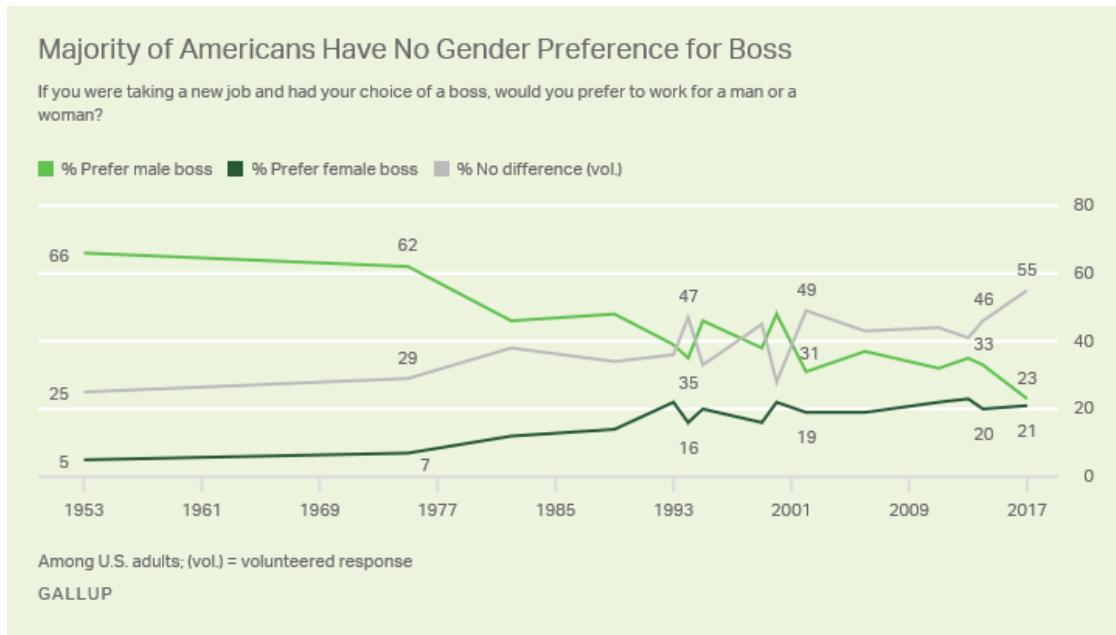
For these reasons, it could be the case that younger people are more accepting of female leaders and may not perceive assertiveness so differently when it is displayed by male or female leaders. All these arguments would raise hope that the double-bind faced by women leaders may diminish over time.

There is evidence that bias against women in leadership positions has decreased in recent years (Hoyt & Burnette, 2013). Hoyt and Burnette (2013) refer to a Gallup poll (2011) that investigated people’s preference to work for a male or female leader. Although 32% of respondents would rather work for men and 22% for women, 44% of participants answered they had no preference. In a similar survey conducted in 1995, 46% of respondents preferred a male boss, 19% preferred a female boss, and 33% indicated no preference (Hoyt & Burnette, 2013). A significant increase in the preference for a female boss and by those who indicated no preference was observed (Hoyt & Burnette, 2013). A more recent survey by Gallup (2017) indicates that 55% of the American population has no preference in terms of the gender of their boss. As shown in Figure 1, the preference toward a male boss significantly decreased from 1953 to 2017,

from 66% to 23%, while those with no gender preference for their bosses grew from 25% to 55%. People’s preference for a female boss also increased from 5% in 1953 to 21% in 2017.

**Figure 1**

*American’s preference for male or female bosses*



Most of the research on backlash in response to women’s assertive leadership behaviors is based on older studies (e.g., Eagly & Mladinic, 1994; Rudman & Glick, 2001; Rudman et al., 2012a), or studies that do not look into reactions from different generations of workers, including millennials. Therefore, the extent to which backlash as a response to assertive women leaders is prevalent among younger employees is not known. It is important to understand whether backlash remains a barrier to women’s promotions to leadership positions when younger workers make the hiring and promotion decisions. After all, millennials became the largest generation in the U.S. labor force in 2016, when they represented 35% of the workforce (Pew Research Center, 2018).

## **Millennial Employees**

Millennials, born between 1981 and 1996 (Pew Research Center, 2019), are currently between 24 and 39 years old and are already a large part of the workforce. Their perceptions, behaviors, and attitudes toward female leaders are more indicative of what the future may hold for women leaders than are those of previous generations of workers, who were represented more heavily in past research on women leaders. In 2020, millennials represented 25% of the American population, while the previous generation – Generation X, born between 1965 and 1980 – comprised 20% of the U.S. population; Baby Boomers (born between 1946 and 1965) were 21% of the U.S. population, and Generation Z (0- to 20-year-olds, born from 2000 to 2020) comprised 26% (Knoema, 2020).

Millennials are projected to comprise about three-quarters of the global workforce by 2025 (Catalyst, 2019c) and have been raised in an environment of dramatic social change in which cultural norms are shifting to favor more gender parity. According to a survey including 17,500 respondents in 21 countries, millennials are more likely to have grown up in homes where both parents worked and to have seen earning parity between their parents (Abouzahr et al., 2017). Ruspini (2020) confirms that millennials are the first children to have grown up with two working parents, or many times, with a single mother. In the U.S., almost 50% of millennials reported that their mothers earned the same as or more than their fathers, while only 16% of baby boomers, aged 56 to 74 in 2020, indicated the same (Abouzahr et al., 2017). Millennials' upbringing included attentive and interactive parents, teachers, and coaches, who would frequently and consistently give them encouragement (Bogosian & Rousseau, 2017). Their need for close contact and communication with superiors, their frequent need for feedback (Myers & Sadghiani, 2010; Stewart et al., 2017), and their expectations to be supported and

appreciated as a result of their contributions (Stewart et al., 2017) might be a reflection of such upbringing. Millennials are currently the biggest generation in the workforce, and their participation will increase in the coming years. Therefore, it is imperative for talent attraction and retention that organizations and leaders understand this generation's values and needs (Barbuto & Gottfredson, 2016; Stewart et al., 2017).

Millennials are highly aware and attentive to the issue of diversity in society (Baralt et al., 2020; Milkman, 2017) and at work (Abouzahr et al., 2017). They are also the most ethnically diverse generation in the U.S. (Pew Research Center, 2014; Ruspini, 2020). They are more likely to argue for a change to have more diversity and inclusion in society in general (Baralt et al., 2020; Milkman, 2017) and in the workplace (Glassdoor, 2019) compared to older workers. Gender, race, sexual orientation, and different perspectives and thoughts are all part of what millennials see as a diverse environment (Milkman, 2017; Patrick & Washington, 2018). This generation wants an inclusive workplace, where different voices, ideas, as well as open and transparent conversations are present (Myers & Sadaghiani, 2010; Patrick & Washington, 2018; Valenti, 2019).

Millennial men's attitudes about gender diversity are more progressive when compared to older men's attitudes (Abouzahr et al., 2017). A study on gender attitudes by Scarborough et al. (2019), using data from the General Social Survey from 1977 to 2016, including over 27,000 respondents, indicates that "successive birth cohorts are becoming more egalitarian, with Generation-Xers and Millennials being the most likely to hold strong egalitarian views" (p. 173). In addition, millennials are more willing to change their behaviors to support gender parity at work (Abouzahr et al., 2017).



Previous studies that show people tend to respond more negatively to female leaders who display the same assertive behaviors as male leaders (Carli & Eagly, 2011; Eagly & Karau, 2002; Eagly et al., 2000; Williams & Tiedens, 2016) may not generalize to millennials to the same degree. The extent to which different attitudes toward male vs. female assertive leaders characterize millennials compared to older employees is not known. This is important to understand because if the millennial generation displays more equal attitudes toward male and female assertive leaders, opportunities for women to be promoted to higher levels of leadership could be improved in the future, as more millennials attain positions where they are making promotion decisions.

In addition to having preferences for more gender equality than older workers, the millennial generation is also less accepting of authoritarian leadership behaviors from leaders of either gender (Faller & Gogek, 2019). “The command-and-control model of leadership that was prevalent during most of the careers of Baby Boomers and even Gen Xers may be inappropriate for managing millennials” (Faller & Gogek, 2019 p. 139). Millennials appreciate a more participatory and transformational leadership approach than previous generations, who were more accepting of a more autocratic style (Strauss, 2016; Gallup, 2016). Millennials seek a team-based culture at work and want to actively and vocally participate and interact with leaders (Myers & Sadaghiani, 2010; Stewart et al., 2017). They are not easily intimidated by older or hierarchically superior colleagues (Myers & Sadaghiani, 2010) as they have been encouraged by their parents to challenge authority (Howe & Strauss, 2007) and “favor a flatter relationship with authority” (Sledge, 2016, p. 14).

Due to the high value they place on equality and being treated as equals, millennials are more likely than older workers to perceive bias in the workplace (Huang et al., 2019).

According to Weber and Elm (2018), the millennial generation may be more conscious about ethical issues in the workplace than previous generations have been. Given that biases are faulty beliefs, attitudes, or behavioral tendencies that constrain cognition, they can inhibit an individual's ability to make ethical decisions (Watts et al., 2020).

Millennials are also more likely than older workers to want to discuss diversity and bias at work (Patrick & Washington, 2018). All of these characteristics and expectations may reduce the extent to which millennials accept explicitly assertive behaviors from female *or* male leaders. Explicit assertive behaviors include the use of a loud voice, openly dominant requests, lowered eyebrows, etc. (Williams & Tiedens, 2016). Explicit influence attempts may influence people to react against or reject aggressive messages, and the more "people are explicitly aware of another person's dominance attempts, the more negatively they will react to them" (Williams & Tiedens, 2016, p. 168). Since millennials are so sensitive to potential bias of all sorts and look for it more ardently than members of previous generations (Huang et al., 2019), they are likely to perceive bias as the reason for behaviors they do not like that are directed at them or their peers. As millennials dislike being subjected to authoritative, directive, and explicitly assertive leadership (Faller & Gogek, 2019), it seems logical that they would more often attribute disliked assertive leadership behaviors to leader bias of one sort or another.

The impact of explicit displays of assertiveness by female and male leaders on millennials compared to older workers' perceptions of the leaders' competence and likability is not known. This is important to understand because, as millennials comprise greater numbers of employees in organizations and make more of the promotion and hiring decisions, both male and female leaders need to understand how this population perceives the display of assertive behaviors. If the results show that millennials demonstrate more negative perceptions of

assertive leadership than prior generations, leaders may need to adjust their leadership styles accordingly to lead that population more effectively. Additionally, as the millennial generation becomes the majority of the workforce and holds more decision-making roles for promotions, millennials' attitudes will influence what types of leaders advance in organizations. Therefore, understanding how this generation perceives leader assertive behaviors will help candidates to leadership positions realize the extent to which the display of such behaviors may put them in a better or worse position for future promotions.

### **Research Questions**

This research seeks to answer the following research questions:

1. To what extent does the gender of a candidate to a leadership position who displays explicit assertive behaviors in an interview affect perceptions of his/her competence and likeability and, ultimately, promotion recommendations?
2. Does the gender of candidates for leadership positions who are explicitly assertive have smaller effects on perceptions of leaders' competence and likeability and, ultimately, promotion recommendations for Millennials as compared to older workers?
3. Do Millennials find explicitly assertive candidates for leadership positions (regardless of their gender) less likable and recommend them for promotion at lower rates than do older workers?

### **Contributions of this Research**

This study contributes to the literature on gender bias in promotion decisions. First, this research seeks to unfold generational differences or similarities in the backlash against female leaders. Specifically, this research examines how millennials' perceptions of explicitly assertive

behaviors of male or female candidates for promotion to a leadership position are similar or different from the perceptions of people of older generations, as well as the impact of such perceptions on promotion recommendations. The extent to which reactions towards male versus female assertive behaviors are similar or different for these generations is not known.

Second, given recent societal changes increasing awareness of the gender gap in leadership roles, including movements towards gender equality, such as the “#MeToo Movement” and “Time’s up,” the status of backlash against women in terms of promotion recommendations is an area that deserves further investigation. Many studies on backlash date from the early 2000s (Eagly et al., 2007; Eagly & Karau, 2002; Ely & Rhode, 2010; Ibarra et al., 2013).

Therefore, this study extends the existing literature on gender bias by adding the perception of millennials compared to members of older generations, answering a call for research in this area. “As baby boomers enter retirement and millennials enter leadership positions, the paradigms and models of leadership must be reexamined, and possibly swept away” (McClesky, 2018, p. 50). It also extends the literature on gender bias regarding the current status of backlash against female candidates for promotion to leadership positions

Additionally, this study extends the literature on promotability by analyzing the impact of assertiveness, likability, and competence on promotion recommendations in the current time. Many studies that investigate the relationship between likability, competence, and promotability date from the early 2000s (Beeson, 2009; Bliege Bird et al., 2005; De Pater et al., 2009a; Kolodinsky et al., 2007; Treadway et al., 2007; Shaughnessy et al., 2011). The world is undergoing dramatic changes, and understanding assertiveness, likability, and competence as antecedents of promotion recommendations in the present time has important implications for

research and practice. Professionals in general, and those involved in promotion decisions in particular, will benefit from findings that unfold the impact of assertiveness, likability, and competence to increase chances for promotion to leadership roles.

Finally, this research extends the literature on millennials in terms of perceptions of leaders' assertive behaviors, regardless of the leader's gender. Previous research findings on generational differences in perceptions of assertive behaviors have been mixed. Some studies indicate millennials are more similar than different from older generations in terms of attitudes at work, work ethic (Deal et al., 2010), communication, feedback, and participative decision-making (Valenti, 2019). In contrast, other studies have found significant differences between them, including broader perspectives about the world (Myers & Sadaghiani, 2010) and perspectives about ways that technology can be used to enhance organizational performance and maximize productivity (Myers & Sadaghiani, 2010; Stewart et al., 2017). This research looks into the impact of the display of explicit assertiveness on perceptions of likability, competence, and ultimately, promotability for millennials compared to older generations. The extent to which different attitudes towards leader assertiveness, regardless of their gender, characterize millennials compared to older generations is not known.

## **Study Overview**

Chapter 2 provides the research model, a review of the literature that has sought to explain the gender gap, and reasons why a more balanced gender representation in leadership positions is desirable. The Social Role Theory of Sex Differences and Similarities and the Role Congruity Theory of Prejudice Toward Female Leaders provide theoretical underpinnings. Definitions and past research are reviewed for the study's important constructs: likability and competence, leader assertiveness and gender, unconscious gender bias, and the Millennial

generation and their mindset, including recent reports on their reactions to bias. The study's eleven hypotheses are presented.

Chapter 3 describes the research methodology, which will use a quantitative between-subjects experimental study with a 2x2 factorial design at the individual level of analysis. The experiment will be implemented online, where participants will view a video of a female or male candidate for a leadership position and answer survey questions. Chapter 3 details information about the data collection, video manipulation, and measures.

Chapter 4 provides details of the analyses, descriptive statistics, and results of the hypotheses tests.

Chapter 5 summarizes the findings and discusses the results. Implications for theory and practice are discussed, as well as limitations and recommendations for future research. The chapter ends with the conclusions from the dissertation research.

## **CHAPTER 2 – LITERATURE REVIEW**

This chapter begins with an overview of the research model for this study. Next, I review past research and theory on the gender gap in leadership. After providing general information on the gender gap in leadership, I discuss the benefits of a gender-balanced research team. Next, I review the two dominant theories used in research on the gender gap, The Social Role Theory of Sex Differences and Similarities and The Role Congruity Theory of Prejudice Toward Female Leaders. Afterwards, I review each of the constructs in the model and present the study's eleven hypotheses.

### **Research Model**

The hypothesized relationships investigated in this research are demonstrated in the conceptual diagram depicted in Figure 1. As discussed in Chapter 1, one of the reasons why women are not advancing to higher levels of leadership is that they have not been promoted in equal proportions as men, despite their equal representation in entry-level positions (Bihagen & Ohls, 2006; Carli & Eagly, 2016; Huang et al., 2019; Yap & Konrad, 2009). Therefore, the dependent variable for this study is the recommendation to promote a candidate to a leadership

position, and Hypothesis 1 is that female candidates will be rated as less promotable than male candidates.

Past research has shown that the two factors that comprise about 90 percent of people's positive or negative social judgments of others are perceptions of warmth/likeability and competence/strength, and these judgments also strongly influence perceptions of people's leadership qualities (Cuddy et al., 2011; Cuddy et al., 2013; Heilman et al., 2004; McAllister et al., 2019; Wei et al., 2017; Thomas et al., 2019; Williams & Tiedens, 2016). Therefore, Hypotheses 2 and 3 relate to the influence of likeability and competence perceptions on the decision to promote the candidate to a leadership position.

One factor that influences people's perceptions of both leaders' likeability and competence is the extent to which the leader is perceived as being assertive (Williams & Tiedens, 2016). The expected positive relationship between assertiveness and perceptions of competence is Hypothesis 4, and the anticipated negative relationship between the candidates' perceived assertiveness and likeability is Hypothesis 5. The gender of the leader can influence how people perceive their behaviors (Brescoll et al., 2018; Eagly & Karau, 2002; Williams & Tiedens, 2016). Evidence exists that explicitly assertive behaviors are perceived as more assertive, even aggressive when displayed by female leaders versus male leaders (Carli & Eagly, 2011; Eagly, 2005; Eagly et al., 2003; Eagly & Karau, 2002; Ely & Rhode, 2010; Williams & Tiedens, 2016). Therefore, Hypothesis 6 predicts that the negative relationship between candidates' assertiveness and likeability will be stronger for female than male candidates who display identical levels of explicit assertiveness.

Hypotheses 7 and 8 relate to the moderating effect of the millennial generation. Because millennials tend to challenge authority and resent directive leadership styles (Faller & Gogek,



2019; Glassdoor, 2019; Howe & Strauss, 2007; Myers & Sadaghiani, 2010; Sledge, 2016).

Hypothesis 7 predicts that perceptions of the candidates' assertiveness will have stronger negative effects on likability for millennials than for members of older generations.

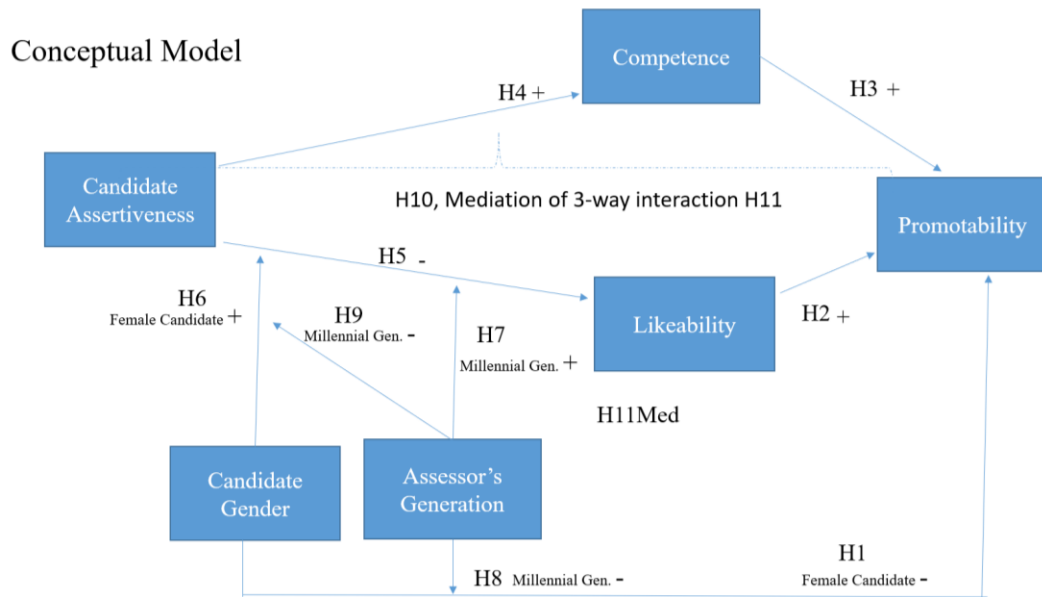
Additionally, given that millennials tend to value gender equality more than prior generations (Abouzahr 2018; Glassdoor, 2019; Scarborough et al., 2019), Hypothesis 8 predicts that there will be a weaker relationship between the gender of the candidate and ratings of promotability for millennials versus members of older generations.

The remaining hypotheses predict three-way interactions with mediation. Hypothesis 9 predicts a three-way interaction between the candidate's gender and the assessor's generation on the relationship between the candidate's assertiveness and likeability such that the negative impact for female candidates will be weaker when the assessor is a member of the millennial generation than an older generation. Hypothesis 10 is similar to Hypothesis 9 but predicts the effect on promotability. Finally, Hypothesis 11 predicts that the three-way interaction between candidate assertiveness, gender, and assessor generation on promotability described in Hypothesis 10 will be partially mediated by perceptions of the candidate's likeability.

Figure 2 shows the conceptual model.

**Figure 2**

*Conceptual Model*



**Benefits of a Gender-Balanced Leadership Team**

Why would companies invest in efforts to achieve more gender-balanced management? A relevant argument is a positive impact on organizations’ bottom lines (Chisholm-Burns et al., 201; Devillard et al., 2018; Fernando et al., 2020). A 2018 study by McKinsey, including over 1,000 companies in 12 countries, showed a correlation between gender diversity in executive levels and higher profitability levels, as well as value creation (Hunt et al., 2018). “Companies in the top-quartile for gender diversity on their executive teams were 21% more likely to have above-average profitability than companies in the fourth quartile” (Hunt et al., 2018, p. 8). Hunt et al. (2018) attributed the performance benefit of women in management to the way women lead, which is different from men. Women’s management and decision-making processes are more inclusive, positively impacting the work environment. Additionally, different

backgrounds, experiences, and leadership styles contribute positively to the corporate environment (Chisholm-Burns et al., 2017; Hunt et al., 2018). Fernando et al. (2020) report similar results. Their research indicates that the increase of female representation in top management teams substantially impacts overall managerial capabilities and positively influences performance in times of crisis and stability. Additionally, they suggest that feminine traits and the more transformational leadership style women generally bring to the management role are more effective than generally believed (Fernando et al., 2020). Transformational leaders serve as mentors, coaches, and inspirers, given their ability to develop a good rapport with subordinates (Bass & Riggio, 2005; Bonsu & Twum-Danso, 2018). Transformational leaders possess attributes of charisma, inspiration stimulation, and individualized consideration (Bass, 1985; Brandt et al., 2016). These attributes influence firm performance as they positively affect employee effectiveness (Bass, 1985; Hetland & Sandal, 2003). This leadership style has many positive outcomes, including increased follower satisfaction and performance (Braun et al., 2013; Hentschel et al., 2018), and communal traits have been positively associated with transformational leadership (Hentschel et al., 2018). Dwyer et al. (2003) found a significant interaction between gender diversity and company growth and concluded that more gender-diverse management teams are positively related to higher productivity levels. A positive relationship between women's leadership and firm performance (e.g., accounting returns) was also found in two recent meta-analyses by Hoobler et al. (2018), and Post and Byron (2015).

Diversity brings complementary perspectives that contribute to collective intelligence (Hunt et al., 2018), and feminine skills, leadership qualities, and traits add value to collective managerial capabilities (Fernando et al., 2020). A lack of gender diversity may also inhibit opportunities for learning and renewal in organizations, as women bring different experiences

and perspectives to the workplace (Ely & Rhode, 2010). “Organizations that fail to tap this knowledge miss out on a valuable resource for rethinking and improving their performance” (Ely & Rhode, 2010, p. 389).

### **Reasons for the Gender Gap in Leadership**

Despite the growing evidence that gender equality in leadership is good for business (Devillard et al., 2018; Fernando et al., 2020; Hoobler et al., 2018, Post & Byron, 2015), a balance in gender in corporate positions has still not been reached. The number of women and men joining the workforce at the beginning of their careers in the U.S. has been quite similar (Ely et al., 2011). Women represented 48% of the world’s workforce in 2019 (Huang et al., 2019). However, women comprise only 17% of corporate board members in the top 50 G20 companies in 2018 (Devillard et al., 2018). In 2019, female leaders represented 38% of managers, 34% of senior managers/directors, 30% of vice presidents, 26% of senior vice presidents, and 21% of the C-suite, as indicated in Figure 2 (Huang al., 2019). In 2019, only 33 female CEOs were part of the Fortune 500 companies, representing 6.6% of the total (Fortune, 2019).

