Gender Differences in Professional Advancement: The Role of Goals, Perceptions, and Behaviors

A dissertation presented

by

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to

The Department of Business Studies

in partial fulfillment of the requirements

for the degree of

Doctor of Philosophy

in the subject of

Organizational Behavior

Harvard University

Cambridge, Massachusetts

April, 2016
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**Gender Differences in Professional Advancement:**  
The Role of Goals, Perceptions, and Behaviors

**Abstract**

Women are significantly underrepresented in senior-level positions within organizations. A great deal of research has provided evidence that both demand-side factors (e.g., bias and discrimination) and supply-side factors (e.g., the different behavioral tendencies of men and women) significantly contribute to this gender disparity. However, demand- and supply-side factors are inextricably linked, such that differences in supply-side behaviors are often elicited in response to the divergent demand-side treatment that members of each gender receive. The aim of the current research was to investigate whether men and women’s goals, which are a strong predictor of downstream behavior, are similarly affected by differences in the ways that men and women are evaluated and treated. Thus, across 12 studies, employing a total of 6,245 participants, we examined differences in the professional advancement goals, perceptions, and behaviors exhibited by men and women. Our findings reveal that, compared to men, women view attaining power at work as less of a goal and opportunities for professional advancement as less desirable. To explore what may be shaping these differential objectives, we examined four potential contributing factors: (i) perceived attainability, (ii) perceptions of negative outcomes, (iii) perceptions of resistance and backlash to one’s ideas and abilities, and (iv) perceived belonging among one’s coworkers. While we found no gender difference for perceptions of attainability, resistance and backlash, or belonging, women did anticipate more negative outcomes (i.e., conflict amongst one’s goals, trade-offs, time constraints, and sacrifice) being associated with a
promotion or high-power job opportunity. Moreover, these perceptions explained the relationship between women’s reduced desire for and pursuit of opportunities related to career advancement. These results are in line with the disproportionate level of domestic responsibilities placed on women as well as the conflicting nature of what it means to be a leader and what it means to be a woman from a societal expectations standpoint. Past research has shown that women’s perceptions of this imbalance and incongruity exert considerable influence over their behavior, but the current research suggests that this role conflict manifests itself on an even deeper level, by influencing the underlying goals that women have for themselves.
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Acknowledgements

The experience of being a PhD student is hard—really hard. It blurs your personal and professional lives, your weekdays and weekends, your office and your home. It is all encompassing and takes a staggering level of fortitude and persistence. Because of this, no one gets through this experience without the support of many, many other people. I could write a whole other dissertation-length paper on the gratitude I have for the village of people who helped me get to this point, but I will do my best to be (relatively) succinct.

First and foremost, I am grateful for my dissertation committee: Amy Cuddy, Mahzarin Banaji, and Robin Ely. Beyond being a dream team of researchers, particularly given the topic of my dissertation, I deeply appreciate their genuine investment in the work and support of me in the face of obstacles I have encountered along this journey. Furthermore, I admire and am inspired by the immense integrity that each of them exhibits and embodies.

Amy, thank you for modeling the following Gary Lew quote on the mug that you gave me during my first year: “This is your world. Shape it or someone else will.” You are a testament to the power of being authentic. Correspondingly, I thank you for your encouragement to just be me, instead of what someone else wants me to be. I also thank you for teaching me so much about writing and presenting. You are a master at communicating information in a compelling and captivating way and I am grateful to have been able to learn some of that from you firsthand. Thank you for your presence, which radiates as bright as your book cover.

Mahzarin, I have never met a professor who is as deeply invested in her students as you are. Despite flying across the world and back almost every week, you are nothing if not
a present mentor who never compromises your commitment to your students. In five years, I don’t believe you have ever canceled a meeting with me and there is something profoundly impactful about that. Something else I have always appreciated about you is how much respect you show for your students’ ideas. If I ever disagreed with you about something related to one of our projects, you never simply dismissed it, but rather engaged in a conversation about it, seeing an opportunity to either make the paper better or provide me with a learning experience. Finally, there have been moments when I was lost or struggling, without a compass to direct me forward. Thank you for stepping up to the plate during those times and being the mentor you were not obligated to be, but that I very much needed.