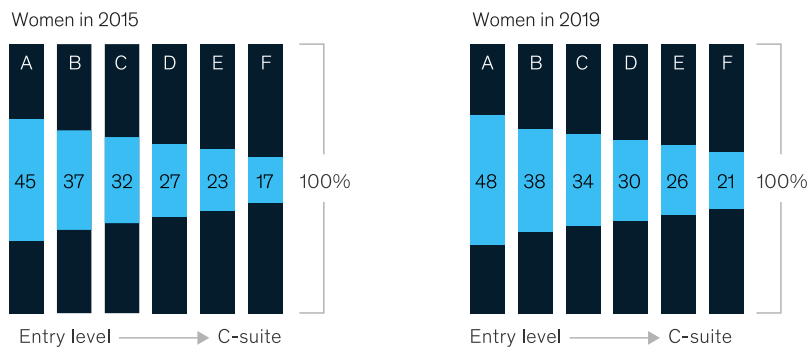
**Figure 3**

*Representation of Women in Leadership Positions*

**Representation of women in senior leadership has increased, but women continue to be underrepresented at every level.**

Representation of women by level, % of employees

A = Entry-level B = Manager C = Senior Manager/Director D = Vice President E = Senior Vice President F = C-suite



Source: 2019 McKinsey & Company and LeanIn.Org Women in the Workplace study

McKinsey  
& Company

Research indicates some factors that may explain part of the gap between men and women in leadership roles. These include confidence (Chisholm-Burns et al., 2017; Dashper, 2018; Ely & Rhode, 2010; KPMG, 2018; Risse et al., 2018; Shinbrot, et al., 2019) and career breaks (Eagly & Carli, 2012; Graf et al., 2018; McIntosh et al., 2012; PayScale, 2018; Sirianni & Negrey, 2000). Perceptions of competence, especially in male-dominated leadership environments, were also identified as one of the variables that affect the gender gap (Carli & Eagly, 2011; Eagly et al., 1995). However, more recent studies indicate that perceptions of competence are not affected by gender (Eagly, 2018; Eagly et al., 2019; Williams & Tiedens, 2016). According to a meta-analysis by Eagly et al. (2019), there has been a significant increase

in perceptions of competence equality over time, as women's stereotypical competence gains have been robust.

Central to the discussion of gender inequality is the concept of gender bias (Ibarra et al., 2013). While explicit bias refers to "the negative beliefs, judgments, and stereotypes to which an individual has conscious access" and, therefore, is intentional and can be measured by self-report, unconscious bias occurs without conscious intention (Boysen, 2009 p.240). Unconscious gender bias has been identified as one of the reasons for gender inequality in the workplace (Eagly & Karau, 2002; Ibarra et al., 2013; Fiarman, 2016). Unconscious gender bias occurs when people consciously reject gender stereotypes but still unconsciously make evaluations based on them (Pritlove et al., 2019). According to Ibarra et al. (2013), powerful and invisible barriers to women's advancement result from unconscious cultural beliefs about gender and workplace structures, practices, and patterns of interaction that favor men.

According to Turban et al. (2017), "gender inequality is due to bias, not to differences in behavior" (p. 5). Therefore, investigations related to how gender bias affects the workplace, and the consequences in terms of likability and promotability, will contribute to further understanding the effects of gender bias. Additionally, better understanding the possible varying degrees of gender bias displayed by different generations will also add to the knowledge about gender and leadership behaviors, which will have value for both gender and leadership research and will also have practical implications for the workplace.

**Confidence.** Women's self-confidence levels affect the gender gap in leadership positions (Chisholm-Burns et al., 2017; Dashper, 2018; Ely & Rhode, 2010; KPMG, 2018; Risse et al., 2018; Shinbrot et al., 2019). Many different factors influence women's level of confidence. Gender norms are one example (Shinbrot et al., 2019). Leadership is often

perceived as “resting outside of traditionally female gender norms”, so those women who doubt their ability to perform outside such gender norms tend to lack self-confidence (Shinbrot et al., 2019, p. 123). In addition, many women internalize stereotypes related to men’s greater suitability for leadership positions, which creates a self-imposed psychological glass ceiling, and contributes to many women seeing themselves as less qualified for key leadership positions (Barron, 2003; Ely & Rhode, 2010).

Women taking on fewer challenging assignments is another consequence of a lack of self-confidence (Chisholm-Burns et al., 2017; Ibarra et al., 2013; Shinbrot et al., 2019). Both women and men who aspire to leadership roles must embrace challenging tasks to achieve promotions (Ely & Rhode, 2010; Shinbrot et al., 2019). Self-limiting behaviors deriving from lack of self-confidence have a negative impact on leadership advancement (Shinbrot et al., 2019), as some women avoid taking risks and, as a consequence, they do not take on such challenging tasks that are fundamental for the development of leadership skills (Hogue & Lord, 2007; Shinbrot et al., 2019).

Other factors also impact women’s lack of self-confidence. For example, research indicates that lack of adequate mentoring and sponsorship programs (Dashper, 2018), lack of leadership training, unclear paths to leadership roles, few female references in leadership positions, factors related to fighting for promotions, salary raises, roles or positions (KPMG, 2018), and the need for more robust professional networks (Ibarra et al., 2013; KPMG, 2018) are also related to lower levels of self-confidence for women, and consequently contribute to the lower representation of women in positions of leadership.

A study by Risse et al. (2018) investigated the role of confidence in shaping an individual’s work outcomes. They focused on an individual’s level of confidence to face a

challenge and put their capabilities to the test and its relationship with the gender wage gap. They investigated whether wage outcomes are not just a function of an individual's level of productivity at work, "but also a reflection of their confidence to put themselves forward for a challenge, test their capabilities, and surmount any fears of failure—a trait that appears to be strongly patterned by gender" (Risse et al., 2018, p. 920). Their findings indicate that men generally demonstrate higher levels of hope for success, weaker fear of failure, and lower agreeableness, behaviors associated with stronger self-centeredness. These personality traits communicate a stronger sense of confidence in one's capabilities and a stronger focus on one's own agenda (Risse et al., 2018). The only area in which women excelled men was in terms of higher levels of conscientiousness, which might suggest that they tend to rely on demonstrations of proficiency in their existing job roles, more than facing the risks of more challenging roles, which are fundamental for the achievement of higher-paying positions (Risse et al., 2018). Therefore, differences in the level of self-confidence are also related to the gender gap in the workplace.

**Career Breaks.** Research implicates career breaks as another variable that affects the leadership path of women (PayScale, 2018). The dominant model of career progression presupposes both continuity and linearity, and work continuity directly impacts salary levels (Sirianni & Negrey, 2000). Working full-time affects career growth for both men and women (Eagly & Carli, 2012; McIntosh et al., 2012). The number of working hours is considered evidence of the level of commitment, which is essential for promotions (Eagly & Carli, 2012; McIntosh et al., 2012).

Career breaks have a significant negative impact on women's advancement to leadership roles, and women tend to face disruptions more often than men (PayScale, 2018). Women are



still “the ones who interrupt their careers, take more days off, and work part-time” to care for family (Eagly & Carli, 2012, p. 5). According to a study by Wallies (2004), while almost 20 percent of women with professional degrees left the labor force during their careers, only 5 percent of men with the same credentials did the same. Women, including highly qualified women, quit their jobs for family reasons more often than men (Bryman, 2011; Sánchez & Lehnert, 2019). Research indicates that 24% of women ramp off due to family-related reasons compared to only one in ten men (Hewlett, 2008).

Women may also opt for flexible employment to balance career and family, while the same is not so common in the case of men (Bryman, 2011). As workplaces do not always offer women the flexibility to balance their family responsibilities with full-time jobs, women opt for part-time employment more often than men (Bryman, 2011; Sánchez & Lehnert, 2019). On the other hand, few men ramp off work for extended periods or choose part-time positions for family reasons (Rhode & Williams, 2007).

Most women who leave the job market want to return to the workforce (Hewlett, 2008). Although many of them eventually do, there are significant career costs and difficulties (Ely & Rhode, 2010; Hewlett, 2008). Due to career breaks, more days off, and part-time work, women usually have fewer years of work experience and fewer hours of employment in a year, which affect their career advancement (Eagly & Carli, 2012)

These factors negatively impact women’s career progress and reduce their earnings (Eagly & Carli, 2012). For example, in the U.S., for every dollar earned by men, women make only 79.9 cents, which represents the raw gap (PayScale, 2018). In similar positions, the result is 97.8 cents for women for every dollar earned by men (PayScale, 2018). The difference between the raw gap and the analysis of women’s and men’s salaries in similar positions is explained by

the fact that women do not reach the higher levels of the hierarchy where salaries are higher in the same number as men.

The excessive number of required work hours is another reason why some women opt out of the leadership track (Stone & Lovejoy, 2004). Women often have more household responsibilities than men and are frequently responsible for chores after the regular work hours, like laundry, dinner, and maintaining the house as a whole (Wellington & Spence, 2001). In general, women with children and families have more constraints related to travel and relocation than men in the same circumstances (Ely & Rhode, 2010; Mann & Hananel, 2021; Nisic & Kley, 2019). “Until the home becomes an equal opportunity employer, women will pay the price in the world outside it” (Ely & Rhode, 2010, p. 382).

**Competence.** Another frequently investigated area related to the gender gap is perceptions of how effective, or competent, male and female leaders are. While in the past, studies referred to differences in perceptions of competence due to gender bias (Eagly et al., 1995), more recent research indicates that perceptions of competence are not impacted by gender differences (Williams & Tiedens, 2016). Therefore, this research looked into the findings over time.

Masculine contexts were reported to play an important role in the differences in competence perception related to male and female leaders in the past (Eagly et al., 1995). A meta-analysis of 96 studies conducted 25 years ago indicated that women were perceived as less competent or effective than men, especially in male-dominated leadership positions (Eagly et al., 1995). One example is in military organizations, where women were perceived as substantially less effective (Carli & Eagly, 2011; Eagly et al., 1995; Rice et al., 1984; Stevens & Gardner, 1987). In contrast, women were considered modestly more effective than men in more feminine

environments, such as the education and social services industries (Eagly et al., 1995). Therefore, except for feminine settings, previous research indicated that women needed to display greater skills than men to be seen as equally competent (Carli, 1990; Carli & Eagly, 2011). Some researchers have also argued that women may have been deemed less competent than men as a result of their lower status in society (Eagly & Karau, 2002; Ridgeway, 2014).

However, more recent findings challenge the belief that perceived differences in competence between men and women are one of the reasons for the leadership promotion gap. A meta-analysis in which 16 nationally representative U.S. public opinion polls from 1946 to 2018 were integrated showed a significant increase in perceptions of competence equality across the genders over time and argued that the gains in terms of the perceptions of women's competence are robust (Eagly et al., 2019). The analyzed surveys asked general questions about whether men and women are equally competent; they did not evaluate the competence of specific leaders, and thus measured stereotypes. Zenger and Folkman (2012) conducted a study that included 7,280 360-degree leader evaluations and found that women were rated as better overall leaders as compared to their male counterparts in 12 out of 16 competencies, including competence-related aspects such as: "*Drives Results*," "*Takes Initiative*," "*Solves Problems and Analyzes Issues*," and "*Technical or Professional Expertise*" (p. 83). The study was updated in 2019 and the results indicate that "women in leadership positions are perceived just as – if not more – competent as their male counterparts" (Zenger & Folkman, 2019, p. 3), which is in line with Eagly et al.'s (2019) findings.

A meta-analysis by Williams and Tiedens (2016) analyzed 31 studies on the effect of dominant behavior on perceptions of leaders' competence. Results also indicated that men and women were perceived as equally competent across dominance levels. Therefore, while past

research found prevailing stereotypes that women were less competent than men, more recent surveys indicate that women are perceived as competent as men. One reason for this change is the impact of feminist activism on gender stereotypes, which has made the belief in gender equality more socially expected and politically correct (Eagly, 2018). Another argument that would explain the change is women's educational achievements in the last decades and their entry into high-prestige occupations previously almost exclusively occupied by men, such as physicians, administrators, etc. (Eagly et al., 2019).

Eagly et al. (2019) argue that not only have perceptions of competence equality increased, but some female advantage has been identified. "In recent polls, among those noting a sex difference in competence, even male respondents shared the belief that women are the more competent sex" (Eagly et al., 2019, p. 12). A similar finding indicated in Zenger and Folkman's (2019) study and in Williams and Tiedens' (2016) meta-analysis is that women in leadership positions were perceived as equally competent as their male counterparts. Therefore, it appears that stereotypical perceptions that women are less competent than men are not the reason why women leaders are not promoted in equal numbers as men.

**Unconscious Gender Bias.** The concept of unconscious bias is fundamental to the investigation of gender differences in promotions. Bias is defined as "an unfair personal opinion that influences your judgment" (Cambridge University Press, n.d.). In the context of psychoanalysis, the adjective unconscious is described as "the part of the mind you are not aware of but which influences behavior" (Cambridge University Press, n.d.). It refers to mental processes that individuals are unaware of (Bargh & Morsella, 2008) and to thoughts without conscious attention (Dijksterhuis & Van Olden, 2006). According to Noon (2018), everyone

possesses biases, but people are frequently unaware of them, as they are deeply engrained. They influence attitudes, decisions, actions, and behaviors and can be measured (Noon, 2018).

Unconscious bias refers to an implicit association or attitude related to different characteristics or aspects of identity, including race or gender (Catalyst, 2014; Fiarman, 2016). It operates beyond one's control and even awareness, informing one's perceptions of people or social groups, and can influence one's decision-making processes and behaviors concerning the target of the bias (Catalyst, 2014; Fiarman, 2016). Bargh and Morsella (2008, p. 74) define unconscious influences as "a lack of awareness of the influences or effects of a triggering stimulus". Not only do these unconscious processes influence the present situation, but also future behaviors (Bargh & Morsella, 2008).

Unconscious gender bias is commonly referred to as *implicit* or *second-generation gender bias* (Madsen & Andrade, 2018). Ibarra et al. (2013) define second-generation bias as "the powerful yet often invisible barriers to women's advancement that arise from cultural beliefs about gender, as well as workplace structures, practices, and patterns of interaction that inadvertently favor men" (p. 64). According to Ibarra et al. (2013), these barriers are difficult to be identified, are many times non-intentional, and do not necessarily affect the individual immediately or directly. Second-generation bias derives from cultural beliefs, organizational structures, practices, and patterns of interaction that benefit men and put women at a disadvantage.

Some consequences of unconscious gender bias identified by Ibarra et al. (2013) that may affect female leaders' ability to be promoted include: less connection between women and their male colleagues, women opting for less relevant roles, men being considered more adequate for leadership positions, the tendency for people to gravitate among others who are similar to them,

thus men tend to sponsor other men, lack of female role models in leadership impacting the new generation of women, who believe those positions are not for them, and lack of mentors and sponsors for women.

Two key examples of unconscious gender bias are core to this study. First, certain behaviors that are necessary for effective leadership (e.g., self-confidence, assertiveness) are seen as positive when demonstrated by men yet are often considered signs of arrogance when displayed by women (Eagly & Karau, 2002; Williams & Tiedens, 2016). Second, women are expected to be caretaking, unselfish and nice, while men are expected to be more decisive, assertive, and independent (Williams & Tiedens, 2016). According to Ely and Rhode (2010), unconscious bias, together with common workplace practices, constrain opportunities for the development of women leaders and their performance in leadership roles. These workplace practices include excessive work hours and workloads, lack of flexible work schedules, distribution of more professional development opportunities to men, and less female participation in informal socializing and mentoring, which promote professional development (Ely & Rhode, 2010). These workplace inequalities and excessive burdens add to the inequalities and greater family responsibilities women face at home, increasing the strong disadvantages of women leaders.

Several consequences of unconscious gender bias have been indicated in the literature. It imposes barriers to inclusion, performance (Catalyst, 2019b; Catalyst, 2020; Ibarra et al., 2013), engagement, innovation (Catalyst, 2019b; Catalyst, 2020), and it impacts the workplace in different ways, including the influence on who is recruited, hired, and even promoted (Caleo & Heilman, 2019; Catalyst, 2019b; Catalyst, 2020; Correll, 2017; Ibarra et al., 2013). Women not

being considered for promotions to more strategic positions is also one of the consequences of unconscious gender bias (Ibarra et al., 2013).

This study investigates how unconscious gender bias influences the promotion of women versus men leaders. Specifically, I investigate how assertive behaviors displayed during an interview for a promotion to a leadership position are affected by the gender of the candidates, taking into account the impact of assertive behaviors on perceptions of likability and competence. I also examine how the gender of the candidate affects perceptions of assertiveness on the part of millennials versus old workers and how participants from different generations react to the display of more assertive behaviors by women and men leaders. Two theoretical frameworks are commonly used to investigate unconscious gender bias, The Social Role Theory of Sex Differences and Similarities and The Role Congruity Theory of Prejudice Toward Female Leaders. These theories are discussed next.

### **The Social Role Theory of Sex Differences and Similarities**

The Social Role Theory of Sex Differences and Similarities originated in the 1980s by Alice and Eagly to better understand the roots of sex differences and similarities in social behavior (Eagly et al., 2000). It was based on differences that had been documented in sex differences in social behavior and psychology, as well as on studies of the ideas people have about men and women (Eagly et al., 2000).

Key to this theory are the concepts of *descriptive* and *injunctive norms* proposed by Cialdini and Trost (as cited in Eagly et al., 2000). *Descriptive norms* reflect expectations about what people actually do, referring to what is normal or typical (Eagly et al., 2000). People commonly refer to others from the same sex to identify the usual behaviors in a situation, and particularly in the face of unfamiliarity, ambiguity, or confusion, they tend to conform to the

observed typical behaviors (Eagly et al., 2000). *Injunctive norms* refer to what is desirable or adequate and may guide the behaviors that are likely to be approved by others. They represent what people ought to do (Eagly et al., 2000). The need to be approved by significant others affects the behaviors people engage in. People tend to refer to the desirable behaviors for people of their own sex when deciding how to behave (Eagly et al., 2000).

The main argument proposed by this theory is that sex differences and similarities in behavior derive from gender role beliefs. These roles represent how people perceive men and women in terms of their social roles in the societies where they live (Eagly & Wood, 2011). Eagly et al. (2000) define the concept of social role as “the shared expectations that apply to persons who occupy certain social positions or are members of a particular social category” (p. 130).

Gender roles result from people’s observations about male and female behaviors and their inferences that “sexes possess corresponding dispositions” (Eagly & Wood, 2011, p. 459). They represent consensual beliefs about the attributes of men and women (Eagly et al., 2003). Men and women are believed to possess attributes that allow them to perform within a set of sex-typical roles (Eagly & Wood, 2011). “These beliefs constitute gender roles, which, through a variety of mediating processes, foster real differences in behavior” (Eagly et al., 2000, p. 124). The theory assumes that gender roles reflect how society distributes men and women into different roles, namely breadwinner and homemaker, and also into occupations (Eagly et al., 2000). Therefore, people believe that men and women have typical and divergent traits and behaviors (Eagly & Karau, 2002; Williams & Best, 1990).

Eagly and Karau (2002) call these traits and behaviors associated with female gender roles *communal* attributes and those related to male gender roles *agentic* attributes. Communal



attributes refer to the more compassionate treatment of others. They include traits and behaviors such as the display of affection, being helpful & kind, demonstrating interpersonal sensitivity, being nurturant, gentle, soft-spoken, and sympathetic (Eagly & Karau, 2002). These behaviors are commonly associated with women (Eagly & Karau, 2002; Eagly et al., 2000).

On the other hand, Agentic attributes refer to more assertive, controlling, and confident tendencies and are generally associated with men. Aggressiveness, ambition, dominance, force, independence, self-sufficiency, self-confidence, and being prone to act as a leader are examples of agentic behaviors and traits (Eagly & Karau, 2002). Agentic traits are also commonly associated with effective leadership (Eagly & Carli, 2012) and are frequently referred to as *agency* (Eagly & Karau, 2002; Eagly et al., 2000; Williams & Tiedens, 2016).

According to the Social Role Theory, men and women are rewarded for conforming to gender roles. Beliefs about the appropriate roles of men and women appear to be particularly central to people's sense of social order (Carli & Eagly, 2011; Williams & Tiedens, 2016). They may be penalized when they do not conform (Eagly et al., 2000). The sanctions for non-conformity may be overt or subtle and as severe as losing a job or as difficult to notice as being ignored (Eagly et al., 2000). Therefore, "gender-linked personality traits – specifically dominance, competence, and agency for men, and warmth, social sensitivity, and other-centeredness for women – are socially prescriptive" (Williams & Tiedens, 2016, p. 167).

Negative reactions to deviations from these gender roles have been reported in a meta-analysis by Eagly et al. (1992). The research analyzed 61 studies on evaluations of female and male leaders. The results demonstrate that women who displayed a more assertive and directive leadership style were evaluated more negatively when compared to men who showed the exact same behaviors (Eagly et al., 1992).

## **The Role Congruity Theory of Prejudice Toward Female Leaders**

The Role Congruity Theory of Prejudice Toward Female Leaders, proposed by Eagly and Karau in 2002, extends the Social Role Theory of Sex Differences and Similarities into a new dimension. The theory aims at explaining how gender and leader roles together produce two kinds of prejudice that result in the preference for male leaders (Ritter & Yoder, 2004). The specific objective of the theory is to determine to what extent prejudice is one of the factors that explain the relative lack of women in positions of high levels of power and authority (Eagly & Karau, 2002).

The concepts of descriptive and injunctive norms and gender roles are fundamental to the Role Congruity Theory of Prejudice Toward Female Leaders. Gender roles reflect expectations about what is both desirable and expected from each sex and derive from *descriptive and injunctive norms* (Ritter & Yoder, 2004). Descriptive norms refer to the expectations about what people actually do, while injunctive norms refer to what is desirable or adequate: behaviors that are likely to be approved by others (Eagly et al., 2000).

According to Eagly and Karau (2002), prejudice toward female leaders derives from two types of disadvantages. First, the descriptive aspect of the female gender role is associated with the display of communal attributes (affection, concern for others, sympathy, etc.), while leadership is associated with more agentic attributes, which reflect male roles (confidence, self-reliance, dominance, ambition, force, etc.) (Eagly, 1987). Women are considered to possess less agency and more communion when compared to men and are, therefore, seen as less qualified for leadership, especially for executive roles (Eagly & Karau, 2002).

The second disadvantage derives from the injunctive aspect of the female gender role. It refers to the behaviors that are likely to be approved by society, how people are expected to

behave. Women face a less favorable evaluation of the display of behaviors related to a leadership role than men because they are perceived as violating the female gender role (Eagly & Karau, 2002). Women's display of agentic traits or behaviors (assertiveness, ambition, dominance, self-sufficiency, self-confidence, etc.) is inconsistent with people's beliefs about desirable female behaviors (Eagly & Karau, 2002). These two disadvantages result in "less favorable attitudes toward female than male leaders, a greater difficulty for women in attaining leadership roles, and greater difficulty for women in being recognized as effective in these roles" (Eagly & Karau, 2002, p. 589).

Therefore, the role incongruity principle refers to the fact that the convergence of the expectations related to gender and leader roles proves to be consistent for men but inconsistent for women (Ritter & Yoder, 2004). Additionally, the mismatch between leader and female gender stereotypes is a precursor of both negative attitudes toward female leaders and prejudice towards women in positions of authority (Eagly & Karau, 2002; Hoyt & Burnette, 2013).

The evidence presented shows that women are often viewed as less promotable to leadership positions than men. This is our first hypothesis.

*H1: Female candidates for a leadership position will be rated as less promotable than male candidates.*

### **Likability and Competence**

Two social judgments that may be affected by biases described in The Social Role Theory of Sex Differences and Similarities and The Role Congruity Theory of Prejudice Toward Female Leaders are perceptions of likeability or warmth and competence. These social judgments may be related to differences in the promotion of female versus male leaders.

Social judgments of individuals and groups are explained by two distinctive traits: warmth and competence (Cuddy et al., 2011; Thomas et al., 2019). Warmth refers to “perceived intent, including friendliness, helpfulness, sincerity, trustworthiness, and morality” (Fiske et al., 2007, p. 77). Competence is defined as “perceived ability, including intelligence, skill, creativity and efficacy” (Fiske et al., 2007, p. 77). Warmth and competence have been identified as universal dimensions of social judgment, even when different perceivers, stimuli, and cultures are controlled for (Cuddy et al., 2011; Cuddy et al., 2013; Thomas et al., 2019). A study by Wojciszke (2005) indicates that warmth and competence are the basic dimensions that almost entirely explain how positively or negatively people evaluate others when spontaneously interpreting their behaviors and impressions. In another study by Wojciszke et al. (1998), warmth and competence accounted for 82% of the variance in terms of global impressions of people. According to Cuddy et al. (2011), “warmth judgments affect how much we trust versus doubt others’ motives, whereas competence judgments affect assessments of others’ ability to effectively enact their motives” (p. 6). A study on employees’ responses to managers’ likability and the moderating effects of power distance indicates that competence and likability are the two most relevant criteria considered when choosing their work partners (Wei et al., 2017).

Different emotions are associated with warmth and competence. Individuals and groups are commonly evaluated as being high or low in each dimension, and the different combinations elicit unique patterns of emotional and behavioral consequences on the part of perceivers (Cuddy et al., 2011). Emotions and behaviors such as admiration, help, and association are elicited when people are judged as both warm and competent. When someone lacks both aspects, the result is uniform negativity, including feelings of contempt, neglect, and attack (Cuddy et al., 2011). Consequently, warmth and competence are also fundamental for leadership. Leaders are

frequently judged regarding two characteristics: how lovable they are, which involves warmth, communion, or trustworthiness, and how fearsome they are, represented by their strength, agency, or competence (Cuddy et al., 2013). Such judgments of leaders by different stakeholders impact leaders' effectiveness; for example, employees' judgments impact their level of motivation to exert extra effort. Therefore, leaders need to continually understand and influence the way others perceive them (Cuddy et al., 2011).

Leaders usually prioritize the demonstration of competence over warmth (Cuddy et al., 2011). The reason for such a choice is leaders' perception that they need to prove they are capable (Cuddy et al., 2011). However, research suggests that the best way to influence and lead is to begin by demonstrating warmth (Cuddy et al., 2011; Cuddy et al., 2013). Projecting competence is important but gaining loyalty and being persuasive in a sustainable way depends on warmth and trustworthiness (Cuddy et al., 2011). When warmth is prioritized, connections are more easily established, as leaders demonstrate that they are able to hear and understand, as well as establish trust (Cuddy et al., 2013).

According to Abele (2003), liking depends on warmth. Warmth captures traits related to perceived intent, including friendliness, helpfulness, sincerity, trustworthiness, and morality (Fiske et al., 2007). Cuddy et al. (2013) refer to warmth-related words and indicate 'friendly' as an example. Likability is therefore closely related to warmth. Williams and Tiedens (2016) and Thomas et al. (2019) use both terms interchangeably, as will be done in this study.

As indicated in Chapter 1, likability refers to "an ability to create positive attitudes in other people through the delivery of emotional and physical benefits" (Sanders, 2006, p. 33). Leadership abilities demand both likability and competence. In a study by McAllister et al. (2019), including 3,056 participants, likability was identified as one of the key ingredients to

effective leadership. Well-liked leaders can expect followers to consider them as authentic, transformational, ethical, and not abusive (McAllister et al., 2019). They also looked into teams and leader likability, and the conclusion was that when teams like their leaders, they are happier at work, walk the extra mile when doing what is required of them, and experience greater well-being. The perception of a leader's likability also contributes to higher levels of team performance (McAllister et al., 2019).

Previous research also indicates that likability is a significant predictor of trust (Doney & Cannon, 1997; Swan et al., 1988). In general, higher levels of liking lead to greater trust (Nicholson et al., 2001). In management contexts, trust positively impacts information sharing, openness, fluidity, and cooperation (Cuddy et al., 2013). Liking also contributes to the sharing and acceptance of ideas, as it allows colleagues to listen to each other's messages; trust also provides a chance to modify people's attitudes and beliefs, as it does not impact only their outward behavior (Cuddy et al., 2013).

### **Promotability, Likability, and Competence**

Promotability is a very relevant factor for an individual's career development (De Pater et al., 2009a; Gurbuz et al., 2016). Moving ahead in organizations has historically been considered critical for individual employees and the organizations that employ them, impacting organizational processes such as human resource management practices and succession planning (De Pater et al., 2009a; Gurbuz et al., 2016). Gurbuz et al. (2016) define promotability judgments as an "individual's readiness and competencies to effectively perform in higher managerial roles" as assessed by their supervisors (p. 198). Promotability has also been defined as "the perception of individuals' capacities and willingness to effectively perform at higher job levels" (De Pater et al., 2009a, p. 298) and as "the favorability of an employee's advancement

prospects” (Greenhaus et al., 1990, p. 69), which is the definition of promotability considered in this study.

Research has indicated that different factors impact promotability. Employees’ performance evaluations and ratings (Greenhaus et al., 1990; London & Stumpf, 1983; Tobing & Yulisetiari, 2021), employees’ education (Markham et al., 1987), challenging job experiences (Carvalho et al., 2021; De Pater et al., 2009b), age (Wayne et al., 1999), employees’ potential (Nevicka & Sedikides, 2021; Thacker & Wayne, 1995), employee narcissism (Nevicka & Sedikides, 2021), and similarity to supervisor (Gurbuz et al., 2016) have been reported as antecedents of promotability. Other factors such as organizational politics (Beehr et al., 1980; Kolodinsky et al., 2007; Silvester & Wyatt, 2016; Zald, 1965), employee coachability (Weiss & Merrigan, 2021), job fit (Pichler & Holmes, 2017), job dedication (Jawahar & Ferris, 2011), interpersonal relations (Huang, 2020; Shaughnessy et al., 2011), career-based networking behaviors (Huang, 2020), and gender (Catalyst, 2019b; Catalyst, 2020, Ibarra et al., 2013) have also been found to impact promotability.

However, some researchers argue that the factors underlying promotion decisions are still not very well-known (Gurbuz et al., 2016; Wayne et al., 1997). According to Jawahar and Ferris (2011), studies that investigate antecedents of promotability judgments have not yet isolated “a key set of predictors, thus leaving us with a rather fragmented set of empirical evidence that shows one set of significant predictors in one study and a different set in other studies” (p. 252). Promotability is still a very much investigated theme (Carvalho et al., 2021; Huang, 2020; Nevicka & Sedikides, 2021; Weiss & Merrigan, 2021), and looking into millennials’ perspective related to the impact of leader assertiveness, likability, and competence on promotability will add to the existing literature.

Two important factors associated with promotability are liking and performance. Positive relationships have been found between promotability and liking (Treadway et al., 2007; Shaughnessy et al., 2011) and promotability and performance (Kolodinsky et al., 2007; Shaughnessy et al., 2011). Heilman et al. (2004) argue that employees need to be seen as both likable and skilled to be hired or promoted, as competence is not enough to completely explain hireability and promotability decisions. Perceptions of promotability, including selection and evaluation decisions, are more influenced by subjective assessments than by competence (Thacker & Wayne, 1995; Wexley & Pulakos, 1982). One example is the positive impact of the supervisor's liking of a subordinate on evaluations of performance (Bolino et al., 2006; Judge & Ferris, 1993; Wayne et al., 1997). Thacker and Wayne (1995) recommend future research on the relationship between likability/affect and assessments of promotability.

Therefore, this research hypothesizes that:

*H2: Perceptions of a candidate's likability will be positively related to ratings of promotability to a leadership position.*

Likability alone is not enough for leaders to be promoted; they must also be perceived as competent. Competence is a fundamental element when organizations choose their leaders (Wei et al., 2017) and when employees choose work partners (Casciaro & Lobo, 2005; Wei et al., 2017). According to Fiske et al. (2007), traits associated with competence are: "capable, skillful, intelligent, and confident" (p. 77). Competence includes the possession of skills, talents, and capabilities and is commonly attributed to a person's abilities (Fiske et al., 2007).

Gurbuz et al. (2016) investigated the impact of performance on promotability. They specifically looked into task performance, defined as "the behaviors that are job-specific, and are related to core job requirements, and contribute to the technical core of the organization" (p.



198). Task performance is related to competence as defined by Fiske et al. (2007), especially as regards “perceived ability,” “skill,” and “efficacy” (p. 77). Gurbuz et al.’s (2016) results indicated that task performance impacted supervisors’ judgments of promotability, as employees who excelled in behaviors that were specific to their jobs, and were related to the job requirements, were considered more suitable for promotion than those who did not display the same behaviors. Previous research has also indicated that task performance is related to promotability (De Pater et al., 2009a). Not only do supervisors value employee’s task performance, but they see additional value in “individuals’ engagement in challenging job experiences when evaluating employees’ promotability” (De Pater et al., 2009a, p. 316).

Supervisors predict promotion candidates’ future achievements by looking at the employees’ current behaviors, observable characteristics, and qualities, which reflect their capacity and talents (Bliege Bird et al., 2005; De Pater et al., 2009a). These aspects also reflect Fiske et al.’s (2007) definition of competence: “perceived ability, including intelligence, skill, creativity, and efficacy”.

Both likability and competence were manipulated in a study by Heilman et al. (2004). Supervisors were classified into different conditions: high-competence (rating of 9.1 out of 10), and low-competence (rating of 5.4 out of 10), high-likability (rating 9.3 out of 10), and low-likability (4.9 out of 10). More competent candidates were more highly recommended for special career opportunities, which included placing the individual on the ‘fast track’ and recommending their promotion to “highly prestigious upper-level positions” (p. 424). Those who were considered both competent and likable were more highly recommended as compared to competent but less likable candidates. Therefore, in addition to liking, perceptions of competence also play a fundamental role in promotion decisions.

The third hypothesis in this research is:

*H3: Perceptions of a candidate's competence will be positively related to ratings of promotability to a leadership position.*

### **Assertiveness and Competence**

Assertiveness is defined as “the skill to seek, maintain, or enhance reinforcement in an interpersonal situation through an expression of feelings or wants when such expression risks loss of reinforcement or even punishment” (Rich & Schoroeder, 1976, p. 1082). It derives from the adjective *assertive*, defined as “behaving confidently and not being frightened to say what you want or believe” (Cambridge University Press, n.d.). According to Hentschel et al. (2019), “assertiveness concerns acting on the world and taking charge” (p. 6). Mnookin et al. (1996) define assertiveness as the process by which a negotiator articulates and advocates for his/her interests. It describes how much a person speaks up for, defends, and acts in the interest of themselves and their own valued preferences, goals, and personal interests (Ames, 2008; Wilson & Gallois, 1993, as cited in Ames & Flynn, 2007). In this research, assertiveness is defined consistently with Rich & Schroeder (1976) as the capacity to confidently seek, maintain, or enhance reinforcement in an interpersonal situation through the expression of feelings or wants, and therefore being willing to openly say what one wants or believes.

The terms assertiveness and dominance have been used interchangeably in research (Burger & Cosby, 1999; Swimmer & Ramanaiah, 1985; Williams & Tiedens, 2016), and measures of both traits are highly correlated (Ray, 1981; Swimmer & Ramanaiah, 1985). Ray (1981) argues that dominance and assertiveness are traits that may not be clearly distinguishable. In this research, the terms ‘assertiveness’ and ‘dominance’ will be used interchangeably.

Ames and Flynn (2007) refer to a continuum of assertiveness, ranging from passivity and submissiveness to aggressiveness and hostility, and argue that low assertiveness refers to the display of unwarranted deference; high assertiveness “may refer to belligerently pursuing goals” (p. 2); moderate assertiveness refers to the ability to defend against imposition while at the same time being able to actively make legitimate claims. Their findings indicate that assertiveness does matter to leadership, and they identify a curvilinear relation between the two constructs. Both lower and higher levels of assertiveness were less positively evaluated as compared to middle levels of assertiveness. At higher levels, a negative effect of assertiveness on leadership was observed. The impact was on social outcomes, as a high level of assertiveness worsens relationships. On the other hand, at lower levels of assertiveness, poor task outcomes were observed: “a low level of assertiveness limits goal achievement” (Ames & Flynn, 2007, p. 1). Moderate assertiveness facilitated leadership success and was positively evaluated by participants (Ames & Flynn, 2007). Therefore, within a range of assertiveness that is not hostile, there is a positive relationship between assertiveness and perceptions of leadership fit and capacity for goal achievement.

Other studies indicate a positive relationship between the display of dominant, agentic behaviors and perceptions of competence (Carli & Eagly, 2011; Eagly & Karau, 2002; Williams & Tiedens, 2016). Even though the terms dominance and assertiveness have subtle differences in connotations in common usage, they are used interchangeably in the literature (Williams & Tiedens, 2016). According to Delamater and Mcnamara (1986), assertiveness is associated with high competence and skill, although it is also viewed as unfavorable in terms of interpersonal behavior. Assertiveness is also positively related to extrinsic success (Higgins et al., 2003). In a study by Rudman and Glick (2001), participants were asked to evaluate videotaped agentic and

communal candidates for a computer lab management position. Male and female candidates were rated in relation to competence, social skills, and hireability. Agentic applicants were rated as more competent. The results showed the importance of displaying agentic traits to enhance perceptions of competence for both men and women. In a meta-analysis including 31 studies measuring competence, “dominance was associated with perceptions of greater competence” (Williams & Tiedens, 2016, p. 179). Therefore, I hypothesize that:

*H4: Assertive behaviors will be positively related to perceptions of the leadership candidate’s competence.*

### **Assertiveness and Likability**

Success in influencing people is one of the most important aspects of effective leadership (Bass, 1990; Falbe & Yukl, 1992; Oc & Bashshur, 2013). Effective leadership positively influences employee engagement, and leaders can affect various aspects of firm performance, including personnel turnover, customer satisfaction, productivity, sales, revenue, etc. (Zenger & Folkman, 2016). As previously argued, research indicates that an initial focus on warmth/likability is the best way to influence and lead (Carrier et al., 2019; Cuddy et al., 2011; Cuddy et al., 2013; Fiske, 2015; Laustsen & Bor, 2017; McAllister et al., 2019; Wei et al., 2017). Therefore, investigating behaviors that impact likability is important for understanding promotability to leadership positions.

A negative impact of assertiveness on likability has been previously identified. Studies on assertiveness and training demonstrate that assertive individuals are considered less likable and friendly than unassertive people, even though their behavior may be seen as appropriate and effective (Kelly et al., 1980; Kelly et al., 1982; Kern, 1982). Williams and Tiedens’ (2016) meta-analysis also indicates that dominant people were consistently less liked than nondominant

ones across all studies that investigated the impact of dominance on likability. Furthermore, attempts to influence others with more aggressive tactics in the workplace tend to be negatively viewed by colleagues and evoke resistance (Falbe & Yukl, 1992). Consequently, “assertive individuals are also more likely to elicit conflict with their exchange partners.” (Ames, 2009 p. 117). Therefore, I hypothesize that:

*H5: Assertive behaviors will be negatively related to perceptions of the leadership candidate’s likability.*

### **The Double Bind of Assertiveness for Women Leaders**

Reactions to the display of assertive behaviors are also gender sensitive. The negative reaction to the display of more dominant, assertive, or agentic behaviors by women is stronger when compared to the same behaviors enacted by men (Carli & Eagly, 2011; Eagly & Karau, 2002; Ely & Rhode, 2010; Williams & Tiedens, 2016). This phenomenon is referred to as *backlash* (Williams & Tiedens, 2016). When women adopt more assertive behaviors, they are frequently more respected but not liked (Eagly & Karau, 2002). When a woman in a position of authority displays a more conventionally feminine style, she might be liked but not necessarily respected (Eagly et al., 2007; Ely & Rhode, 2010; Ibarra et al., 2013).

According to the Social Role Theory, an explanation is related to the violation of social norms (Eagly et al., 2000). When people violate expected social norms, they are frequently perceived as threats to the existing order (Carli & Eagly, 2011; Rudman et al., 2012a; Williams & Tiedens, 2016). This is what happens when women, who are expected to demonstrate behaviors more related to warmth, display assertive traits (Williams & Tiedens, 2016). The findings in Williams and Tiedens’ (2016) meta-analysis indicate that the impact of backlash is on likability. Other studies confirm that penalties for norm violation take the form of a reduction in

the levels of liking or warmth towards the violator. Still, these violations do not affect perceptions of competence (Prentice & Carranza, 2004, as cited in Williams & Tiedens, 2016). Rudman et al. (2012b) conducted six experiments in which women displaying agentic behaviors were consistently considered less likable but not less competent than men who showed the same behaviors.

Dominance can be explicitly displayed or more implicit. Explicit dominance refers, for example, to a loud voice, lowered eyebrows, explicit dominant requests, etc. (Williams & Tiedens, 2016). Implicit dominance, on the other hand, refers to indirect influence attempts, more submissive faces (as compared to more dominant facial structures), dominant requests low in explicitness, etc. “Explicit dominance is operationalized ... as a direct demand for behavior change, and implicit dominance as dominance that is communicated less directly (nonverbally/para-verbally)” (Williams & Tiedens, 2016, p. 169). However, the meta-analysis indicates that when dominance was not openly displayed, i.e., when it was implicit, the negative impact on likability was not confirmed (Williams & Tiedens, 2016). The negative effect of explicit dominance on likability was significant both for men and women, but women were more penalized than men when identical explicit dominance behaviors were displayed. However, when the display of dominance was implicit, there was not a difference in perceptions of likeability by gender.

Some of the studies included in the meta-analysis exemplify the negative impact of explicit dominance on likability (Williams & Tiedens, 2016). One example is an experiment in which female and male candidates to a leadership role presented themselves as either communal or agentic during the job interview (Rudman et al., 2012b). In the case of communal applicants, both men and women interviewed were rated as equally likable, but men were considered more

hirable and more competent. In the case of agentic candidates, both women and men were rated as equally competent. Still, agentic women were considered less likable and hireable than agentic men, which clearly demonstrates the backlash against agentic women (Rudman et al., 2012b). In a similar experiment, Phelan et al. (2008) identified the same results. Therefore, female leaders who display agentic behaviors pay the price in terms of being less liked, which negatively affects their chances of being hired (Rudman & Glick, 2001) and the possibility of being promoted.

In a study by Rudman and Glick (1999), participants were asked to make hiring recommendations for a feminized or masculine managerial job. The feminized job description emphasized the need for communal traits, such as being helpful, sensitive to the needs of clients, and able to listen carefully to their concerns, as well as agentic traits such as “technically skilled, ambitious, strongly independent, and able to work well under pressure” (Rudman & Glick, 1999, p. 1006). The masculine managerial job emphasized only the need for agentic traits. Four applicant videotapes were used, and candidates responded to six questions. Agentic candidates (one male and one female) responded directly and self-confidently, giving examples of accomplishments that would “cast them in a favorable light” (p. 1006). Communal applicants (one male and one female), on the other hand, “spoke more modestly of their skills and accomplishments” (p. 1006). Each candidate also read a ‘life philosophy’ essay, in which agentic candidates emphasized their own agentic traits, while communal candidates emphasized their own communal traits. Raters first read the essay and then watched the video. They rated their perceptions of candidates’ competence, social skills, and hireability. Agentic female candidates who were competent in male domains were rated less liked and more personally derogated when compared to competent men in the same domains. Being disliked strongly affected competent individuals’ overall evaluations as well recommendations for higher salaries

and promotions. One possible explanation is that competent women in masculine domains are seen “as hostile in their dealings with others” (p. 417). Women need to present themselves as agentic to be hired, but there is a cost in terms of negative perceptions of their interpersonal skills (Rudman & Glick, 1999).

Rudman and Glick (2001) went on to investigate backlash further. They replicated their previous study, including the previously described use of the videotapes (Rudman & Glick, 1999) to identify why agentic women face backlash and also to look into ways women might be able to avoid the backlash effect. Their findings indicate discrimination against the agentic female candidate, as she was perceived as not nice due to her dominant style. However, “the male participant’s social skills and hireability were less affected by his dominative style” (p. 758). They argue that the concept of agency contemplates two components: competence and dominance. “It is primarily dominance that violates prescriptive stereotypes of women’s niceness” (Rudman & Glick, 2001, p. 746).

Research indicates that the double bind still exists against female leaders (Teele et al., 2018; Weiner & Burton, 2016). A study by Catalyst (2007) investigated stereotypic perceptions about senior female and male leaders in western countries. Their study relied on data from more than 1,200 leaders and was supplemented with in-depth interviews with 13 female leaders working at a large American-headquartered global organization. Respondents indicated that when women acted according to the existing gender stereotypes, which expected women to display communal behaviors, they were viewed as less competent leaders. They were considered too soft. On the other hand, when women acted more agentially, which was inconsistent with the existing communal stereotype, they were regarded as unfeminine or too tough. When women acted similarly to their male colleagues, their behavior was frowned upon. “Due to gender



expectations, the same leadership style can be described as assertive in a man but abrasive in a woman” (p. 21).

Based on these findings, I hypothesize that...

*H6: Assertive behaviors will be more negatively related to likability for female candidates than for male candidates for promotion to a leadership position.*

### **The Millennial Generation’s Perspectives May Differ**

Perceptions of appropriate leader behaviors and gender roles are not constant but instead change over time. Some of the important studies cited in this dissertation are about twenty-five years old. Due to the pace of societal changes, even the more recent studies may represent the social norms and values of a generation of workers that are retiring instead of those of a generation that is becoming more represented in the workplace: the millennials.

The study of generational cohorts gives researchers a tool to analyze changes in views over time (Pew Research, 2019a). Important world events, technological advances, economic and social shifts interact with the life cycle and aging process and affect people’s views of the world (Barbuto & Gottfredson, 2016; Pew Research, 2019a). For organizations, understanding the characteristics of their current workforce is essential, as the quality of human capital directly affects strategy implementation and firm performance (Hitt et al., 2001).

In 2016, millennials became the largest generation in the U.S. workforce, as shown in Figure 2 (Pew Research Center, 2019). Given that millennials already represent more than 50% of the workforce (Knoema, 2020), a probable scenario is that they will occupy most of the initial and mid-level leadership positions in the next years. Therefore, understanding the factors that influence promotion decisions by members of this generation, especially for early-career

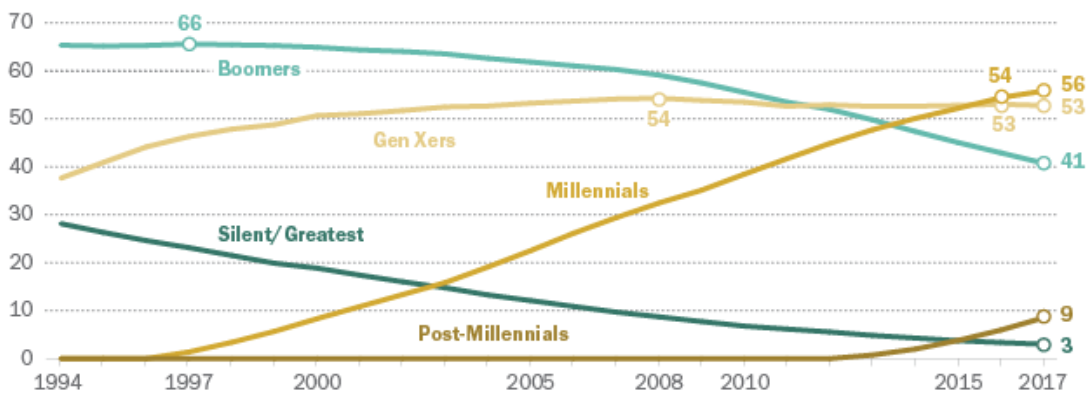
leadership positions in lower-level management, can be an important step in the search for more gender parity in the workplace in the future.

**Figure 4**

*Millennials in the Labor Workforce*

**Millennials became the largest generation in the labor force in 2016**

*U.S. labor force, in millions*



Note: Labor force includes those ages 16 and older who are working or looking for work. Annual averages shown.  
 Source: Pew Research Center analysis of monthly 1994-2017 Current Population Survey (IPUMS).

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The exact dates that define millennials differ in the literature. Birth dates for members of this generation range from the beginning of the 1980s to the mid/end of the 1990s. According to the Pew Research Center (2019b), anyone born between 1981 and 1996 (ages 23 to 38) is considered a millennial. Barsh et al. (2016) refer to the years between 1980 and 2000, while the U.S. Census Bureau (2014) considers 1981 to 1995. Wey Smola and Sutton (2002) defined millennials as those born between 1979 and 1994. In this study, we will follow the birth dates used by the Pew Research Center (2019b): 1981 to 1996.

Understanding the different characteristics and values of members of the millennial generation is fundamental to understanding contemporary expectations of leaders, as millennials already represent the largest working population. In terms of work expectations, Kowske et al. (2010) argue that millennials demonstrate a higher level of overall satisfaction with the companies they work for and are also more satisfied with job security, recognition, and career growth than members of Generation X (born between 1965 - 1980). In addition, millennials function well in teams, prefer a more open and frequent communication style, are particularly motivated by significant challenges, and comprehend communication technologies better than previous generations (Myers & Sadaghiani, 2010).

Research indicates several characteristics associated with Millennials. They are: the search for financial rewards (Appanah & Pillay, 2020; Stewart et al., 2017), an interest in building interpersonal relationships, and being part of a team-based workplace (Appanah & Pillay, 2020; Myers & Sadaghiani, 2010; Stewart et al., 2017), decreased work centrality (Anderson et al., 2017), confidence (Deloitte, 2018; Harris-Boundy & Flatt, 2010), and a demand for ethical leadership behaviors (Appanah & Pillay, 2020). Millennials also look for companies that understand the importance of more flexible career paths and more work-life balance (Anderson et al., 2017; Myers & Sadaghiani, 2010; Twenge & Kasser, 2013) and organizations that understand the need for more balance between profits and social concerns, which includes a more diverse, flexible and nurturing environment for employees (Deloitte, 2018). They need to find the work fulfilling, or else they tend to leave the firm (Stewart et al., 2017).

Other research also investigates management styles preferred by millennials. Millennials tend to demonstrate tighter peer bonds and be more team-oriented than members of Generation X (Borges et al., 2010). Given their stronger team orientation, they also tend to be more inclusive,

treating different types of people fairly and equally. They crave immediate feedback from their superiors and value open and frequent communication with their leaders (Appanah & Pillay, 2020; Lowe et al., 2008, as cited in Chou, 2012). Millennials are also not intimidated by more senior team members, either in terms of age or status (Myers, & Sadaghiani, 2010). The relationship with the immediate supervisor is a critical aspect of the work environment and a primary source of intrinsic motivation for millennial followers (Deci et al., 1999). This generation places a higher value on flexibility and openness than prior generations (Gerzema & D'Antonio, 2017).

### **Generation as a Moderator of the Relationship Between Assertiveness and Likability**

During the Baby Boomers' work life, the chain of command model of leadership was accepted, and managers were expected to give directions and lead employees towards organizational objectives (Yu & Miller, 2005). However, this style is inappropriate for managing millennials (Faller & Gogek, 2019; Stewart et al., 2017). Authoritarian leadership behaviors are less accepted by members of the millennial generation (Faller & Gogek, 2019), while previous generations are reported to be more accepting of more autocratic leadership styles (Gallup, 2016; Strauss, 2016). One possible explanation lies in how this generation was brought up, being encouraged by their parents to challenge authority (Howe & Strauss, 2007).

Millennials appreciate more communal behaviors in leaders (Carli & Eagly, 2011; Gerzema & D'Antonio, 2017). Openness and flexibility, collaboration, and sharing of credit are highly appreciated by members of the millennial generation (Appanah & Pillay, 2020; Gerzema & D'Antonio, 2017). Millennials are also more likely to value traits related to patience and the ability to plan for the future (Gerzema & D'Antonio, 2017). Leaders who are more collaborative, transformational and who adopt leadership styles that have more elements related

to teaching and coaching are perceived as more effective by millennials (Carli & Eagly, 2011). Millennials favor a less hierarchical relationship with authority even within more rigid contexts, such as the military, where there is a strong emphasis on authority and hierarchy (Sledge, 2016).

Millennials, who dislike directive leadership, may differ from older workers in how they perceive assertive, authoritarian leadership styles as being biased against them. A survey by Glassdoor in 2019 found that younger adult employees reported that they experienced or witnessed more discrimination at work than did older workers. For example, over 50% of the U.S. millennial employees reported gender discrimination at work compared to 30% of workers aged 55 or older. In addition, 62% of American employees aged 18 to 34 indicated that their companies should do more to increase diversity and inclusion, while only 38% of workers aged 55 or older agreed (Glassdoor, 2019). These results suggest that millennials perceive more bias and are more sensitive to perceived bias in the workplace than members of older generations. Because millennials are more likely to perceive leaders' displays of assertiveness as biased, they are also likely to have a stronger negative reaction to the assertiveness than would members of older generations. Given that the negative impact of perceived assertiveness is on leaders' likability (Kelly et al., 1982; Williams & Tiedens, 2016), millennials may consider assertive leaders as less likable than do older workers.

Because millennials dislike directive, hierarchical leadership styles and prefer more collaborative leaders (Chenkovich & Cates, 2016; Sledge, 2016), they are likely to find leaders they perceive as explicitly assertive even less likable than members of older generations. Although previous research has found that perceptions of explicit assertiveness negatively impact likability (Williams & Tiedens, 2016), research has not examined whether generational differences strengthen this effect. Therefore, I hypothesize that ...

*H7: Assertive behaviors will be more negatively related to perceptions of the leadership candidate's likability when assessed by millennials than by members of older generations.*

### **Millennials' Perceptions of Female Leaders**

Millennials' perceptions of a job candidate's promotability may be less affected by the leaders' gender than older generations' perceptions because millennials value communal leadership styles and gender diversity in the workplace. The millennial generation brings different attitudes towards leadership, the work environment, and organizational culture, and they want to vocally participate with leaders (Faller & Gogek, 2019). They value a more gender-diverse work environment and are more open to female leaders (Gerzema & D'Antonio, 2017). According to the results of a survey on millennials by The Boston Consulting Group (BCG, 2017), which included 17,500 respondents from 21 countries, there has been a significant shift in generational mindsets: millennial men's attitudes toward gender diversity are more progressive than those of older men, and more closely aligned with women's (Abouzahr et al., 2017).

Temporal shifts may impact perceptions of agentic (aggressive, dominant, independent, self-confident, etc.) and communal behaviors (displays of affection, helpfulness, kindness, interpersonal sensitivity, etc.) (Wood & Eagly, 2015). This could result from changes in attitudes related to gender roles or in the definition of leader roles (Eagly & Karau, 2002).

Several differences between millennials and older generations in the workplace are also indicated in the Boston Consulting Group survey (2017). Compared to previous generations, millennials were more likely to have grown up in a dual-income home and have experienced earning parity between their parents in America. They also have had more chances to contribute to childcare and are more willing to adapt their behaviors to support female colleagues (Abouzahr et al., 2017). In addition, participants from the millennial generation demonstrated a

willingness to change their behaviors to support diversity in the workplace, and men under 40 also demonstrated greater awareness of the obstacles women face at work (Abouzahr et al., 2017). A recent survey conducted by Glassdoor (2019) indicates that 62% of U.S. employees between 18 and 34 believe their company needs to do more to increase diversity and inclusion. All in all, shifts in the behavior of members of this generation indicate that time may impact and change beliefs about gender and gender roles (Treleaven, 2015).

Changes in the preferences for male versus female leaders have also been identified. The results of a study on the influence of supervisors' race, gender, age, and generation on millennials' job satisfaction identified no preference for gender (Campione, 2014). The young employees who took part in the study did not demonstrate any preference for having a male supervisor. "This may be indicative of the increasing visibility of female supervisors, especially those managing the entry-level positions of these young workers" (Campione, 2014, p. 30). Another interesting finding in this study is related to the supervisor-subordinate dyad. A preference on the part of the young participants for same-gender supervisors who belong to an older generation was identified. Some explanations are related to older and same-gender supervisor relationships being more comfortable, less threatening, and providing more opportunities for mentoring and building trust (Campione, 2014). Trust in the supervisor is fundamental for the quality of the supervisor-subordinate dyad, and older supervisors are perceived as more trustworthy (Campione, 2014).

Recent research confirms that changes in stereotypes of males and females take place over time. Eagly et al. (2019) published a meta-analysis on communion, agency, competence, and gender stereotypes, involving 16 nationally representative opinion polls in the U.S. The research evaluated studies from 1946 to 2018, and the results indicate that stereotypes are

flexible and responsive to changes in women's and men's roles since the mid-20<sup>th</sup> century. According to this study, perceptions of women's competence have increased relative to men's, and now there is a belief in competence equality. Results show a substantial female advantage in terms of perceived communal behaviors, but the advantage for males regarding perceived agency showed no change. This matters because transformations in the labor market over time have placed increased importance on leaders' social skills, in which women are perceived to be stronger than men. According to Deming (2017), jobs have increasingly required high levels of social skills. "It appears that female leaders are somewhat more likely than their male counterparts to have a repertoire of the leadership behaviors that are particularly effective under contemporary conditions" (Eagly et al., 2019, p. 587). These changes seem to mainly reflect the attitudes of the members of the millennial generation. According to Gerzema and D'Antonio (2017), millennials may even identify qualities in their female leaders that make them more effective.

*H8: The effect of a candidate's gender on perceptions of promotability for a leadership role will be weaker when assessed by millennials than when assessed by members of older generations.*

Millennials are less comfortable with top-down decisions (Gerzema & D'Antonio, 2017) and value open-minded alternatives rather than decision-making that follows a more hierarchical structure (Chenkovich & Cates, 2016; Gerzema & D'Antonio, 2017). This fits well with the more communal behaviors expected of female leaders. Young women and men who participated in Gerzema and D'Antonio's study (2017) regarded aggressive and hierarchical management as masculine, whereas generous, communicative leadership was considered feminine. Great value was placed on the feminine traits by those participants, and they reported the wish to work with leaders who can blend both sets of behaviors (Gerzema & D'Antonio, 2017).



These changes suggest that perceptions of female leaders' assertiveness might change, particularly as millennials step more and more into leadership roles. As stated in the Role Congruity Theory, "many variables...could affect the degree of incongruity between leadership roles and female (and male) gender roles as well as the weight given to gender roles" (Eagly & Karau, 2002, p. 589). Despite the reported fit between agentic behaviors and leaders, which has been relatively strong since the 1970s, research has indicated that the "think manager – think male" mentality has started to weaken (Duehr & Bono, 2006, as cited in Carli & Eagly, 2011). According to Eagly and Karau (2002), the female disadvantage related to backlash lessened from 1953 to 2000. Taking into account the evidence that millennials differ from prior generations, that temporal shifts should be investigated as perceptions of agency and communion might change (Wood & Eagly, 2015), that millennials' attitudes favor a more gender-diverse work environment, and that millennials demonstrate greater acceptance of female leaders (Gerzema & D'Antonio, 2017), I hypothesize two three-way interactions in which...

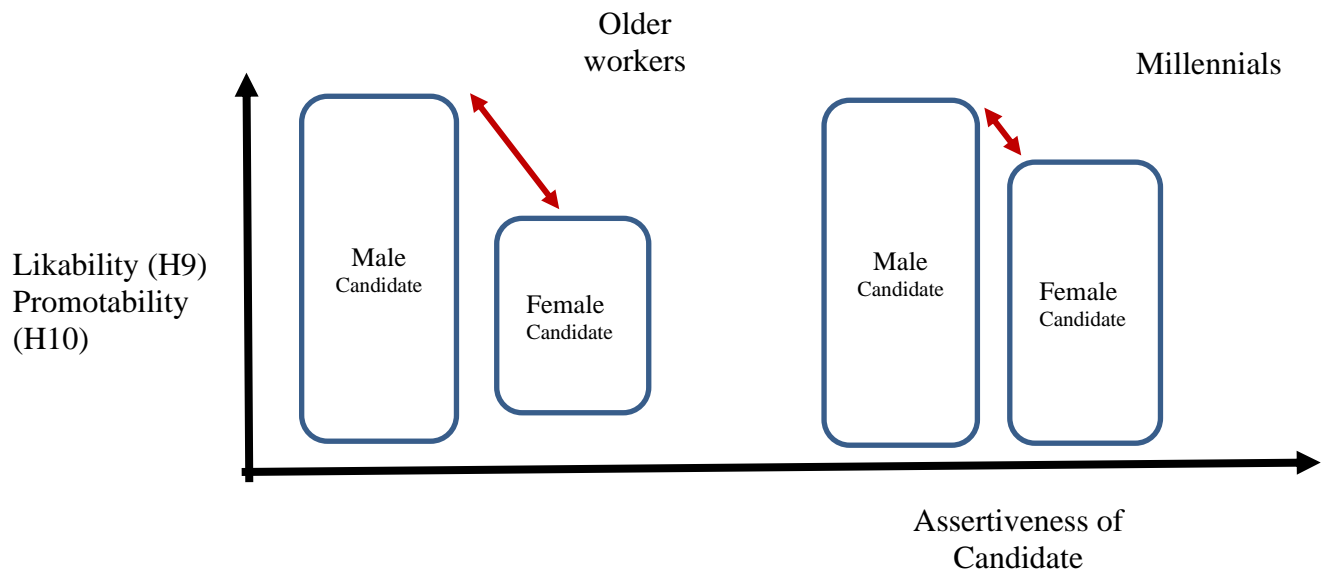
*H9: The moderating effect of gender on the relationship between a candidate's assertive behavior and the candidate's likeability (the negative impact on likeability is stronger for female candidates) will be weaker when the assessor is a member of the millennial generation than when the assessor is a member of an older generation.*

*H10: The moderating effect of gender on the relationship between a candidate's assertive behavior and the candidate's promotability will be weaker when the assessor is a member of the millennial generation than when the assessor is a member of an older generation.*

Figure 5 is a graphical representation of the hypotheses:

**Figure 5**

*Graphical Representation of Hypotheses 9 and 10*



Finally, I propose the following hypotheses regarding mediation.

*H11: The three-way interaction between candidate assertiveness, gender, and assessor generation on promotability described in H10 will be partially mediated by perceptions of the candidate's likability.*

In the next chapter, the methodological aspects of this study will be detailed.

## **CHAPTER 3 - METHODOLOGY**

### **The Research Design**

The study is a between-subjects two x two factorial experimental design at an individual level of analysis. Christensen et al. (2014) define experimental research as “a quantitative approach designed to discover the effects of presumed causes” (p. 29).

This research was implemented considering all ethical precautions. The survey implementation only started after the Institutional Review Board’s (IRB) approval. Two revisions of the initial documentation were submitted to the IRB, and the implementation only took place once the permission was granted. Participants were invited to participate in the study voluntarily and could withdraw from the survey at any time.

### **Participants**

This study gathered data from two different types of participants. The first participant group included students and alumni from the Crummer Graduate School of Business at Rollins College. Students received an email invitation containing a hyperlink to the anonymous survey. To reach alumni, an invitation was posted on the Crummer Alumni Association's Facebook and LinkedIn pages. Although the original plan discussed with the Alumni Relations Department in 2020 was to send emails to all members, these emails were not approved when it was time to

collect the data due to non-solicitation guidelines. I, therefore, followed the suggestion from Alumni Relations staff to have them post a link to the survey on the Alumni Association's LinkedIn and Facebook pages.

Qualtrics, a commercial survey sampling and administration company, was contracted to provide a second group of participants. Given the existing partnerships between Qualtrics and various online panel companies, the company has access to approximately thirty-five million panelists located in the U.S. (Qualtrics, 2019b) and has been widely used in recent research (DiPietropolo, 2020; Holt & Loraas, 2019; Klink et al., 2021; Otterbring et al., 2020). Samples recruited through online panels can be as representative of the targeted population as more traditional recruitment methods (Farrell & Petersen, 2010; Miller et al., 2020; Walter et al., 2016). A meta-analysis by Walter et al. (2016) investigated differences between online panel data and conventionally sourced samples. The researchers compared means, reliability, and correlations among constructs based on data from online panels and conventional respondents. Results indicated that online panel data provides valid samples for research in applied psychology and management (Walter et al., 2016). Qualtrics was also utilized for the data collection. This software is commonly used in surveys, as it can administer a range of procedures, including questionnaires and randomized experiments (Carpenter et al., 2018).

To participate in the study, participants needed to meet three qualifying criteria, measured by the first questions on the survey. The minimum age of participants was 24, which is the minimum age of a millennial. The minimum educational level was an Associate degree, as most people in the position to hire someone into a leadership position would meet this minimum educational level. Finally, at least two years of work experience were required so that

participants would have an informed opinion about who they would recommend for a promotion to a leadership position.

## **Procedures**

Apart from the initial recruitment procedures, all other steps in the survey implementation were the same for both respondent bases. All participants were advised that the survey would be used for research purposes, the collected data would be confidentially stored, and only the researchers would have access to the data. Participants were also informed that the expected duration of the survey was 10-15 minutes and that they could choose to end their participation at any time. Finally, participants were asked to give their digital consent to participate in the study.

Participants read a job description for a job opportunity for a candidate applying for promotion to a junior leadership role (shown in Appendix A). Next, they were informed about an internal candidate for the position and then read the candidate's resume (shown in Appendix B). Next, they watched a video of the candidate's interview and answered questions about it (the video scripts are shown in Appendix C). The details of the job description, resume, and videos are described below. The survey questions included measures of perceptions of assertiveness, likability, competence, and promotability of the candidate in the video. Finally, participants answered other demographic questions.

Participants were randomly assigned to watch one of four job interview videos with a candidate seeking a promotion to a leadership position. The experimental manipulation was related to (1) the sex of the candidate for the promotion and (2) the level of assertiveness (high or low) displayed by the candidate during the interview. Two scripts (modified slightly from Rudman & Glick, 1999) were used for this experiment, one in which the candidate displays high

explicit assertiveness and a second one in which low assertiveness is demonstrated. One male and one female actor portrayed the candidate in both the assertive and non-assertive videos. Every effort was made to ensure that the only differences were (1) the gender of the candidate and (2) the high/low assertiveness level. This included the colors and style of the candidates' outfits, the physical environment, the age of the candidates, and their use of gestures and tone of voice. To evaluate whether there were differences other than gender between the videos, a group of Crummer MBA and EDBA students rated the similarity between both videos, noted any differences they saw, and rated the attractiveness of the two candidates prior to the implementation of the final survey. A detailed description of this stage of the survey is provided below under the Pilot Study Stage 1 section.

The study materials stated that the candidate was applying for a leadership position in the initial stages of his or her leadership career. I chose to focus on an early-career-stage promotion because the most relevant obstacle to women's parity in the workplace is the first step to management (Huang et al., 2019). In addition, the millennial generation (currently aged 24 to 38), which is the focus of this research, would currently be more represented in earlier-stage leadership positions than top-level leadership positions.

After the four videos were produced and pilot tested (see the Pilot Study section below), study participants received an anonymous link to the Qualtrics survey. Participants were randomly assigned to watch one of the four versions of the video, which was embedded in the survey. The Qualtrics platform provides a video randomization feature, as the random assignment is needed to achieve internal validity in experimental studies (Christensen et al., 2014; Slack & Draugalis, 2001). Apart from the video, all items in the survey were identical across the four experimental conditions.

**Assertiveness manipulation.** Assertiveness was manipulated as the independent variable. In the assertive manipulation, male and female candidates displayed explicitly assertive behaviors involving dominant verbal and nonverbal behaviors. These include staring at others while speaking, pointing at people, and self-promoting (Eagly & Carli, 2012) and bodily expansion or openness, physical proximity, eye contact (especially when speaking), and touching others (Williams & Tiedens, 2016). Paraverbal cues also conveyed assertiveness. Paraverbal cues are defined as “a set of vocal cues that accompany speech behavior such as voice pitch, response latencies, filled and unfilled pauses, message duration, speech errors, and repetitions” (Hart et al., 2010, p. 177). Paraverbal behaviors related to dominance include talk time, a lack of hesitations in speech, speech volume, and interruptions (Williams & Tiedens, 2016). The candidates used a loud voice and demonstrated competitiveness, self-promotion, and authority. They openly made eye contact with the camera while speaking, talked nonstop for a significant amount of time, and showed a low level of hesitation.

In the non-assertive manipulation, the male and female candidates displayed a low level of assertiveness, speaking modestly of their accomplishments and skills. They demonstrated communal characteristics such as warmth, friendliness, being good listeners, and being sensitive to the needs of others, consistent with Rudman and Glick’s (1999) manipulation. They used a soft tone of voice and demonstrated speech hesitancy and reduced eye contact, as in Kelly et al.’s (1982) study.

### **Pilot Study**

Consistent with best practices, I conducted a pilot study to verify if the high assertive/low assertive manipulation was adequately captured in the videos and to pre-test the survey (Polit et al., 2001; Van Teijlingen & Hundley, 2001). The pilot study is an opportunity to test the

methodology and all the components of the major study, including instruments, directions, data recording form, and participant selection (Lackey & Wingate, 1998; Van Ort, 1981).

The pilot study was divided into two stages and involved a total of 83 participants. The first stage checked the manipulation of assertiveness and included 40 participants. Stage 2 pretested the complete instrument with 43 participants.

**Study materials.** I developed the job description, resume, and interview scripts for my study based on Rudman and Glick's (1999) study on backlash toward agentic women. One of their predictions was that the agentic female candidate would be perceived as lacking social skills when compared to the male candidate. The consequence would be that the agentic female candidate would be less likely to be hired. Given the similarities between Rudman and Glick's (1999) study and this research in terms of the use of videos with agentic and communal male and female candidates to investigate backlash, I opted to use a similar context. The context of Rudman and Glick's (1999) investigation was a selection process for the position of computer lab manager. The context of my study was an interview for a promotion to a junior management position in IT in a U.S.-based company.

I selected a name for the candidate that would work for a man or woman, Terry Smith. Terry is an Information Technology (IT) specialist who already works for the company. If selected, this will be Terry's first management position.

I wrote a job description (Appendix A) based on the job description detailed in Rudman and Glick's (1999) study, including language that the desired candidate should be "technically skilled, ambitious, strongly independent, able to work well under pressure" (p. 1006). My job description also stated the candidate should be "attentive to the needs of the members of the team" which was also adapted from Rudman and Glick's (1999) study. I added the words



“team-oriented” and “results-oriented” because they are common in job descriptions and are characteristics that are widely expected of people in leadership roles today. The selected candidate will manage six subordinates.

I also created a resume (Appendix B). The resume included all the characteristics listed in the job description. The objective was to have as close a match between the job description and resume as possible, as the manipulation in this study was only the candidate's assertiveness and gender. Therefore, the candidate should be qualified for the described position so that what would possibly influence differences in perception would be the level of assertiveness and the gender of the candidates.

I created four videos of Terry interviewing for a promotion opportunity. I hired a male and a female actor who had a similar appearance and recorded each answering identical interview questions twice, once in an explicitly assertive manner and once in a non-assertive way. Every effort was made to keep everything else about the videos similar, including the actors' clothing (dark suits and white shirts) and the background. Both actors had American accents and dark hair. The same questions were asked in the assertive and non-assertive interviews, and answers varied between conditions to manipulate assertiveness.

Two video scripts, adapted from the scripts used in Rudman (1998) and Rudman and Glick (1999) were used (Appendix C). Dr. Rudman kindly shared the interview scripts with me and I adapted them to the context of an opportunity for a promotion. In the first script, answers were openly assertive; in the second, responses were non-assertive. Both scripts included the same questions: (1) “Are you a good self-starter? Describe an example where you took the initiative on a project;” (2) “Would you describe yourself as competitive?”; (3) “How do you propose to keep up to date with technological advances?”; (4) “What kind of leadership skills

would you bring to the job?"; (5) "How will you handle conflict resolution?"; and (6) "Why are you the best candidate for this position?" The questions were displayed on a black screen, appeared for 10 seconds, and were followed by videos of the candidate answering the questions while seated in an office. The videos were shot from the waist up.

Non-assertive candidates spoke modestly about their accomplishments and skills. They demonstrated warmth, friendliness, sensitivity to the needs of others, and being good listeners (Rudman & Glick, 1999). Additionally, their tone of voice was also soft, and their speech was hesitant (Kelly et al., 1982). Assertive candidates, on the other hand, responded in a direct, self-confident manner. Besides self-promoting (Eagly & Carli, 2012), their tone of voice was louder (Williams & Tiedens, 2016). They demonstrated competitiveness and authority, openly made eye contact with the camera while speaking, and displayed a low level of hesitation (Williams & Tiedens, 2016). Examples of the non-assertive and assertive answers to the question "How will you handle conflict resolution?" are:

*Non-assertive.* "Sometimes conflicts simply arise from misunderstandings. That's why I like to get people together to talk out conflicts when they come up. That way, we can come to a solution that works for the whole group."

*Assertive.* "I like to be direct. I have no qualms about saying, "Look, we've got a problem," and addressing the issue head-on. Conflicts are a part of life, and the sooner you address them, the more efficient and productive you'll be."

Two of Crummer's faculty members and three members of EDDBA Cohorts 05 and 06 evaluated the job description, resume, and videos and found them to be appropriate. These materials were pretested in the two pilot studies without any indication of problems.

**Stage 1.** Separate groups of participants assessed one of the following sets of videos: one set included both the male and female explicitly assertive candidates, and a second set included both the male and female non-assertive candidates. The two videos in each condition (assertive/non-assertive) were randomly displayed to show either the male first and the female candidate second or the female first and the male candidate second.

Sixty-four people received an invitation email and were who were randomly assigned to watch either the two assertive candidates' interviews or the two non-assertive ones. A total of 40 people responded to the invitation. Twenty-three participants assessed the assertive candidates, and 17 respondents assessed the non-assertive candidates. After watching each of the two videos (of the male and female candidates), participants answered survey questions about the candidate. The survey included a measure of assertiveness developed by Richmond and McCroskey (2013), which served as a manipulation check for assertiveness manipulation. The survey also included a measure of physical attractiveness by Manning and Quinton (2007) because people tend to prefer attractive individuals (Dipboye et al., 1977; Dossinger et al., 2019; Morrow et al., 1990). Physical attractiveness can confound research results as prior research shows there are career advantages for more attractive individuals (Dossinger et al., 2019), including the relationship between attractiveness and promotability (Morrow et al., 1990). Participants also answered a question about how old they thought the candidates were to assess whether there were significant differences in perceptions of the candidates' ages.

**Stage 2.** For the second stage of the pilot study, 43 participants, divided into 11 millennials and 32 older workers, 19 male and 24 female, took the complete Qualtrics survey to pre-test the final instrument (Appendix E). The Qualtrics platform provided a total of 31 respondents, and 12 participants were Crummer Graduate School of Business at Rollins College

EDBA, MBA students, or people with whom these students shared the link to the survey. The number of participants represented more than ten percent of the sample size planned for the main study, as suggested by Lackey and Wingate (1998). In this second stage of the pilot study, the following items were assessed: (1) instructions, (2) videos with the manipulation of levels of assertiveness (high/low), (3) measures of assertiveness, (4) measures of likability, (5) measures of competence, (6) measures of recommendation for promotion, (7) perception of attractiveness of the candidates, (8) previous male and/or female boss, (9) assessor's age, (10) assessor's gender, and (11) time required by participants to complete the online survey.

### **Participants in the Main Study**

The main study included nine predictors and three control variables, which using a rule-of-thumb of 10 observations per variable required a minimum of 120 participants. The online tool [danielsoper.com](http://danielsoper.com) was also used to determine the optimal number of respondents (Soper, 2014). This is a sample size calculator for multiple regression to suggest the minimum required sample size for a given study, considering the probability level, the number of predictors in the model, the anticipated effect size, and the desired statistical power (Soper, 2014). This online tool has been cited 241 times, as in Balaji and Roy (2017), Wouters et al. (2014), and Roy et al. (2018). At a desired statistical power of 0.8, a probability level of 0.05, and an effect size of 0.15, the recommended number of participants was 127. I initially planned to recruit 150 participants to increase the power of the study. However, once the pilot study was implemented and the effect size was estimated, the target sample was revised as discussed below to guarantee that there would be enough participants from the millennial generation and older workers.

Power analysis was implemented utilizing the sensitivity power analysis app GPower 3.1. This app has been used in different studies (Dymecka et al., 2021; Faul et al., 2009; Papeo &

Abassi, 2019). Based on the means gathered in the pilot study and the number of conditions, I calculated the effect size, and the result was 0.3. At a desired statistical power of 0.8, a probability level of 0.05, and an effect size of 0.3, the recommended number of participants was 128. At the statistical power of 0.95 with all other items held constant, the suggested number of respondents was 196. I contracted with Qualtrics to provide 200 respondents who are 24 years old or older, hold at least an associate or bachelor's degree, and have a minimum of two years of work experience, to include 100 millennials and 100 older workers randomly assigned to the four experimental conditions. I also solicited responses from Crummer Graduate School of Business at Rollins College EDDBA and MBA students and alumni.

## **Measures**

### **Dependent Variable.**

*Recommendation to promote the candidate (Promotability).* Promotability was assessed in two ways. First, the three-item scale by Thacker and Wayne (1995) (Cronbach's alpha = .82) measured the recommendation to promote the leader. This article has been cited 238 times, and the scale was used in Hoobler et al. (2009). The original items are: "I believe that this employee will have a successful career," "If I had to select a successor for my position, it would be this candidate," and "I believe this subordinate has high potential." The items were slightly modified to the circumstances of this study and read: "I believe this candidate will have a successful leadership career," "If I had to select a candidate for the available management position, I would select this candidate," and "I believe this candidate has high potential." Answers were provided on a 7-point scale with anchors at 1 = "strongly disagree" and 7 = "strongly agree." This variable was assessed in a second way to be similar to how a Human Resources practitioner would rate candidates. Participants answered the following question: "To what extent do you

recommend we hire this candidate for the position in the job description you read?” Answers were provided on a seven-point scale ranging from 1 = “Not Hire” to 7 = “Hire.” For convergent validity, a correlation was calculated between the answers to this question and the mean of the items in the promotability scale.

### **Independent Variables.**

***Candidate assertiveness (CandidateAssertiveness).*** Candidate assertiveness is a dichotomous variable (high explicit assertiveness/low assertiveness) manipulated in this experimental study. Four videos were produced in which a female and a male candidate displayed both high and low assertiveness. As a manipulation check, perceptions of the candidate’s assertiveness were measured in the pilot study using the Socio-Communicative Style Scale, developed by Richmond and McCroskey (2013) (Cronbach’s Alpha: .90). Responses were provided on a 7-item scale anchored by 1 = “strongly disagree,” and 7 = “strongly agree.” The items are: “defends own beliefs,” “independent,” “forceful,” “has a strong personality,” “assertive,” “dominant,” “willing to take a stand,” “acts as a leader,” and “competitive.” This scale was developed in 1985 and used by Punyanunt-Carter and Carter (2015) and Thompson et al. (1990).

***Candidate gender (CandidateGender).*** This is a dichotomous variable (male or female candidate) manipulated in this experimental study.

***Perceptions of candidate’s likability (Likability).*** Perceptions of the candidate’s likability were measured using six items from The Reysen Likability Scale (Reysen, 2005). Responses were provided on a 7-point Likert scale (1 = “strongly disagree” and 7 = “strongly agree”). This scale has been used in multiple studies (Graham et al., 2008; Wieber et al., 2014), and the Cronbach’s alphas ranged from .90 to .91. The items are: “This person is friendly,”

“This person is likable,” “This person is warm,” “This person is approachable,” “I would ask this person for advice,” and “I would like to be friends with this person.”

***Perceptions of candidate’s competence (Competence).*** Perceptions of the candidate’s competence were measured using the seven-item bipolar leader competence scale by Cruz et al. (1999) (Cronbach’s alpha = .84). This article has been cited 127 times. The seven-point semantic differential scale uses the following anchors: incompetent/competent, incapable/capable, logical/illogical, skilled/unskilled, inexperienced/experienced, unintelligent/intelligent, not knowledgeable/ knowledgeable.

***Assessor’s generation (AssessorGeneration).*** Participants provided their year of birth. From this, the assessors’ generation was coded as zero for older workers, born in 1980 or before, and one for millennials, born between 1981 and 1996 (Pew Research Center, 2019). In addition, for convergent validity, assessors were asked, “Which generation do you feel you are part of?” The options were Millennials, Generation X, and Baby Boomers. A Chi-Square test was used to examine the convergent validity between the answers to this question and the coded generations calculated from age.

**Control Variables.** I controlled for three variables: assessors’ gender, assessors’ age, and the candidates’ physical attractiveness. Information about whether assessors have worked for a male and/or female leader was also collected as well as whether respondents knew the actor or actress in the video

***Gender of assessor (GenderAssessor).*** Previous studies refer to the impact of the observers’ sex on the perceptions of others. In general, men are more critical of women’s leadership (Eagly et al., 1992). They may display a stronger tendency than female observers to perceive women as less qualified than men for leadership (Eagly & Karau, 2002). According to

a study by Heilman et al. (1995), male managers rated female managers as more agentic and less communal as compared to other women. Therefore, this study controlled for assessors' gender. Assessors were asked to identify their gender by answering the question, "What is your gender?" The options were: male, female, and other or prefer not to answer.

***Assessors' age (AssessorAge).*** Assessors provided their year of birth. Their chronological age was calculated from this number to control for age because age is confounded with generation. The generation variable must be significant after controlling for age to show that an effect is due to generation.

***Physical attractiveness of candidates (Attractiveness).*** Previous studies indicate that physical attractiveness has an important effect on hiring (Desrumaux et al., 2009; Marshall et al., 1998) as well as on promotion decisions (Marlowe et al., 1996). Research also indicates that physical appearance can be the most salient, if not the strongest, factor that affects manager judgments (Quereshi & Kay, 1986). Therefore, this study controlled for the physical attractiveness of the candidates. Participants in the pilot study were asked to evaluate the level of attractiveness of the candidate utilizing a three-item 7-point Likert scale, with two anchors (from very unattractive to very attractive), and the mean was used as a control variable in the main study. The items, adapted from the scale used by Manning and Quinton (2007), are: "How physically attractive do you consider the candidate to be?" "How attractive do you consider his/her face to be?" "How attractive do you consider his/her voice to be?"

***Previous male and/or female leader (PFBoss, PMBoss).*** Men's construal of leadership is often more masculine than that of women (Eagly & Karau, 2002), and men are less likely than women to have had a female manager (Reskin & Ross, 1995). In a study by Duehr and Bono (2006), participants with positive past experiences with female managers tended to rate women



higher on management characteristics. Therefore, I collected the number of years assessors have worked for male and female leaders during their careers by asking them to indicate the “Total number of years you have worked under the supervision of a male [female] boss.”

**Actor/Actress recognition.** Participants were asked, “Have you ever met the person in the video?” so that anyone who indicated they had met the actor/actress could be removed from the respondent base before analyzing the data.

### **Attention Checks**

The research questionnaire included five attention checks. The objective of using attention check questions is to identify careless respondents (Kung et al., 2018) and to screen out participants who don’t pay attention before survey analyses (Maniaci & Rogge, 2014). They also help identify non-human participants (Maniaci & Rogge, 2014). Only respondents who were able to answer these five questions correctly as they appeared in the survey were allowed to continue completing the survey. Any wrong answer resulted in the termination of the survey to that respondent. Examples of the attention check questions utilized in this survey are: “Does the resume state that the candidate is team-oriented?” and “What is  $4 + 4$ ?”

### **Participant Debrief**

At the end of the online survey, participants were informed of the study title: “Study Title: Effects of candidate gender and assertiveness on likability and promotability to a leadership position: a comparative study of U.S. Millennials and older U.S. workers.” They were also informed about the purpose of the study and the reason for not revealing the study purpose in the consent document signed at the beginning of the survey. The consent document did not indicate the details of the study earlier because including that information would have the

potential to act as a "primer" where there is a potential risk that participants might be influenced to modify their behaviors in the online survey.

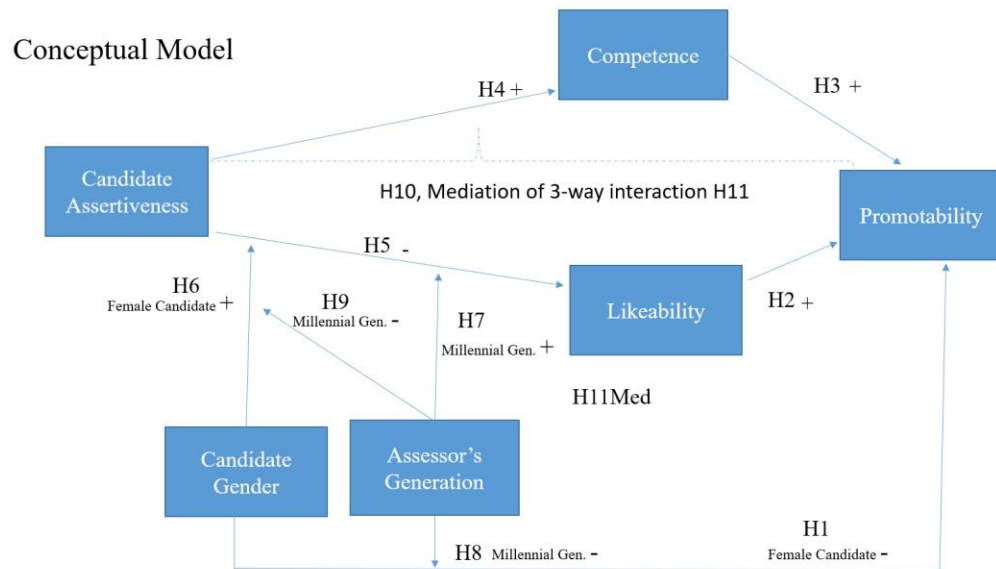
### **List of Variables, Hypotheses, and Regression Equations**

In this study, multiple regression analysis was used to test the proposed relationships in the 11 hypotheses. Multiple regression analysis is used to assess the influence of two or more variables on a dependent variable (Christensen et al., 2014; George & Mallery, 2016). It is appropriate for this dissertation because the method involves a true experiment and has a continuous dependent variable and categorical independent variables, and moderators (Osborne, 2019). Experimental designs answer questions about cause and effect when an independent variable causes changes in the dependent variable (Christensen et al., 2014). This study utilizes a 2x2 factorial design. A 2x2 factorial design is recommended when “two or more independent variables are studied to determine their separate and joint effects on the dependent variable” (Christensen et al., 2014, p. 234). This study aims at analyzing both main effects, which are defined as the influence of one independent variable on the dependent variables, and interactions, “when the effect of one independent variable on the dependent variable varies at the different levels of the other independent variable.” (Christensen et al., 2014, p. 235). Multiple regression analysis is appropriate for this statistical analysis due to its capability of analyzing both main effects and interactions between effects in situations where there are not multiple indicators for the study’s independent variables, as is the case for this experiment, which manipulates assertiveness and gender.

The regression equations for each hypothesis are as follows:

**Figure 2**

*Conceptual Model*



1. CandidateAssertiveness
2. Competence
3. Likability
4. CandidateGender
5. AssessorGeneration
6. CandidateAssertiveness\*CandidateGender
7. CandidateAssertiveness \* AssessorGeneration
8. CandidateGender \* AssessorGeneration
9. CandidateAssertiveness \* CandidateGender \* AssessorGeneration (2 X 2 X 2)
10. Attractiveness
11. AssessorAge
12. GenderAssessor

*H1: Female candidates for a leadership position will be rated as less promotable than male candidates.*

*H2: Perceptions of a candidate's likability will be positively related to ratings of promotability to a leadership position.*

*H3: Perceptions of a candidate's competence will be positively related to ratings of promotability to a leadership position.*

Promotability =  $\alpha + \beta_1$ Attractiveness +  $\beta_2$ AssessorAge +  $\beta_3$ GenderAssessor +  **$\beta_4$ CandidateGender** (H1) +  **$\beta_5$ Likability** (H2) +  **$\beta_6$ Competence** (H3) +  $e$

*H4: Assertive behaviors will be positively related to perceptions of the leadership candidate's competence.*

Competence =  $\alpha + \beta_1$ Attractiveness +  $\beta_2$ AssessorAge +  $\beta_3$ GenderAssessor +  **$\beta_4$ CandidateAssertiveness** +  $e$

*H5: Assertive behaviors will be negatively related to perceptions of the leadership candidate's likability.*

*H6: Assertive behaviors will be more negatively related to likability for female candidates than for male candidates for a promotion to a leadership position.*

*H7: Assertive behaviors will be more negatively related to perceptions of the leadership candidate's likability when assessed by millennials than by members of older generations.*

*H9: The moderating effect of gender on the relationship between a candidate's assertive behavior and the candidate's likeability (the negative impact on likeability is stronger for female candidates) will be weaker when the assessor is a member of the millennial generation than when the assessor is a member of an older generation.*

$$\begin{aligned} \text{Likability} = & \alpha + \beta_1 \text{Attractiveness} + \beta_2 \text{AssessorAge} + \beta_3 \text{CandidateGender} + \beta_4 \text{AssessorGender} \\ & + \beta_5 \text{CandidateAssertiveness} \text{ (H5)} + \beta_6 \text{AssessorGeneration} \text{ (H7)} + \\ & \beta_7 \text{AssessorGeneration} \times \text{CandidateGender} + \beta_8 \text{AssessorGeneration} \times \text{CandidateAssertiveness} + \\ & \beta_9 \text{CandidateAssertiveness} \times \text{CandidateGender} \text{ (H6)} + \\ & \beta_{10} \text{AssessorGeneration} \times \text{CandidateGender} \times \text{CandidateAssertiveness} \text{ (H9)} \end{aligned}$$

*H8: The effect of a candidate's gender on perceptions of promotability for a leadership role will be weaker when assessed by millennials than when assessed by members of older generations.*

*H10: The moderating effect of gender on the relationship between a candidate's assertive behavior and the candidate's promotability will be weaker when the assessor is a member of the millennial generation than when the assessor is a member of an older generation.*

$$\begin{aligned} \text{Promotability} = & \alpha + \beta_1 \text{CandidateAttractiveness} + \beta_2 \text{AssessorAge} + \beta_3 \text{CandidateGender} + \\ & \beta_4 \text{AssessorGender} + \beta_5 \text{CandidateAssertiveness} + \beta_6 \text{AssessorGeneration} + \\ & \beta_7 \text{AssessorGeneration} \times \text{CandidateGender} \text{ (H8)} + \\ & \beta_8 \text{AssessorGeneration} \times \text{CandidateAssertiveness} + \beta_9 \text{CandidateAssertiveness} \times \text{CandidateGender} + \\ & \beta_{10} \text{AssessorGeneration} \times \text{CandidateGender} \times \text{CandidateAssertiveness} \text{ (H10)} \end{aligned}$$

*H11: The three-way interaction between candidate assertiveness, gender, and assessor generation on promotability described in H10 will be partially mediated by perceptions of the candidate's likability.*

$$\begin{aligned} \text{Promotability} = & \alpha + \beta_1 \text{CandidateAttractiveness} + \beta_2 \text{AssessorAge} + \beta_3 \text{CandidateGender} + \\ & \beta_4 \text{AssessorGender} + \beta_5 \text{CandidateAssertiveness} + \beta_6 \text{AssessorGeneration} + \\ & \beta_7 \text{AssessorGeneration} \times \text{CandidateGender} + \beta_8 \text{AssessorGeneration} \times \text{CandidateAssertiveness} + \\ & \beta_9 \text{CandidateAssertiveness} \times \text{CandidateGender} + \end{aligned}$$

$\beta_{10} \text{AssessorGeneration} \times \text{CandidateGender} \times \text{CandidateAssertiveness} + \beta_{11} \text{Likability} +$   
 $\beta_{12} \text{Competence} + e$

## **CHAPTER 4 - RESULTS**

This chapter describes the study results. First, the results of the pilot study stages one and two are presented. Next, the demographic data on the participants, descriptive statistics, and correlations for the variables in the main study are presented. Finally, the multiple regression analyses and results of the hypothesis tests are presented.

### **Results of Pilot Study - Stage 1**

A total of 40 participants from Crummer Graduate School of Business at Rollins College MBA and Executive Doctorate of Business Administration students and people they referred to complete the survey participated in stage 1 of the pilot study. An invitation email was sent to 64 people who were randomly assigned to watch either the two assertive or the two non-assertive videos. Twenty-three participants watched the former, and 17 participants watched the latter. In the non-assertive sample, 9 respondents were male, 7 female, and one preferred not to disclose. The assertive sample included 12 male and 11 female respondents. All participants worked in the U.S. The sample included 52.5% of participants from the U.S., 30% originally from Brazil, 5% from Venezuela, and one respondent each from Iceland, India, Venezuela, West Indies, and Egypt.

**Assertiveness.** The Cronbach’s alpha for the assertiveness scale was .92. The results for the manipulation check for assertiveness are shown in Table 1. An independent sample t-test was used to investigate the differences in perceived assertiveness. The results indicate that respondents perceived the actors in the assertive condition (M= 5.40, SD = .94) to be significantly more assertive than in the non-assertive condition (M = 3.90, SD = 1.13) ( $p < .001$ ). Thus, the manipulation of assertiveness was effective.

**Table 1**

*Descriptive Statistics and T-Test for Differences in Perceived Assertiveness - Pilot Study Stage 1*

Measure	<i>M</i>	<i>SD</i>	Sig. (2-tailed)
Assertive Candidates	5.40	.94	
Non-Assertive Candidates	3.90	1.36	
Assertive vs. Non-Assertive Candidates			< .001
Male Assertive	5.12	0.81	
Male Non-Assertive	3.59	1.27	
Male Assertive vs. Male Non-Assertive			< .001
Female Assertive	6.01	0.70	
Female Non-Assertive	4.16	1.29	
Female Assertive vs. Female Non-Assertive			< .001
Male Non-Assertive vs. Female Non-Assertive			0.200
Male Assertive vs. Female Assertive			< .001

*Note:* N=23 for the assertive condition and 17 for the non-assertive condition.

In the assertive condition, the mean perceived assertiveness for the male actor was 5.12 (SD = 0.81), and the mean for the female actor was 6.01 (SD = 0.70). The independent sample t-test (Table 1) showed that in the assertive condition, the female candidate was considered more assertive than the male candidate ( $p < .001$ ), even though the actors followed identical scripts and attempted to display identical verbal and nonverbal behaviors.

In the non-assertive condition, the mean for the male actor was 3.59 (SD = 1.27), and for the female actress, the mean was 4.16 (SD = 1.29). The independent sample t-test indicated that



the difference between the two candidates was not significant ( $p = .20$ ) in this condition (Table 1).

**Attractiveness.** The Cronbach's alpha for the attractiveness scale was .87. To test whether there were differences in the perceived attractiveness of the male actor compared to the female actor, I performed a t-test. As shown in Table 2, there was not a significant difference between the perceived attractiveness of the male ( $M = 4.06$ ,  $SD = 1.09$ ) vs. the female ( $M = 4.24$ ,  $SD = 1.21$ ) actor across conditions ( $p = .481$ ). I also investigated whether there were differences in perceptions of the candidates' attractiveness in the different assertiveness conditions and found none. There was no significant difference in the perceived attractiveness of the male actor in the assertive condition ( $M = 4.20$ ) compared to the female actress ( $M = 4.23$ ) in the same condition ( $p = .927$ ). The same is true about the non-assertive condition, where the mean for the male candidate was 3.86, and for the female candidate, it was 4.25. The independent t-tests showed no significant differences between the candidates: Assertive vs. Non-Assertive Candidates ( $p = .636$ ), Male Assertive vs. Male Non-Assertive ( $p = .337$ ), Female Assertive vs. Female Non-Assertive ( $p = .954$ ), Male Non-Assertive vs. Female Non-Assertive ( $p = .384$ ), and Male Assertive vs. Female Assertive ( $p = .927$ ) (Table 2). This indicates that differences in the attractiveness of the actors are unlikely to be a confound in the study.

**Table 2***Means, Standard Deviations and T-Test for Differences in Attractiveness – Pilot Study Stage 1*

Measure	<i>M</i>	<i>SD</i>	Sig. (2-tailed)
Male Candidates	4.06	1.09	
Female Candidates	4.24	1.21	
Male vs. Female Candidates			.481
Assertive Candidates	4.22	0.96	
Non-Assertive Candidates	4.06	1.14	
Assertive vs. Non-Assertive Candidates			0.636
Male Assertive	4.20	0.89	
Male Non-Assertive	3.86	1.32	
Male Assertive vs. Male Non-Assertive			0.337
Female Assertive	4.23	1.21	
Female Non-Assertive	4.25	1.27	
Female Assertive vs. Female Non-Assertive			0.954
Male Non-Assertive vs. Female Non-Assertive			0.384
Male Assertive vs. Female Assertive			0.927

*Note:* N=23 for the assertive condition and 17 for the non-assertive condition.

**Age.** Respondents were asked to estimate the age of the candidates. The independent t-test showed that there was not a significant difference between the mean of the perceived age of the male ( $M = 27.45$ ) and female ( $M = 28.37$ ) candidates ( $p < .240$ ). The mean for the assertive male candidate was 26.70, for the assertive female candidate, 27.35, for the non-assertive male, it was 28.47, and for the non-assertive female, it was 29.76. Thus, non-assertive candidates were considered slightly older, but all ages were very close and within the millennial age group.

### **Pilot Study – Stage 2**

The second stage of the pilot study, which pre-tested the final instrument, included a sample of 43 participants. The Qualtrics online platform provided 31 respondents, and the other 12 individuals accessed the survey through emails sent to the Crummer Graduate School of Business at Rollins College EDDBA, MBA students, or people with whom these students shared

the link to the survey. The reliability of all of the scales was assessed with a Cronbach's alpha and found to be adequate: promotability  $\alpha = .95$ , competence  $\alpha = .91$ , Likability  $\alpha = .97$ , and attractiveness  $\alpha = .92$ .

The Qualtrics platform was utilized for the implementation of the pilot study. First, I verified the survey flow to ensure that participants were advancing through the complete survey. The assessed items include instructions, random distribution of the four videos with the manipulation of levels of assertiveness (high/low) and gender (male/female), measures of (1) recommendation for promotion, (2) assertiveness, (3) competence, (4) likability, (5) attractiveness of the candidates, previous male and/or female boss, assessor's age and country of origin, assessor's gender, and time required by participants to complete the online survey. Then, to ensure that a complete data analysis could be implemented, data cleaning and initial analysis were conducted, including correlations and power analysis. Because all of the results were as expected, no changes to the survey questionnaire were made in the final survey due to this pilot study stage.

### **Results of Main Study**

The final web-based survey was sent out to 1,145 Qualtrics participants, including those who completed the survey and those screened out or terminated. All participants were based in the United States. Qualtrics sent an anonymous link to established partner panel providers. From all of those who attempted to answer the questionnaire, 357 respondents were terminated due to selecting a wrong answer on the first attention check question. Thirty-five additional respondents were terminated after choosing the wrong answer to the second attention check question. Three participants indicated 1997 as their year of birth, and they were also excluded from the respondent base as, although they are 24 years old, they are not part of the millennial

generation. In the end, there were 219 valid respondents from Qualtrics. All other participants were screened out for not having the pre-requisites for the survey, including age, educational level, and two years of previous work experience.

Because there were only 18 complete responses from the Rollins participants, a decision was made to use only the data provided by Qualtrics. Thus, all 219 participants in the final analysis were Qualtrics participants who completed 100% of the survey and responded correctly to the five attention checks included in the questionnaire. The 31 participants provided by Qualtrics that were part of the second pilot study are included in the final data analysis as there were no changes implemented to the survey questionnaire as a result of the pilot study.

This study included the manipulation of assertiveness implemented by producing four previously detailed videos, which will be referred to as ‘conditions.’ Condition one depicts a non-assertive male candidate; condition two displays the assertive male candidate; condition three shows the non-assertive female candidate; condition four displays the assertive female candidate. Participants were randomly assigned one of these four conditions. A total of 55 people answered questions about the non-assertive male candidate, 55 about the assertive male, 53 about the non-assertive female, and 56 about the assertive female candidate.

### **Demographic Data**

Participants' level of education was as follows: 9.6% have an associate degree, 47.9% have a bachelor's degree, 34.7% have a master's degree, and 7.8% have a doctorate degree.

Participants' race was as follows: 79.9% are White/Caucasian, 6.4% are Black/African American, 5.9% are Asian/Pacific Islander, 5% are Hispanic/Latino Origin, two are from Hawaii, one is American Indian/Alaskan native, two preferred not to answer, and one indicated "Other". In addition, 95.4% of the participants indicated the U.S. as their country of birth, two

indicated India, and there is one participant each from Armenia, Austria, Colombia, Cuba, India, Iran, Taiwan, Ukraine, and the United Kingdom.

Participants indicated the number of years they have worked under the supervision of a male and/or female boss. Of the 219 respondents, 211 (96%) indicated having worked for a male boss. Also, from among the 219 participants, 198 (90%) had worked for a female boss. 50.2% of them worked under the supervision of a male boss for over eight years, while only 23.3% indicated having worked for a female boss for the same period. When we consider a shorter period, for up to 7 years, the opposite scenario is observed. 67.1% of the participants have worked under the supervision of a female boss, while 46.1% have had the same experience under a male boss. Thus, overall, participants have spent less time working for female bosses.

This study's participants' age range varied from 25 to 77 ( $M = 44.0$ ,  $SD = 13.67$ ). 37% of respondents were 30- to 39-years-olds, followed by 26.5% of 40- to 49-year-olds. There were 10% of 50- to 59-year-olds, 9.1% of 60- to 69-, 8.7% of 25- to 29-, and 8.2% of 70- to 77-year-old respondents.

Respondents indicated their year of birth and were coded as older workers (born in 1980 or before) or millennials (born between 1981 and 1996) (Pew Research Center, 2019). There were 110 millennials and 109 people from older generations. Participants from each of these two generational groups were divided into four conditions related to gender and assertiveness level in the videos. There were 26 older workers and 29 millennials in the "male assertive" condition. In the "female non-assertive" condition, there were 27 older workers and 26 millennials. Finally, 29 older workers and 27 millennials were in the "female assertive" condition.

Participants also answered the question, "Which generation do you feel you are part of?" The options were Millennials, Generation X, and Baby Boomers. A crosstabs analysis was

utilized to look for the relationships between the variables. The results of the Pearson Chi-Square is  $X^2(3, N = 219) = 64.37, p = < .001$ . Therefore, the two variables are dependent. Of the 109 people born in 1980 or before, 90 correctly indicated either “Generation X” or “Baby Boomers,” but 11 indicated “Millennials” as their generation. However, of the 110 people born between 1981 and 1996, the millennial generation, only 58 indicated “Millennials,” 40 chose “Generation X,” and 5 opted for “Baby Boomers.” A total of 15 people indicated “Other.” Thus, Millennials are less likely than members of older generations to identify with their age-based generation.

### **Descriptive Statistics**

The means, standard deviations, Chronbach’s alphas, and Pearson bivariate correlations (two-tailed) for all the study variables are shown in Table 3. The reliability for all variables was acceptable, with all Chronbach’s alphas exceeding .7 (see Table 3). Table 4 shows the means and standard deviations for the key study variables across the four experimental conditions.

### **Correlations**

For convergent validity of the promotability scale by Thacker and Wayne (1995), participants also answered a question similar to how an HR practitioner would rate candidates: “To what extent do you recommend we hire this candidate for the position in the job description you read?” The Pearson Correlation indicates that the two measurements are strongly correlated ( $r = .92, p < .001$ ). The analyses reported in the tables below are based on the Thacker and Wayne promotability scale.

As expected, there is a strong positive correlation between competence and promotability ( $r = .87, p < 0.001$ ) and between likability and promotability ( $r = .76, p < 0.001$ ). Attractiveness also has a strong and positive relationship with promotability ( $r = .66, p < 0.001$ ). The

correlations analysis shows that the candidates' assertiveness did not significantly correlate with promotability ( $r = -.03$ ,  $p = .626$ ).

**Table 3***Correlation of Model Variables, Means, and Standard Deviations*

	M	SD	1	2	3	4	5	6	7	8	9
1.GendAssessor	1.50	.50	-								
2.AssessorAge	44.01	13.67	0.04	-							
3.CandAssert	0.51	0.50	0.10	0.01	-						
4.CandGend	1.50	0.50	-0.01	0.03	0.01	-					
5.AssesorGener	0.50	0.50	0.01	-.79***	0.00	-0.03	-				
6.Attractiveness	4.94	1.38	-0.06	-0.06	-0.12	-0.05	.15*	(.91)			
7.Likability	5.20	1.54	-.13*	-0.07	-.37**	0.01	0.07	.79***	(.96)		
8.Competence	5.99	1.03	-0.07	-0.09	-0.02	0.00	0.08	.61***	.66***	(.95)	
9.Promotability	5.55	1.38	-0.11	-0.12	-0.03	-0.06	0.11	.66***	.76***	.87***	(.93)

*Note.* N = 218 AssessorAge, N = 219 all other variables. Reliability coefficients (Cronbach's alphas) are reported along the diagonal.

GendAssessor = GenderAssessor (coded 1 = male, 2 = female); AssessorAge = AssessorsAge; CandAssert = CandidateAssertiveness

(coded 0 = non-assertive, 1 = assertive); CandGend = Candidate Gender (coded 1 = male, 2 = female); AssesorGener =

AssesorGeneration (coded 0 = older workers, 1 = millennials).

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .



**Table 4***Descriptive Statistics – Variables’ Means and Standard Deviations by Gender and Condition*

CandGend	CandAssert	Promotability		Competence		Likability		Attractiveness	
		M	SD	M	SD	M	SD	M	SD
Male	Non-Assert	5.85	1.13	6.08	.96	5.81	1.01	5.19	1.15
	Assertive	5.41	1.47	5.90	1.14	4.55	1.72	4.84	1.51
	Total	5.63	1.32	5.99	1.05	5.18	1.54	5.01	1.35
Female	Non-Assert	5.33	1.47	5.94	1.07	5.75	1.09	5.01	1.27
	Assertive	5.59	1.40	6.04	0.97	4.72	1.76	4.73	1.54
	Total	5.46	1.43	5.99	1.01	5.22	1.55	4.86	1.42
Total	Non-Assert	5.59	1.33	6.01	1.01	5.78	1.05	5.10	1.21
	Assertive	5.50	1.43	5.97	1.05	4.64	1.74	4.78	1.52
	Total	5.55	1.38	5.99	1.03	5.20	1.54	4.94	1.38

*Note.* N = 219 in total, Male Non-Assertive = 55, Female Non-Assertive = 53, Male Assertive = 55, Female Assertive = 56, Total Non-Assertive = 111, Total Assertive = 108.  
CandGend = CandidateGender, CandAssert = CandidateAssertiveness.

Competence was strongly correlated with attractiveness ( $r = .61, p < 0.001$ ), likability ( $r = .66, p < 0.001$ ) and promotability ( $r = .87, p < 0.001$ ). Surprisingly, there was no significant correlation between assertiveness and competence ( $r = .02, p = .774$ ).

Likability had a significant negative relationship with assertiveness ( $r = -.37, p < 0.001$ ). The more assertive the candidate, the less likable they were considered. Likability also had a strong positive relationship with attractiveness ( $r = .72, p < 0.001$ ), competence ( $r = .66, p < 0.001$ ), and promotability ( $r = .72, p < 0.001$ ). The more likable the candidates, the more competent and promotable they were considered to be. Also, the more attractive the candidate, the more likable they were found to be. There was a weaker correlation with the gender of the assessor ( $r = -.13, p < 0.05$ ), such that male raters rated the candidates as more likable than women raters did (male raters were coded 1 and women raters 2).

Attractiveness had a strong and positive relationship with promotability ( $r = .66, p < 0.001$ ), likability ( $r = .72, p < 0.001$ ) and competence ( $r = .61, p < 0.001$ ). It was weakly

correlated with assessor generation ( $r = .15, p < 0.05$ ). Millennials found the candidates more attractive ( $M = 5.14$ ) than older workers did ( $M = 4.73$ ) (see Table 4).

### Results of the Hypotheses Tests for Promotability

Hypotheses 1, 2, and 3 were tested in the same model using linear regression. The results are shown in Table 5. The R-square indicates that 83% of the variation in promotability was explained by the variables in the model.

**Table 5**

*Hierarchical Regression Results for Promotability*

Variable	B	P	R <sup>2</sup>
Model			0.83***
(Constant)		0.04	
Competence	0.63	0.000	
Likability	0.31	0.000	
Attractiveness	0.05	0.26	
CandidateGender	-0.07	0.02	
GenderAssessor	-0.02	0.51	
AssessorAge	-0.04	0.16	

*Note.* N = 218

Candidate Gender coded 1 = male, 2 = female, GenderAssessor coded 1 = male, 2 = female.

B = Standardized Beta,  $p$  = Significance Level, \*\*\* =  $p < .001$ .

Hypothesis 1 predicted that female candidates for a leadership position would be rated as less promotable than male candidates. As shown in Table 5, the coefficient for candidate gender is significant. Males were coded as one and females as two. The coefficient sign indicates that male candidates are considered more promotable than female candidates ( $\beta = -.07, p < 0.05$ ).

Although the effect size is small, hypothesis one is supported.

Hypothesis 2 predicted that perceptions of a candidate's likability would be positively related to ratings of promotability to a leadership position. As shown in Table 5, the coefficient for likeability was significant ( $\beta = .31, p < .001$ ), supporting Hypothesis 2.

Hypothesis 3 predicted that perceptions of a candidate’s competence would be positively related to ratings of promotability to a leadership position. As shown in Table 5, the coefficient for competence was significant and positive ( $\beta = .63, p < .001$ ), supporting Hypothesis 3.

**Results of the Hypothesis Test for Competence**

Hypothesis 4 predicted that assertive behaviors would be positively related to perceptions of the leadership candidate’s competence. This was tested using multiple regression, and the results are shown in Table 6. As shown in Model 1, the coefficient for candidate assertiveness is not significant ( $\beta = .05, p = .36$ ). Therefore, Hypothesis 4 was not supported. Attractiveness was strongly related to perceptions of competence ( $\beta = .62, p < .001$ ).

**Table 6**

*Hierarchical Regression Results for Competence*

Variable	B	P	R <sup>2</sup>
Model			0.38***
(Constant)		0.000	
Attractiveness	0.62	0.000	
AssessorAge	-0.05	0.38	
GenderAssessor	-0.03	0.59	
CandidateAssertiveness	0.05	0.36	

*Note.* N = 218

GenderAssessor coded 1 = male, 2 = female, CandidateAssertiveness coded 0 = non-assertive, 1 = assertive

B = Standardized Beta, p = Significance Level, \*\*\* =  $p < .001$ .

**Results of the Hypotheses Tests for Likability**

Hypotheses 5, 6, 7, and 9 were tested using multiple regression in separate steps for the main effects and interactions. The control variable AssessorGender was not significantly related to likability, so it was removed. The results of the regression equations are shown in Table 7.

The R-square for Model 3 shows that together all of the variables account for 60% of the variance in Likability.

**Table 7**

*Hierarchical Regression Results for Likability*

Variable	B	P	R <sup>2</sup>	Adjusted R <sup>2</sup>	R <sup>2</sup> Change
Model 1			0.61***	.60	.61
(Constant)		0.000			
CandidateAssertiveness	-0.29	0.000			
CandidateGender	.06	0.18			
AssessorGeneration	-0.13	0.06			
Attractiveness	0.70	0.000			
AssessorAge	-0.12	0.08			
Model 2			0.61***	.60	.005
(Constant)		0.000			
CandidateAssertiveness	-0.46	0.00			
CandidateGender	0.04	0.62			
AssessorGeneration	-0.15	0.30			
Attractiveness	0.70	0.000			
AssessorAge	-0.13	0.06			
GeneratxGend	-0.05	0.73			
GeneratxAssert	0.11	0.14			
GendxAssert	0.12	0.40			
Model 3			0.62***	.60	.005
(Constant)		0.000			
CandidateAssertiveness	-0.67	0.001			
CandidateGender	-0.03	0.71			
AssessorGeneration	-0.36	0.08			
Attractiveness	0.69	0.000			
AssessorAge	-0.14	0.051			
GeneratxGend	0.17	0.39			
GeneratxAssert	0.47	0.05			
GendxAssert	0.35	0.09			
GendxAssertxGenerat	-0.38	0.11			

*Note.* N = 218

CandidateAssertiveness coded 0 = non-assertive, 1 = assertive, CandidateGender coded 1 = male, 2 = female, AssessorGeneration coded 0 = older workers, 1 = millennials.

Generat = AssessorGeneration, Gend = CandidateGender, Assert = CandidateAssertiveness

B = Standardized Beta, p = Significance Level, \*\*\* = p < .001.

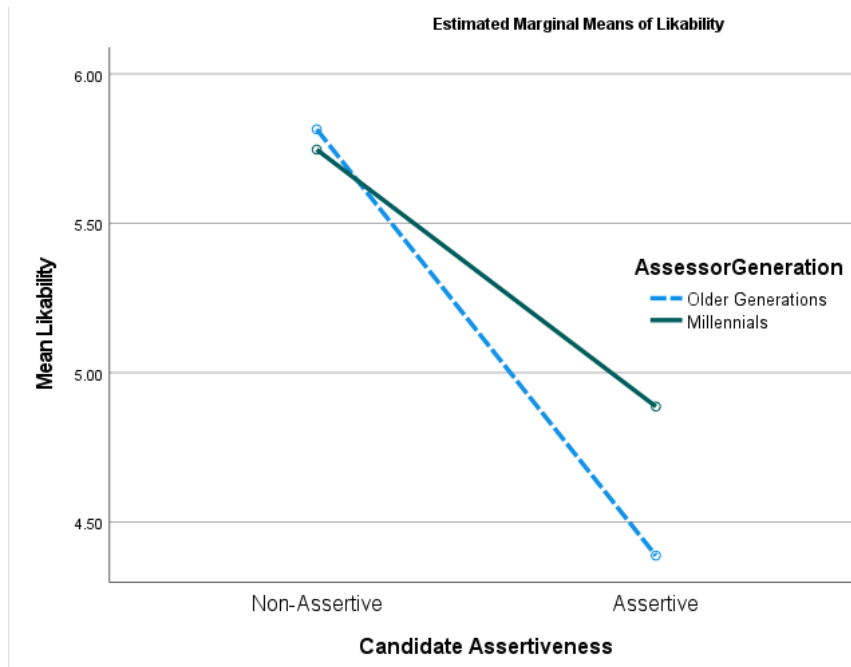
Hypothesis 5 predicted that assertive behaviors would be negatively related to perceptions of the leadership candidate's likability. As shown in Table 7, Model 1, the coefficient for candidate assertiveness was significant ( $\beta = -.29, p < 0.001$ ). Therefore, Hypothesis 5 was supported.

Hypothesis 6 predicted that assertive behaviors would be more negatively related to likability for female candidates than for male candidates for promotion to a leadership position. Table 7, Model 2, indicates that the interaction between assertiveness and gender was not significant ( $\beta = .12, p = .40$ ). Hypothesis 6 was not supported.

Hypothesis 7 predicted that assertive behaviors would be more negatively related to perceptions of the leadership candidate's likability when assessed by millennials than by members of older generations. Table 7, Model 2, indicates that the interaction between assertiveness and generation was not significant ( $\beta = .11, p = .14$ ). However, in Model 3, when the three-way interaction is included in the regression (AssessorGeneration x CandidateGender x CandidateAssertiveness), the interaction between assertiveness and generation becomes significant ( $\beta = .47, p < 0.05$ ). Given that older workers were coded 0 and millennials, 1, the relationship went in the opposite direction than predicted (see Figure 6). Therefore, Hypothesis 7 was not supported.

**Figure 6**

*Effects of Assessor Generation on Likability of Job Candidate*



Hypothesis 9 predicted that the moderating effect of gender on the relationship between a candidate's assertive behavior and the candidate's likability (the negative impact on likability would be stronger for female candidates) would be weaker when the assessor is a member of the millennial generation than when the assessor is a member of an older generation. As indicated in Table 7, Model 3, the three-way interaction was not significant ( $\beta = -.38, p = .11$ ). Therefore, Hypothesis 9 was not supported.

### **Results for Millennials vs. Older Generations**

Hypotheses 8 and 10 were tested using multiple regression. The results are shown in Table 8. The R-square shows that together the variables account for 46% of the variance in Promotability (see Table 8, Model 3).

**Table 8***Hierarchical Regression Results for Millennials, Older Generations, and Promotability*

Variable	B	P	R <sup>2</sup>	Adjusted R <sup>2</sup>	R <sup>2</sup> Change
Model 1			0.46***	.44	.46
(Constant)		0.000			
Attractiveness	0.67	0.000			
AssessorAge	-0.16	0.05			
CandidateGender	-0.03	0.55			
GenderAssessor	-0.06	0.23			
CandidateAssertiveness	0.05	0.35			
AssessorGeneration	-0.11	0.19			
Model 2			0.48***	.46	.02
(Constant)		0.000			
Attractiveness	0.67	0.000			
AssessorAge	-0.17	0.04			
CandidateGender	-0.19	0.03			
GenderAssessor	-0.07	0.16			
CandidateAssertiveness	-0.35	0.04			
AssessorGeneration	-0.23	0.19			
generatxgend	0.10	0.53			
generatxassert	0.03	0.70			
gendxassert	0.42	0.01			
Model 3			0.48***	.46	.004
(Constant)		0.000			
Attractiveness	0.67	0.000			
AssessorAge	-0.17	0.04			
CandidateGender	-0.25	0.01			
GenderAssessor	-0.07	0.15			
CandidateAssertiveness	-0.53	0.02			
AssessorGeneration	-0.41	0.08			
generatxgend	0.30	0.20			
generatxassert	0.34	0.22			
gendxassert	0.62	0.01			
gendxassertxgenerat	-0.33	0.24			

*Note.* N = 218, B = Standardized Beta, *p* = Significance Level.

CandidateGender coded 1 = male, 2 = female, GenderAssessor coded 1 = male, 2 = female, CandidateAssertiveness coded 0 = non-assertive, 1 = assertive, AssessorGeneration coded 0 = older generations, 1 = millennials.

Generat = AssessorGeneration, Gend = CandidateGender, Assert = CandidateAssertiveness.

Hypothesis 8 predicted that the effect of a candidate's gender on perceptions of promotability to a leadership role would be weaker when assessed by millennials than when assessed by members of older generations. As shown in Table 8, Model 2, the interaction between AssessorGeneration and CandidateGender was not significant ( $\beta = .10$   $p = .53$ ). Therefore, Hypothesis 8 was not supported.

An interesting finding is the significance of AssessorAge in all models predicting promotability ( $\beta = -.17$ ,  $p = < .05$ , Model 3). This indicates that younger people rated the candidates more promotable than older people. The relationship between AssessorGeneration and Promotability, although not significant, was also in the direction of millennials ( $M = 5.7$ ), rather than older workers ( $M = 5.4$ ) rating the candidates as more promotable after controlling for assessor's age ( $\beta = -.41$ ,  $p = .08$ , Model 3). However, in Table 5, when likability and competence were included in the regression for Promotability, AssessorAge was not significant ( $\beta = -.04$ ,  $p = .16$ ).

Hypothesis 10 predicted that the moderating effect of gender on the relationship between a candidate's assertive behavior and the candidate's promotability would be weaker when the assessor is a member of the millennial generation than when the assessor is a member of an older generation. The coefficient for the three-way interaction shown in Table 8, Model 3 was not significant ( $\beta = -.33$ ,  $p = .24$ ). Therefore, Hypothesis 10 was not supported.

Hypothesis 11 predicted that the three-way interaction between candidate assertiveness, gender, and assessor generation on promotability described in H10 would be partially mediated by perceptions of the candidate's likability. Given that Hypothesis 10 was not supported, mediation could not exist. Therefore, Hypothesis 11 was not supported.



## Summary of Findings

Table 9 provides a summary of the results for all hypotheses. These results are discussed in Chapter 5.

**Table 9**

### *Summary of Findings*

Hypotheses	Result
H1: Female candidates for a leadership position will be rated as less promotable than male candidates.	Hypothesis supported.
H2: Perceptions of a candidate's likability will be positively related to ratings of promotability to a leadership position.	Hypothesis supported.
H3: Perceptions of a candidate's competence will be positively related to ratings of promotability to a leadership position.	Hypothesis supported.
H4: Assertive behaviors will be positively related to perceptions of the leadership candidate's competence	Hypothesis not supported.
H5: Assertive behaviors will be negatively related to perceptions of the leadership candidate's likability.	Hypothesis supported.
H6: Assertive behaviors will be more negatively related to likability for female candidates than for male candidates for a leadership position.	Hypothesis not supported.
H7: Assertive behaviors will be more negatively related to perceptions of the leadership candidate's likability when assessed by millennials than by members of older generations	Hypothesis not supported. Assertive behaviors were more negatively related to perceptions of likability when assessed by older workers, which goes in the opposite direction of the hypothesis.
H8: The effect of a candidate's gender on perceptions of promotability for a leadership role will be weaker when assessed by millennials than when assessed by members of older generations	Hypothesis not supported.
H9: The moderating effects of gender on the relationship between a candidate's assertive behavior and the candidate's likeability (the negative impact on likeability is stronger for female candidates) will be weaker when the assessor is a member of the millennial generation than when the assessor is a member of an older generation.	Hypothesis not supported.
H10: The moderating effect of gender on the relationship between a candidate's assertive behavior and the candidate's promotability will be weaker when the assessor is a member	Hypothesis not supported.

Hypotheses	Result
of the millennial generation than when the assessor is a member of an older generation.	
H11: The three-way interaction between candidate assertiveness, gender, and assessor generation on promotability described in H10 will be partially mediated by perceptions of the candidate's likability.	Hypothesis not supported.

## **CHAPTER 5 – DISCUSSION, LIMITATIONS, AND FUTURE RESEARCH**

This chapter offers a discussion of the research findings presented in Chapter 4. The chapter begins by revisiting the purpose of this study. Next, a general discussion of the findings, including managerial implications, is presented, followed by the study limitations. Finally, recommendations for future research are made.

### **Study Overview**

This study responded to a call for more research on factors that influence differences in promotability to leadership positions (Gurbuz et al., 2016) for male vs. female job candidates (Eagly et al., 2003). The study examined the impact of assertiveness, perceptions of likability, and competence on promotability. It also analyzed the gender of the candidate to a leadership position and the generation of the assessor (rater) as moderators of these relationships. Using a 2x2 experimental methodology in which participants watched one of four videos with a male and a female actor displaying assertive and non-assertive styles, the results showed that the female candidate was considered slightly less promotable overall, consistent with past research (Eagly et al., 2007; Ely & Rhode, 2010; Ibarra et al., 2013; William & Tiedens, 2016).

Consistent with past research (Shaughnessy et al., 2011), perceptions of the candidate's competence and likability were strongly related to promotability. When both male and female

candidates behaved assertively, they were rated as less likable. Yet, contrary to the hypothesis, this negative effect of assertiveness on likability was not stronger for the female candidate. Also, contrary to the hypothesis and past research (Carli & Eagly, 2011; Eagly & Karau, 2002; Williams & Tiedens, 2016), the assertive candidates were not perceived as more competent.

Also, contrary to the hypothesis, there was no effect of the assessor's (rater's) generation on their ratings of the candidate's promotability. A difference in the impact of the candidate's assertiveness on likability was found, but contrary to the hypothesis, older generations perceived the assertive candidates as less likable. Consistent with past research (Etcoff et al., 2011; Todorov et al., 2005), participants who evaluated the candidates as attractive also found them much more likable and competent.

### **The Double Bind for Women vs. Communality Bonus for Men**

The male candidate for the leadership promotion was rated as slightly more promotable than the female candidate, even after controlling for perceptions of the candidates' competence, likability, and attractiveness. This result was particularly influenced by the positive evaluation of the non-assertive male candidate, who was rated the most promotable of the four conditions. In contrast, the non-assertive female candidate was rated the least promotable of the four conditions (see Table 4). However, although the non-assertive female was rated as the least promotable, she was rated as more likable than the assertive female (see Table 4). This result for the non-assertive female candidate aligns with previous research that a double bind penalizes women's promotability to leadership when they are warm and considerate (Carli & Eagly, 2011; Eagly & Karau, 2002; Ibarra et al., 2013). Women leaders who display more stereotypically feminine behaviors are frequently criticized for not being assertive and confident enough to be competent leaders (Carli & Eagly, 2011; Eagly & Karau, 2002; Ibarra et al., 2013; William &

Tiedens, 2016). Thus, women must choose whether to be less assertive and better liked or more assertive and more promotable to leadership but less liked. This research shows that the double bind continues to be a very relevant obstacle to women who aspire to grow into leadership roles.

In contrast, the non-assertive male candidate in this study was considered both the most likable and the most promotable, thus not facing a trade-off between likability and promotability. The positive evaluation of the non-assertive male candidate can be explained by “the communality-bonus effect for male leaders” or the more positive evaluation toward men when they display certain communal behaviors (Hentschel et al., 2018, p. 112; Shughnessy et al., 2015). While displaying non-assertive and warm behaviors is unimpressive in women, it is noteworthy in men (Eagly & Carli, 2007). This finding challenges the more masculine construal of leadership indicated in previous research in which men are expected to display assertive behaviors like self-confidence and dominance (Eagly & Karau, 2002)

The stronger perceptions of likeability and promotability of the less assertive, warmer male candidate may have been somewhat increased by the coronavirus pandemic, creating a communality-bonus effect for male leaders. Eichenauer et al. (2021) argue that communal leader behaviors are more important to employees in crisis contexts, such as the coronavirus pandemic. Interactions between leaders and their teams mediated by online tools for extended periods have been the norm in many companies. As a result, leaders can count less on body language and in-person interactions to mitigate the impact of assertive behaviors.

As indicated in the Social Role Theory (Eagly & Karau, 2002), men are expected to display agentic attributes (ambition, assertiveness, force, self-confidence, etc.) while communal traits (being helpful and kind, demonstrating interpersonal sensitivity, etc.) are associated with women. Therefore, in the context of the coronavirus pandemic, in which the display of

communal behaviors is more important to employees (Eichenauer et al., 2021), the positive surprise of a male candidate behaving non-assertively, or showing more communality, might have caused respondents to react very positively.

A somewhat surprising result is related to the assertive female candidate. She was evaluated as having slightly higher promotability than the assertive male candidate. This finding contrasts with a vast literature that indicates women are penalized for the demonstration of assertive behaviors as they violate the female gender role (Carli & Eagly, 2011; Eagly et al., 2000; Eagly & Karau, 2002, Hoyt & Burnette, 2013, Ibarra et al., 2013; William & Tiedens, 2016). The assertive female in this study was considered less likable but not less promotable. The same surprising result, in which no differences for promotability evaluations for assertive women vs. men were found, is reported in a recent study by Hentschel et al. (2018). This might derive from either actual changes in society in terms of reduction of backlash or due to socially desirable answers, which will be discussed later on in this chapter.

Many studies on backlash were published over ten years ago (Eagly & Karau, 2002; Ely & Rhode, 2010, Schein et al., 1996; Ritter & Yoder, 2004), and society might be in the midst of changes regarding the perceptions of women in leadership positions. Varghese et al. (2018) argue that gender norms are being challenged and might be changing, especially as a result of movements such as “Me too” and “Time’s up,” which advocate for women to be assertive and promote their stories.

In the last ten years, American society has witnessed various movements in favor of gender equality. In 2017, “The Women’s March” and the “#MeToo Movement” focused on different aspects related to women in society and the workplace and had a significant impact on society in general. In 2018, the “Time’s up” movement began. It aims at creating a society free

of gender-based discrimination, which includes equity and safety in the workplace. It was launched by over 300 women in Hollywood and counts on the engagement of celebrities with a significant impact on society. Another important movement was the “HeForShe.” It started in 2014 at the United Nations in New York. Their objective is to achieve equality by encouraging both men and women to take action against negative stereotypes and behaviors. These movements might have contributed to people’s awareness of gender bias and prompted changes in people’s perceptions of assertive women in leadership positions. As a result, participants in this study might be more open to female assertiveness than those in previous research.

Additionally, according to the Pew Research Center (2020), Americans expressed more dissatisfaction regarding the state of gender equality in the country in 2020 compared to the scenario in 2017. Therefore, changes in people’s mindset may be happening in favor of a more equitable society, which might have influenced the respondents’ answers regarding perceptions of the female candidate, particularly the assertive one. Even if these changes are minor, they may positively impact opportunities for women in leadership positions in the U.S. in the future.

Another possible explanation for the absence of backlash against the assertive female candidate derives from the concept of social desirability response bias. It refers to the tendency of people “to over-report socially desirable characteristics and behaviors and under-report undesirable characteristics and behaviors” (Zerbe & Paulhus, 1987 in Dalton & Ortegren, 2011, p. 73). According to Eagly (2018), the impact of feminist activism on gender stereotypes has made the belief in gender equality more socially expected and politically correct. Socially desirable responses are most likely to occur in reply to socially sensitive questions (Van de Mortel, 2008). Given the recent social movements and possible societal changes previously reported, participants who evaluated the assertive female candidate might have felt pressured to

give socially acceptable responses rather than demonstrate their inner beliefs. If so, they might have assessed her more favorably than they actually considered her to be. This effect could have caused the absence of a backlash effect in promotability against the assertive female candidate compared to the assertive male candidate in this research.

### **Impact of Perceptions of Likability and Competence on Promotability**

Likability was positively related to promotability as hypothesized in this study and in line with previous research (Treadway et al., 2007; Shaughnessy et al., 2011). Being likable enhances chances of promotion. Perceptions of competence were also associated with promotability as hypothesized and consistent with previous research findings (Beeson, 2009; Bliege Bird et al., 2005; De Pater et al., 2009a; Kolodinsky et al., 2007; Shaughnessy et al., 2011).

Together, likability and competence were responsible for 82.2% of the variation in promotability in this research. These results are in line with Heilman et al. (2004). According to their study, competence is not enough to completely explain hireability and promotability decisions. Employees, regardless of gender, need to be seen as both likable and skilled to be hired or promoted (Heilman et al., 2004). These are valued leadership characteristics and should not be neglected either by employees themselves or in the selection or promotion processes. When making decisions related to promotion to leadership positions, companies should focus on both employees' technical skills and how likable the individuals are to give them the best chance to rise and have a leadership impact in the organization. Showing empathy, honesty, support, compassion, and sympathy (Eichenauer et al., 2021), acknowledging others' emotions and fears, and developing emotional connections (Cuddy et al., 2013) are some examples of behaviors that help leaders be more likable. Warmth/Likability "is the conduit of influence," and more likable



leaders are better able to establish trust with employees and improve engagement and performance (Cuddy et al., 2013, p. 56).

However, organizations need to give special attention to the clear and specific description of expected or desired behaviors and traits associated with likability. It is important to avoid allowing for the interviewer's own standards or biases to interfere with the candidate's likability assessment. For example, previous research indicates that similarity to supervisor (Gurbuz et al., 2016) plays a role in promotion decisions. Similarity is also one of the most frequent predictors of liking (Hampton et al., 2019). Therefore, all measures need to be taken to avoid this kind of interference in the promotion process.

Interestingly, 83.8% of respondents evaluated the candidates as competent (ratings between 5 and 7 on a 7-point scale). Participants did not differentiate between assertiveness conditions or gender of the candidate and considered the candidates in the four conditions as competent. The lack of differentiation in terms of gender aligns with previous research (Eagly et al., 2019; Williams & Tiedens, 2016), which indicates that gender differences do not impact perceptions of competence.

### **Candidate Assertiveness and Perceptions of Competence**

Contrary to my hypothesis, there was no significant effect of the candidate's assertiveness on perceived competence. This result was surprising, as previous studies report a positive effect of assertiveness on competence (Carli & Eagly, 2011; Eagly & Karau, 2002; Williams & Tiedens, 2016), both for men and women (Rudman & Glick, 2001). Moreover, as indicated above, nearly 84% of competence evaluations ranged from 5 to 7, across conditions and gender, and the mean was 6 on the 7-point scale. Therefore, it is possible that restriction of range in the competence variable may have contributed to the findings.

Another possible reason for this lack of relationship between assertiveness and competence is social desirability. People like to appear altruistic and society-oriented (Chung & Monroe, 2003), so participants might have rated the non-assertive female candidate as more competent, thinking it was more expected or politically correct.

Another possibility is that changes are actually taking place in society, such that gender and assertiveness are both becoming less relevant. For example, a recent survey on creating a culture of diversity, equity, and inclusion (DEI) conducted by the HBR Analytic Services (2021), including 1,115 North American organizational leaders, indicates that many organizations are prioritizing treating all employees equitably and creating conditions to make anyone feel welcomed and included. Additionally, DEI initiatives also encourage organizations to investigate talent-management policies and processes to understand which ones are limiting employees' opportunities, as decisions should be based on objective, job-relevant criteria (Cox & Lancefield, 2021). DEI initiatives may be causing workforce members to put less emphasis on leaders' demographic characteristics and aspects of their communication style that are not directly job-related when evaluating leader competence. All in all, social desirability and actual changes in society, or a mixture of both, could explain why assertive and non-assertive candidates across genders were similarly rated in terms of competence.

While neither candidate assertiveness nor candidate gender predicted perceptions of their competence, perceived attractiveness did. Although overall, the candidates were considered similarly attractive, study participants who rated the candidate as attractive also rated them as more competent and likable.

## **Impact of Candidate Assertiveness & Gender on Perceptions of Likability**

As hypothesized, a significant negative effect of assertiveness on likability was found. Assertive candidates were considered less likable than non-assertive candidates, as indicated in previous research (Kelly et al., 1980; Kelly et al., 1982; Kern, 1982; Levena et al., 2018; Williams & Tiedens, 2016). While being liked enhances promotion chances, being disliked can be a hindrance to climbing the corporate ladder (Shaughnessy et al., 2011). Given this strong positive relationship of likability with promotability, professionals need to consider what traits and behaviors strengthen or weaken others' perceptions of their likability. Some examples of behaviors that help build likability are: speaking with lower pitch and volume, sharing personal stories, acknowledging people's emotions and fears, demonstrating empathy, and smiling (Cuddy et al., 2013). In addition, developing emotional intelligence, particularly interpersonal skills, will also help leaders connect and build trust with employees (Boyatzis et al., 2005), contributing to likability perceptions.

Organizations also need to assess candidates for promotion to leadership positions in terms of how likable they are. Being liked impacts the building of trust and employee engagement (Cuddy et al., 2013), which influences firm performance, including turnover, customer satisfaction, sales, revenue, productivity, among other aspects (Zenger & Folkman, 2016). The more the teams like their leaders, the more committed and willing to walk the extra mile they will probably be, and the more successful organizations can become. However, it is critical to avoid biases that could occur unintentionally if decisions are made based on an individual's perceptions rather than evidence-based criteria. Therefore, as discussed earlier, organizations need to clearly define metrics and descriptions related to the likability behaviors expected from candidates to leadership positions.

Gender did not moderate the relationship between assertive behaviors and likability, contrary to previous studies, which found that the relationship was stronger for females (Carli & Eagly, 2011; Eagly & Karau, 2002; Rudman et al., 2012a; Williams & Tiedens, 2016). Possible explanations are related to social desirability or to an actual reduction in the backlash against women. Wood and Eagly (2015) argue that research on the effects of gender and gender expectations needs to take temporal shifts into account because societal changes might affect people's perceptions of sex differences between males and females. It might be the case that society is actually moving towards a more equitable scenario driven by recent movements and changes in perspective by the whole population. Any reductions in backlash may open doors for women to ascend the corporate ladder in a more balanced competitive environment in the future.

### **Millennials**

This study found surprising results about the effects of the millennial generation. It was hypothesized that assertive behaviors would be more negatively related to perceptions of the leadership candidate's likability when assessed by millennials than by members of older generations. However, this was not supported by the data.

Initially, the interaction between assertiveness and generation was not significant when only the variables and two-way interactions were included. However, when a three-way interaction was considered (between gender and generation on likability, which was not supported), the two-way relationship between generation and assertiveness became significant but in the opposite direction from the hypothesis. Assertive behaviors were more negatively related to perceptions of likability when assessed by older generations than by millennials. This result was surprising because previous research found that millennials dislike directive, hierarchical leadership styles and favor more collaborative leaders (Chenkovich & Cates, 2016;

Sledge, 2016). Perhaps the curvilinear relationship between assertiveness and leadership proposed by Ames and Flynn (2007) would explain this result. They argue that both lower and higher levels of assertiveness are detrimental to leadership, but a moderate level of assertiveness facilitates leadership success (Amys & Flynn, 2007). Thus, it might be the case that millennials perceived the level of assertiveness demonstrated by the actors as appropriate for leadership.

Another possible explanation is related to the fact that the actors were millennials themselves. People tend to identify with those similar to them (Akers et al., 1995), which might have caused millennials to have a more favorable impression of the candidates and not react as negatively as expected to their assertiveness.

Contrary to the hypothesis, the effect of a candidate's gender on perceptions of promotability for a leadership role was not weaker when assessed by millennials than when assessed by members of older generations. Thus, the hypothesis that there would be a moderating effect of gender on the relationship between a candidate's assertive behavior and the candidate's promotability that would be weaker when assessed by millennials than members of older generations was also not supported. Previous research on generational differences has been mixed. Some research has found differences between millennials and older generations (Myers & Sadaghiani, 2010; Stewart et al., 2017), and other studies found few or no differences (Deal et al., 2010; Valenti, 2019). Valenti (2019) investigated millennials' leadership preferences and concluded that millennials were not so different from previous generations with respect to communication, feedback, participative decision-making, etc. Deal et al. (2010) point out that generational differences exist but are often modest. The lack of longitudinal generational studies limits researchers' "ability to disentangle generational effects from those of age or life stage." (Deal et al., 2010, p. 196). In this study, I controlled for age (and thus life stage) because age is

confounded with generation. As indicated in Chapter 3, to show the effect of generation, the generation variable needs to be significant after controlling for age.

In this research, generation based on age did not closely correspond with self-reported generation. Participants were asked to self-report their age and their generation. While 82.6% of the members of older generations correctly indicated their generation, only 52.7% of millennials selected ‘Millennial.’ Over a third of millennials, 36.4%, indicated they were members of Generation X, and 5% selected Baby Boomers as their generation. Therefore, members of older generations are more likely to identify with their age-based generation than millennials. This has implications for future research that will be discussed later in this chapter.

### **The Impact of Attractiveness**

Attractiveness, one of the control variables in this research, had significant relationships with four of the study variables: Assessors’ Generation, Likability, Competence, and Promotability. When people found the actors to be attractive, they also considered them more likable, competent, and promotable.

Both actors had a similar physical appearance. The two looked Latino and dressed the same way: a white shirt and a black jacket. The pilot test results showed they were considered equally attractive across conditions. In the main study, however, even though the same videos were used as in the pilot study, the non-assertive candidates were considered more attractive than assertive candidates, and this difference was significant. Considering that the same actors performed both the assertive and non-assertive roles on the same day in the same attire, it is interesting to note that the assertive candidates were rated as less attractive.

Attractiveness is significantly correlated with the assessors’ generation, such that older generations found the candidates less attractive than millennials did. One possible explanation is

that both actors are members of the millennial generation, as previously stated. Therefore, millennials' identification with the actors might have been stronger than members of older generations.

Attractiveness was also positively correlated with likability and competence. The more attractive the candidate, the more likable, competent, and promotable they were perceived to be. Attractiveness is only significantly related to promotability when likability and competence are not controlled for (see Table 8). However, as Table 5 indicates, the relationship between attractiveness and promotability is no longer significant once these two variables are controlled for.

These results are aligned with studies that indicate the critical effect of attractiveness on hiring (Desrumaux et al., 2009; Marshall et al., 1998), promotion decisions (Marlowe et al., 1996), and perceptions of competence (Nault et al., 2020). Given the impact of likability and competence on promotability and the significant relationship between attractiveness and these two first variables, this study's results indicate that attractiveness strongly influences promotion decisions. This may bring an extra burden for women, as research indicates “a beauty tax in workplace settings” (Ramati-Ziber et al., 2020, p. 338). Women are judged by their level of attractiveness more than men (Heflick et al., 2011; Wolbring & Riordan, 2016), and appearance-based discrimination creates additional barriers to gender equality in the workplace (Ramati-Ziber et al., 2020). Furthermore, meeting society's expectations of a feminine appearance is even more challenging because it often requires spending time and money on hair, make-up, and accessories. These costs are greater than men typically experience to meet societal expectations for an attractive male appearance. The time spent cultivating an attractive appearance adds to the total time commitment women face in terms of work and family chores. They are often expected

to be the family caregivers and are frequently responsible for most household responsibilities like laundry, dinner, and maintaining the house as a whole (Dunatchik et al., 2021, Wellington & Spence, 2001). According to a recent McKinsey (2021) study, burnout, stress, and exhaustion continue to impact women more than men. Together, the beauty tax and the work and home workloads are undoubtedly a substantial burden for women.

All of the movement towards more equality in the workplace needs to consider this bias towards attractive people. HR managers should take these relationships into account and work towards reducing bias against less physically attractive candidates in promotion decisions. Training can also be implemented with a view to making leaders more aware of bias towards more attractive employees so they can work toward avoiding favoring more attractive subordinates.

### **Limitations**

Some limitations of this research should be considered. First, this was an experimental methodology involving one male and one female actor portraying assertive and non-assertive job candidates. Although they followed the same scripts, attempted to display the same non-verbal and para verbal behaviors, and the settings were as identical as possible, there may have been unknown attributes of the actors or minor differences in their performances that affected the results.

Participants rated the female actor as more assertive than the male actor in the assertive condition in the pilot study. This could be because even though the actors behaved identically, the female was perceived as more assertive, or there could have been some minor differences in the actors' performances. There were no consistent comments from the pilot study that would indicate there were differences. Future research could make use of recordings only so that visual



aspects would not potentially interfere with the results. Still, the tradeoff would be the loss of engagement and richness from the videos. Another possibility is the use of synthetic videos, as implemented by Powers' (2021) research, which would guarantee a higher level of similarity between the male and the female characters.

The actors in the video had a Latino look with an American accent. This experiment could be replicated with actors of different races or ethnicities to investigate whether race or ethnicity would impact responses. Additionally, this study used only participants in the U.S. If the study were replicated in other countries, the results might differ as context and culture affect expectations for men's and women's behavior (Wood & Eagly, 2015).

This research did not consider the effects of industry. Cheryan and Markus (2020) refer to masculine defaults environments where "characteristics and behaviors associated with the male gender role are valued, rewarded, or regarded as standard, normal, neutral, or necessary aspects of a given cultural context" (p. 1024). Given all the recent movements towards more equality in the workplace, future research should reassess the current intensity of backlash in different contexts, including male-dominated industries and roles where agentic traits are the expected norm and female-majority industries and positions where communal traits play a more central role.

Finally, the criteria for selecting participants aimed to get a pool of respondents that would be more representative of managers as opposed to undergraduate students, who are common respondents in experimental settings (Kolb, 1999; Rudman & Glick, 1999; Heilman et al., 2004). All participants were at least 24 years old and had a minimum of two years of work experience. In addition, 90.4% of them had at least a bachelor's degree, and the remaining 9.1% had an associate degree. However, the respondent base was not restricted to managers who

make direct promotion decisions. Therefore, future research could be implemented with participants limited to HR managers, business leaders, or other professionals currently making hiring and promotion decisions. The results would indicate similarities and/or differences between perceptions of those who actually make the decisions and the more general working population of college graduates examined in this study.

### **Future Research**

Further research on antecedents of promotability, more specifically on the impact of gender and the role of assertive and communal behaviors, is recommended. Given all the recent movements for more equality in society, diversity in the workplace and leadership, and the observed shift towards a preference for a more transformational leadership style, changes in the backlash against women and a greater desire for a more equitable workplace might be taking place. One important area to be investigated further is the impact of leader assertive and non-assertive behaviors on employees. Another possible change is some level of reduction of backlash against agentic women. Any changes in terms of behaviors and traits that are expected or accepted for both male and female leaders, as well as any reduction in backlash, will impact both research and practice and should be investigated.

**Assertiveness vs. Communality.** The results of this research reflect “the communality-bonus effect for male leaders,” in which men are more positively evaluated when they display certain communal behaviors (Hentschel et al., 2018, p. 112). The non-assertive male candidate was the one with the highest ratings for promotability. It is important to understand if this trend towards valuing more communal behaviors by male leaders is present across industries, including more male-dominated contexts. Varghese et al. (2018) indicate that hybrid tactics, in which candidates demonstrate assertive and non-assertive behaviors (being competitive, self-

promoting, and at the same time being interpersonal, sensitive, and cooperative) enabled both males and females to appear equally competent and warm in a job interview. In this study, the positive impact of the display of non-assertive behaviors benefitted only the male candidate. However, the extent to which these communal behaviors in male leaders have become more valued needs to be further investigated, taking different contexts and industries into account.

Additionally, the impact of the COVID pandemic has driven workplace practices towards a more remote environment. The extent to which more communal behaviors on the part of the leader, male or female, are more appropriate or effective in virtual and mixed workplaces is not known. Therefore, more investigation is necessary to confirm whether the display of communal traits is more valued in male than female leaders across different contexts. Additionally, once the COVID pandemic is over and companies partially or totally move back to face-to-face settings, the impact of assertive and non-assertive leader behaviors should be re-evaluated to verify whether the positive impact of non-assertive male leader behaviors will continue to be as favorable.

Shifts in the relevance of non-assertive behaviors as antecedents of promotability and hireability are relevant not only in research but also in practice. The specific communal behaviors that cause a positive impact in perceptions of leadership for male and/or female leaders in different contexts need further clarification. Once these behaviors are clearly understood for specific industries and positions, many organizations will be able to revise job descriptions, assessment criteria, feedback practices, hiring and promotion dynamics, and professional training and development programs to incorporate these behaviors and traits to clarify what is expected from their leaders.

**Competence.** Although previous studies report a positive effect of assertiveness on competence (Carli & Eagly, 2011; Eagly & Karau, 2002; Williams & Tiedens, 2016), for both men and women (Rudman & Glick, 2001), in this research, this relationship was not significant. This might be related to a shift towards transformational leadership (Eagly et al., 2003) reported in research quite a while ago. The qualities that are necessary to display transformational behaviors include collaboration, interpersonal interactions, power-sharing, and characteristics that reflect feminine or communal attributes (Vinkenburg et al., 2011; Saint-Michel, 2018). Hentschel et al. (2018) also argue that communal traits have been positively associated with transformational leaders. Therefore, it might be the case that more communal traits and behaviors in leaders have gained strength, while the display of assertiveness might have lost its previous relevance in terms of the impact on perceptions of competence. Future research should re-evaluate the relationship between assertiveness on perceptions of competence in different contexts and perhaps control for transformational leadership behaviors.

Given that this study identified (1) a relevant and strong relationship between competence, likability, and promotion decisions, (2) the absence of a significant relationship between assertiveness and competence, and (3) a negative relationship between assertiveness and likability, the place and intensity of assertiveness in the workplace should be further analyzed. Shifts in terms of the impact of assertiveness on perceptions of competence across industries and in different contexts, including masculine, feminine, and neutral environments, need to be investigated.

These results also suggest that some individuals' and companies' perspectives of assertiveness may need to be revised to reflect the findings related to the curvilinear relationship between assertiveness and leadership effectiveness argued by Ames and Flynn (2007). Either

low levels or very high levels of assertiveness might be detrimental to the work environment (Ames & Flynn, 2007). The challenge is to determine the optimal level of assertiveness conducive to business practices in different contexts. Ames and Wazlawek (2014) argue that it is difficult for individuals to choose the appropriate level of assertiveness. Therefore, companies can implement training and development initiatives to help managers and leaders exercise influence within an adequate level of assertiveness, learning to balance their interpersonal assertiveness and push appropriately (Ames & Wazlawek, 2014).

**Likability.** This study confirmed the importance of likability and competence as predictors of promotability. Future research should investigate the extent to which HR managers incorporate measures of likability and competence in their evaluations of candidates. According to Amaral et al. (2019), competence and warmth judgments are made during interviews, impacting subsequent evaluations. The extent to which HR managers or those in charge of promotion decisions consciously make such judgments during promotion processes is not known.

Additionally, research indicates that similarity is one strong predictor of liking (Hampton et al., 2019). People tend to like people similar to them. Therefore, future research on evaluating this quality in candidates, with a particular focus on selecting for likability without creating conscious or unconscious bias related to gender, race, ethnicity, and other minoritized groups, would be useful.

Given the strong relationship between likability and promotability, individuals aspiring to climb the professional ladder need to invest in developing behaviors that will promote higher levels of likability. According to Cuddy et al. (2013), the best way to influence and lead is to start by demonstrating warmth/likability. HR managers and those involved with promotions also

need to consider the impact of a candidate's likability when these decisions are made. In addition, organizations need to promote training and development opportunities to develop the likability of potential future leaders. "Leaders who are not liked will pay a high price as it is almost certain that their teams will evaluate them negatively on other facets of performance" (McAllister et al., 2019, p. 5). Therefore, companies need to clearly indicate the extent to which this trait is valued and expected in that given culture as part of everyday managerial practice and provide their employees with opportunities to develop likability.

**Generation and Age.** Given that age is confounded with generation (Deal et al., 2010), future research focusing on generational differences should control for age, as was done in this study. The results showed that generation based on age did not closely correspond with self-reported generation. Many millennials, in particular, did not identify as members of their generation, which may have contributed to the lack of support for the hypotheses pertaining to generational differences. Future research on generational effects should take into account that age-based generation and generational identity may be different things.

**Backlash.** In this research, the impact of gender on perceptions of promotability was significant but small. Backlash against the assertive female candidate as compared to the assertive male candidate was not identified, despite having been found repeatedly in previous research (Carli & Eagly, 2011; Eagly et al., 2000; Eagly & Karau, 2002, Hoyt & Burnette, 2013, Ibarra et al., 2013; William & Tiedens, 2016). The rise of women into leadership roles is gaining some momentum (Eagly, 2020). Future research should investigate if this reduction of backlash is observed across industries and cultures or if it is the result of social desirability bias.

## **Summary**

This research investigated the impact of assertive behaviors on perceptions of likability, competence, and promotability for male versus female candidates for a promotion to a leadership position, taking into account the gender of the assessor and whether the assessor is a millennial or a member of an older generation. The findings indicate that both likability and competence are strongly correlated with promotability. In addition, male candidates were considered more promotable than female candidates, although the impact of gender on promotability was small. Assertive candidates were considered less likable than non-assertive candidates. Assertiveness was not a significant predictor of competence in this research. Older generations also rated the assertive candidates as less likable. The results indicate that millennials and older generations are more similar than different in their ratings of male and female candidates. Attractiveness was strongly correlated with likability, competence, and promotability. The implications indicate a bias in favor of attractive people for promotion opportunities.

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## Appendix A – Job Description

Terry is an Information Technology (IT) specialist with a U.S.-based company and has worked for this organization for three years, having started as a trainee. Terry has no direct subordinates.

The company has an opening for a junior manager in IT. The desired candidate should be technically skilled, ambitious, strongly independent, able to work well under pressure, team-oriented, attentive to the needs of the members of the team, and results-oriented.

Terry is one of the internal candidates for this position. The selected candidate will manage six subordinates. If promoted, this will be Terry's first management position.

The internal selection process includes different stages. In this stage, candidates will be asked to respond to specific situations. You will watch a video of the interview and answer some questions about this candidate.

## Appendix B – Candidate’s Resume

**Terry Smith**

[www.tsmith@amct.com](mailto:www.tsmith@amct.com)

**Position of Interest:** Junior Project Manager

### **SUMMARY**

Solution-focused IT Project Specialist with 5+ years of experience leading large-scale IT projects from design through implementation.

### **HIGHLIGHTS**

- Able to lead large project teams
- Results-oriented
- Able to work well under pressure
- Team-oriented
- Problem-solving focus
- Able to work independently
- Strong technical skills
- Strong emphasis on self-development

### **EDUCATION**

Florida State University – Tallahassee, Florida  
B.S. Information Technology – 2015

### **PROFESSIONAL EXPERIENCE**

AMCT, Inc.

Senior Project Specialist

September 2017 – Current

- Define project scope, goals, deliverables, and deadlines for success
- Engage stakeholders, including customers and teammates
- Accountable for project budget
- Team lead on projects with up to 8 team members

Zync Tec, Inc.

Project Specialist

August 2015 – July 2017

- Led a project to create a system that eliminated quoting errors, enhancing the customer experience
- Adhered to project budget and schedule

### **CERTIFICATION**

PMI Agile Certified Practitioner (PMI-ACP)– 2016  
Project Management Institute

## Appendix C – Interview Scripts

### **Explicit Assertive Mode**

**Q1: Are you a good self-starter? Describe an example where you took the initiative on a project.**

Agentic: I'm definitely a self-starter. For example, I worked at an independent bookstore one summer, and I was really surprised to find out they didn't have their own website. I mean, if you don't have a www. in front of your company's name, you're locking yourself out of a huge market! Anyway, they clearly needed one, so I set them up. It worked out so well that the store's profit increased by 10%. Needless to say, the owners were very happy.

**Q2: Would you describe yourself as competitive?**

Agentic: Oh definitely. I mean that in a healthy way, of course. I'm not obsessed with competition or anything. But I do enjoy competing. To tell you the truth, I hate to lose at anything.

**Q3: How do you propose to keep up to date with technological advances?**

Agentic: I'm very aggressive about that. In this industry, you have to be. Hardware changes every 6 months and software even faster than that. I belong to several listservs that email me about new products and software on a daily basis, plus I'm on all the major mailing lists, so when a new opportunity for training or certification comes up, I'm one of the first to know, and I'm one of the first to enroll.

**Q4: What kind of leadership skills would you bring to the job?**

Agentic: I think I'm extremely good at sizing people up quickly and delegating responsibility accordingly. I also plan on hiring the very best talent that's available and to make sure that they

have the resources to do their job the best that they can. I have to say I expect a lot of the people who work for me, but I'm upfront about those expectations.

**Q5: How will you handle conflict resolution?**

Agentic: I like to be direct. I have no qualms about saying, "Look, we've got a problem," and addressing the issue head-on. Conflicts are a part of life, and the sooner you address them, the more efficient and productive you'll be.

**Q6: Why are you the best candidate for this position? Where do you see yourself in five or ten years?**

Agentic: As you can see from my resume, I have repeatedly demonstrated my ability to lead a project and to get project teams to perform at extremely high levels. Under my leadership, these teams met every single deadline and delivered outstanding project results. This clearly demonstrates that I am uniquely qualified for the position you are trying to fill. I have every confidence that I will continue along my leadership trajectory and ensure that my teams meet and exceed your every expectation.

**Non-Assertive Mode**

**Q1: Are you a good self-starter? Describe an example where you took the initiative on a project.**

Communal: Sure, I'd consider myself a self-starter, but first, I like to know that I'm going in the right direction. Give an example? Well, I designed a website for the bookstore I was working at one summer. They were a small, independent store, and I thought they could really benefit from a website. So, I suggested it to my boss, and she was really interested, so we brainstormed some ideas, and I asked the other employees and some of the customers what they'd like to see on a website. In the end, I think it turned out pretty well.

**Q2: Would you describe yourself as competitive?**

Communal: Well, I wouldn't say that I'm competitive by nature, but if competition is necessary, I'll try to do the very best I can. Still, if it's all the same to everyone, I think everyone should win.

**Q3: How do you propose to keep up to date with technological advances?**

Communal: Well, I know the local community college offers courses. That's how I first got interested in this field by taking a web-design course there. They have some really good professors. And I'm certain your company offers tech-related courses or seminars to all your employees. So, I take every opportunity that comes along to keep up with the latest technology.

**Q4: What kind of leadership skills would you bring to the job?**

Communal: I'm pretty good at delegating responsibilities once I get to know the people that work for me. I try to match the person to the job that they can grow into. I don't expect them to be perfect right away. Plus, I'm extremely flexible about working around people's scheduling problems.

**Q5: How will you handle conflict resolution?**

Communal: Sometimes conflicts simply arise from misunderstandings. That's why I like to get people together to talk out conflicts when they come up. That way, we can come to a solution that works for the whole group.

**Q6: Why are you the best candidate for this position? Where do you see yourself in five or ten years?**

Communal: As you can see from my resume, I have had the great pleasure of leading several extremely high-performing project teams. Together, we met deadlines and delivered great project results. These unique experiences have prepared me for the position that you are looking

to fill. I have every confidence that this position will give me the opportunity to continue along my leadership trajectory and that, together, my teams and I will meet and exceed every expectation you have.



## Appendix D – Pilot Study Manipulation Check Survey

### **ASSERTIVENESS**

Q1.1 This study is being conducted by Vera Alves, a Doctoral candidate at Crummer Graduate School of Business at Rollins College in Florida, as part of the Executive Doctorate of Business Administration (EDBA) program. You are invited to participate in a pilot study that is part of a survey assessing candidates' potential for a promotion to a junior managerial position. The first step of this research involved producing videos of different candidates in a job interview.

This pilot study evaluates two potential candidates for the main study. You will be asked to watch two videos and answer questions after each of them. At the end, you will be asked a question about your perceptions of the two candidates.

This pilot study should take approximately 15 minutes to complete. There are little or no risks associated with this study.

### **PARTICIPATION**

Your participation in this pilot study is voluntary. You may refuse to take part in the study or exit the study at any time with no penalty. Participants need to be 18 years or older.

### **CONFIDENTIALITY**

Your answers will be sent to Qualtrics, where data will be stored in a password-protected electronic format. No names or identifying information will be included in any publications or presentations based on these data, and your responses to this pilot study will remain confidential. Data will be collected and held confidentially, not anonymously, within Qualtrics. Additionally, data will be exported into a CSV file and stored on an external hard drive by the researcher and maintained in a secure location where data files will be password

protected and no personal Cloud data storage will be utilized by the researcher. Data will be stored electronically for at least five years from the date of final publication.

### **ELECTRONIC CONSENT**

Please select your choice below. You may print a copy of this consent form for your records. If you have any questions, please contact Dr. Houston, Chair, Rollins IRB, at [jhouston@rollins.edu](mailto:jhouston@rollins.edu). Clicking on the “Agree” button indicates that:

- You have read the above information.
- You voluntarily agree to participate.
- You are 18 years of age or older.

Q1.2 Please indicate your option.

- Yes, I agree. (1)
- No, I do not agree. (2)

Q2.1 How did you learn about this survey?

- I am currently an MBA student at Crummer Graduate School of Business. (1)
- I am currently an EDDBA student at Crummer Graduate School of Business. (2)
- I am a Rollins Alumni. (3)
- Someone I know sent me the link to the survey. (4)
- None of the above. (5)

### Q3.1

You will now read about a job opportunity. You will then evaluate videos of two candidates for the job.

Q4.1 Terry is an Information Technology (IT) specialist with a U.S.-based company and has worked for this organization for three years, having started as a trainee. Terry has no direct subordinates.

The company has an opening for a junior manager in IT. The desired candidate should be technically skilled, ambitious, strongly independent, able to work well under pressure, team-oriented, attentive to the needs of the members of the team, and results-oriented. Terry is one of the internal candidates for this position. The selected candidate will manage six subordinates. If promoted, this will be Terry's first management position.

The internal selection process includes different stages. In this stage, candidates will be asked to respond to specific situations. You will watch a video of the interview and answer some questions about this candidate.

Q5.1 You will now watch videos of two candidates interviewing for the job. Press the play button to begin the video. Each video is followed by questions. After each video, scroll to the bottom of the page and click on the white arrow in the blue box to proceed to the questions.

Q6.1 Video

Q6.2 Timing

Q7.1 How old do you think this candidate is?

▼ 20 (20) ... 45 (45)

Q8.1 Please indicate the degree to which each of these characteristics applies to the candidate you have just watched. The scale goes from (1) strongly disagree to (7) strongly agree. There are no right or wrong answers. Work quickly and record your first impression.

	Strongly Disagree 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly Agree 7 (7)
Defends own beliefs (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Independent (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Forceful (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Has a strong personality (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Assertive (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Dominant (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Willing to take a stand (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Acts like a leader (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Competitive (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q9.1 Please answer the following questions about the candidate in the video.

	Very Unattractive 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Very Attractive 7 (7)
How physically attractive do you consider the candidate to be? (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

How  
attractive  
do you  
consider  
the  
candidate's  
face to be?

(2)

How  
attractive  
do you  
consider  
the  
candidate's  
voice to  
be? (3)

Q10.1 Video 2

Q10.2 Timing

Q11.1 How old do you think this candidate is?

▼ 20 (20) ... 45 (45)

12.1 Please indicate the degree to which each of these characteristics apply to the candidate you have just watched. The scale goes from (1) strongly disagree to (7) strongly agree. There are no right or wrong answers. Work quickly and record your first impression.

	Strongly Disagree 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly Agree 7 (7)
Defends own beliefs (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Independent (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Forceful (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Has a strong personality (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Assertive (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Dominant (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Willing to take a stand (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Acts like a leader (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Competitive (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q13.1 Please answer the following questions about the candidate in the video.

	Very Unattractive 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Very Attractive 7 (7)
How physically attractive do you consider the candidate to be? (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



How  
attractive  
do you  
consider  
the  
candidate's  
face to be?

(2)

How  
attractive  
do you  
consider  
the  
candidate's  
voice to  
be? (3)

Q14.1 What differences did you notice between the two videos?

---

Q15.1 Please indicate (your)...

Q15.2 Gender.

- Male (1)
- Female (2)
- Other or prefer not to disclose (3)

Q15.3 The highest degree or level of education you have completed.

- High School diploma (1)
- Some college but no degree (2)
- Associate's degree (for example: AA, AS) (3)
- Bachelor's degree (for example: BA, BS) (4)
- Master's degree (for example: MA, MS, MEng, MEd, MSW, MBA) (5)
- Doctorate degree (for example, PhD, EdD) (6)

Q15.4 Race or origin.

- White / Caucasian (1)
- Hispanic / Latino / Spanish Origin (2)
- Black / African American (3)
- Asian / Pacific Islander (4)
- American Indian / Alaskan Native (6)
- Hawaii (10)
- Multi-racial (11)
- Other (12)
- Prefer not to answer (13)

Q15.5 Country of Birth

- United States (8)
- Other (Please specify) (9)

Q15.6 Please indicate your country of birth.

---

Q15.7 Total number of years you have worked under the supervision of a male boss.

- Never (1)
- Less than a year (2)
- 1 to 3 years (3)
- 4 to 7 years (4)
- 8 to 11 years (5)
- 12 years and above (6)

Q15.8 Total number of years you have worked under the supervision of a female boss.

- Never (1)
- Less than a year (2)
- 1 to 3 years (3)
- 4 to 7 years (4)
- 8 to 11 years (5)
- 12 years and above (24)

Q15.9 Year of birth.

▼ 2003 (133) ... Prefer not to answer (197)

Q15.10 Which generation do you feel you are part of?

- Millennials (1)
- Generation X (2)
- Baby Boomers (3)
- Other (4)

Q16.1 Thank you for taking part in this survey. Your participation will provide valuable insights for this research.

Q17.1 The title of this study is “Effects of candidate gender and assertiveness on likability and promotability to a leadership position: comparing perceptions of U.S. Millennials with those of older U.S. workers.”

The purpose of this study is to investigate the impact of the display of assertive behaviors on perceptions of likability, competence, and promotion recommendations, for male versus female job candidates, taking into account the assessors’ generation. This research will contribute to the existing knowledge on gender bias. It also contributes to the understanding of the relationship between likability and competence to promotability. Finally, it contributes to understanding how

the millennial generation differs, or not, from older workers in their perceptions of leader gender and assertiveness.

The consent document did not indicate all details of the study because including that information could affect participants' answers in the online survey.

For follow-up questions, please contact Vera Alves at [valves@rollins.edu](mailto:valves@rollins.edu).

Thank you for your time.

## **EFFECTS OF CANDIDATE GENDER AND ASSERTIVENESS ON LIKABILITY AND PROMOTABILITY**

Q1.1 This study is being conducted by Vera Alves, a Doctoral candidate at Crummer Graduate School of Business at Rollins College in Florida, as part of the Executive Doctorate of Business Administration (EDBA) program.

You are invited to participate in a web-based online survey assessing a candidate's potential for a promotion to a junior managerial position. If selected, this position will be the candidate's first leadership role. You will watch a video and answer questions about the candidate. The survey should take approximately 12-15 minutes to complete. There are few or no risks associated with this study.

### **PARTICIPATION**

Given the objectives of this study, participants need to have at least two years of work experience. Your participation in this survey is voluntary. You may refuse to take part in the research or exit the survey at any time with no penalty. Participants need to be 24 years or older.

### **CONFIDENTIALITY**

Your survey answers will be sent to Qualtrics, where data will be stored in a password-protected electronic format. No names or identifying information will be included in any publications or presentations based on these data, and your responses to this survey will remain confidential. Data will be collected and held confidentially, not anonymously, within Qualtrics. Additionally, data will be exported into a CSV file and stored on an external hard drive by the researcher, and maintained in a secure location where data files will be password

protected. No personal Cloud data storage will be utilized by the researcher. Data will be stored electronically for at least five years from the date of final publication.

### **ELECTRONIC CONSENT**

Please select your choice below. You may print a copy of this consent form for your records. If you have any questions, please contact Dr. Houston, Chair, Rollins IRB  
atjhouston@rollins.edu.

Clicking on the “Agree” button indicates that:

- You have read the above information
- You voluntarily agree to participate
- You are 24 years of age or older
- You have at least two years of work experience

Yes, I agree. (1)

No, I do not agree. (2)

Q2.3 Before moving forward, please check that you have your sound turned on. You must be able to hear and see the video to complete your participation. Will you be able to hear the video?

Yes (4)

No (5)



Q3.1 How did you learn about this survey?

- I am currently an MBA student at Crummer Graduate School of Business. (1)
- I am currently an EDDBA student at Crummer Graduate School of Business. (2)
- I am currently a Hamilton Holt student at Rollins College. (6)
- I am a Rollins Alumni. (7)
- Someone I know sent me the link to the survey. (8)
- None of the above. (9)

Q4.1 You will now read about a job opportunity. Be prepared to answer questions about it.

Q5.1 Read the information below.

Terry is an Information Technology (IT) specialist with a U.S.-based company and has worked for this organization for three years, having started as a trainee. Terry has no direct subordinates.

The company has an opening for a junior manager in IT. The desired candidate should be technically skilled, ambitious, strongly independent, able to work well under pressure, team-oriented, attentive to the needs of the members of the team, and results-oriented. Terry is one of the internal candidates for this position. The selected candidate will manage six subordinates. If promoted, this will be Terry's first management position.

The internal selection process includes different stages. In this stage, candidates will be asked to respond to specific situations. After reading Terry's resume, you will watch a video of the interview and answer some questions about this candidate.

Q6.1 This is an interview for:

- A new team member that has not previously worked for the company. (1)
- The selection of an Executive Vice President. (2)
- Promotion of a current employee to a junior IT management position. (3)

Q7.1 Next, please read Terry's resume. Be prepared to answer questions about it.

Q7.2 Resume

Q8.1 Does the resume state that the candidate is results-oriented?

- Yes (1)
- No (2)

Q8.2 Does the resume state that the candidate is team-oriented?

- Yes (1)
- No (2)

Q9.1 You will now watch a video. Press the play button to begin the video. The video is followed by questions. After the video, scroll to the bottom of the page and click on the white arrow in the blue box to proceed to the questions.

Q10.1 Video Male Communal

Q10.2 Timing

Q11.1 Video Male Agentic

Q11.2 Timing

Q12.1 Video Female Communal

Q12.2 Timing

Q13.1 Video Female Agentic

Q13.2 Timing

Q14.1 Please answer the following questions about the candidate in the video.

	Strongly Disagree 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly Agree 7 (7)
I believe this candidate will have a successful leadership career. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

If I had to  
select a  
candidate  
for the  
available  
management  
position, I  
would select  
this  
candidate.

(2)

I believe  
this  
candidate  
has high  
potential.

(3)



Q14.2

	Not Promote 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Promote 7 (7)
To what extent do you recommend we promote this candidate for the position in the job description you read? (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q15.1 What is  $4 + 4$ ?

6 (1)

8 (2)

4 (3)

Q16.1

	Incompetent 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Competent 7 (7)
The candidate in the video is (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q16.2

	Incapable 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Capable 7 (7)
The candidate in the video is (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q16.3

	Logical 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Illogical 7 (7)
The candidate in the video is (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q16.4

	Skilled 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Unskilled 7 (7)
The candidate in the video is (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q16.5

	Inexperienced 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Experienced 7 (7)
The candidate in the video is (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q16.6

	Unintelligent 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Intelligent 7 (7)
The candidate in the video is (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Q16.7

	Not knowledgeable 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Knowledgeable 7 (7)
The candidate in the video is (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q17.1

Please click on the answer "Somewhat disagree" on the scale from "strongly agree" to "strongly disagree."

- Strongly agree (1)
- Somewhat agree (2)
- Neither agree nor disagree (3)
- Somewhat disagree (4)
- Strongly disagree (5)

Q18.1 Please answer the following questions about the candidate in the video.

	Strongly Disagree 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly Agree 7 (7)
This person is friendly. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This person is likable. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This person is warm. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This person is approachable. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would ask this person for advice. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I would like  
to be friends  
with this  
person. (6)

Q19.1 Please answer the following questions about the candidate in the video.

	Very						Very
	Unattractive	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Attractive
	1 (1)						7 (7)

How  
physically  
attractive  
do you  
consider  
the  
candidate  
to be? (1)

How  
attractive  
do you  
consider  
the  
candidate's  
face to be?

(2)

How  
attractive  
do you  
consider  
the  
candidate's  
voice to  
be? (3)

Q20.1 Please indicate (your)...

Q20.2 Gender.

Male (1)

Female (2)

Other or prefer not to disclose (3)

Q20.3 The highest degree or level of education you have completed.

- High School diploma (1)
- Some college but no degree (2)
- Associate degree (for example: AA, AS) (3)
- Bachelor's degree (for example: BA, BS) (4)
- Master's degree (for example: MA, MS, MEng, MEd, MSW, MBA) (5)
- Doctorate degree (for example, PhD, EdD) (6)

Q20.4 Race or origin.

- White / Caucasian (1)
- Hispanic / Latino / Spanish Origin (2)
- Black / African American (3)
- Asian / Pacific Islander (4)
- American Indian / Alaskan Native (6)
- Hawaii (10)
- Other (11)
- Prefer not to answer (12)

Q20.5 Country of Birth

- United States (8)
- Other (Please specify) (9) \_\_\_\_\_

Q20.7 Total number of years you have worked under the supervision of a male boss.

- Never (1)
- Less than a year (2)
- 1 to 3 years (3)
- 4 to 7 years (4)
- 8 to 11 years (5)
- 12 years and above (6)

Q20.8 Total number of years you have worked under the supervision of a female boss.

- Never (1)
- Less than a year (2)
- 1 to 3 years (3)
- 4 to 7 years (4)
- 8 to 11 years (5)
- 12 years and above (24)

Q20.9 Year of birth.

▼ 2003 (133) ... Other (196)

Q20.10 Which generation do you feel you are part of?

- Millennials (1)
- Generation X (2)
- Baby Boomers (3)
- Other (4)

Q21.1 Have you ever met the person in the video?

- Yes. (1)
- No. (2)

Q22.1

The title of this study is “Effects of candidate gender and assertiveness on likability and promotability to a leadership position: comparing perceptions of U.S. Millennials with those of older U.S. workers.”

The purpose of this study is to investigate the impact of the display of assertive behaviors on perceptions of likability, competence, and promotion recommendations, for male versus female job candidates, taking into account the assessors’ generation. This research will contribute to the existing knowledge on gender bias. It also contributes to the understanding of the relationship between likability and competence to promotability. Finally, it contributes to understanding how

the millennial generation differs, or not, from older workers in their perceptions of leader gender and assertiveness.

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Q22.2

Thank you for taking part in this survey. Your participation will provide valuable insights into this research.