Robin, your passion for high-quality research and the issues women face at work is unparalleled. I consider myself and my research lucky to have had your involvement and influence over the past year. I never left a meeting in your office without being motivated and excited to get back to work, with a fresh perspective on the project and its potential. Your enthusiasm for gender research and compassion for students was exemplified by your gracious offer to be on my committee despite our minimal history with one another and a workload that made the decision to add another dissertation to your docket perhaps unwise. Ever since I received that email from you last fall, I have been incredibly grateful that you made such an altruistic choice.

Another Harvard professor whom I am deeply thankful for is Paul McKinnon. After almost 10 years of pursuing a career in academia and being surrounded by other would-be professors, it is daunting to reimagine your professional identity and embark upon a career that is not found within an ivory tower. Paul, thank you for being my tour guide and mentor.
as I chart a new path for myself. You brought me back to life and made me excited about my career again. There is no value that can be assigned to a gift like that.

My final mentor-related thank you goes to my undergraduate advisor at Berkeley, Robb Willer. Robb, I am still routinely grateful that I signed up for your class all those years ago. From a professor, to an advisor, to a friend, you have had an immeasurable impact on my life over the past 10 years. If I ever encounter any snakes on a plane, you’ll be the first person I call.

Two of the most incredible people whom I have met at Harvard have not been academics, but rather a dean (Garth McCavana) and an ombudsman (Lydia Cummings). Garth, thank you for caring about and advocating on behalf of the graduate students at Harvard. Someone has to watch out for those who have no power and you are the perfect person for the job. Lydia, what can I say other than you saved me. I would never have graduated if I had not met you. You have been a beacon of light when everything around me felt dark as night. Harvard, and the world in general, has far too few of you.

Research can often be a solitary and draining affair, involving too many hours spent alone in an office with only a computer and your data sets to keep you company. As a naturally social person, I am grateful to all of my friends who were always there to provide me with a much-needed dose of fun, laughter, support, and encouragement.

One of the odd parts about grad school is that your friends are also your colleagues. This can breed competition and undermine the development of authentic friendships. I have been lucky enough to find a set of friends within academia who were friends first and colleagues second. To all of them (Ken Allen, Regan Bernhard, Erica Boothby, Juan Manuel Contreras, Gus Cooney, Emily Cotterill, Beth Devine, Christopher Dial, Matthew Feinberg,
Steven Felix, Erin Hennes, Kiera Hudson, Benedek Kurdi, Bria Long, Rita Ludwig, Brandi Newell, Kevin Madore, Ashley Martin, Katie Porter, Andrew Reece, Hadiya Roderique, Allison Seitchik, Jennifer Sheehy-Skeffington, and Mark Thornton), thank you for choosing the friendship-first path.

Outside of academic circles, my best friends from high school (Shannon Tenbroeck), college (Emilia de Luz), volleyball (Kristin Perkins), HGSLI (Elizabeth “Lizzie” Adelman, Erika Carlsen, Marika Semerdzhian), and the MBA program (Meagan Hill, Christina Mendez) have provided amazing balance and perspective to my life. I thank these friends for reminding me that a world outside of academia exists and making sure I remember that there is more to me than my publication record. In that same vein, to my friends from Rugged CrossFit (Jamie Brause, Stephen Brissette, Kevin Cleary, Brianna Collins, Rob Stevenson, and Andrea Whalen), thank you for routinely making a set of thrusters and burpees at 7:30am the best part of my day. Thank you for giving me the strength to hit multiple PRs and to get through this experience, both mentally and physically.

Then there are friends who exist in a special category all their own, transcending the boundaries of friendship and becoming more akin to family. Of course, they are unique even from family because they are the family that you choose to have rather than the family you were born with. Rachel Arnett and David Zade, thank you for being my adopted family.

Rachel, I could not have asked for a better partner in crime during this experience. Over the past five years, we’ve cried together, laughed together (WAY more often than cried), supported each other through major obstacles (personal and professional), and celebrated one another’s major achievements (personal and professional). I still remember sitting in the cafeteria at Columbia trying to have an unbiased conversation with you about
Berkeley vs. Harvard, but secretly (or not) bursting with hope that you would pick Harvard. Not only can I not imagine having gone through this experience without you, I don’t want to even consider what that would have been like. Thank you for being the flawless dragon that you are. You are a star—don’t ever forget it.

Dave, as you routinely remind me, you are an incredible friend. You have been my rock during several storms, a source of comfort, compassion, knowledge, insight, great meals, and the warmest snow boots (red laces included) a girl could ask for. You have opened my eyes to so many different things in life and allowed me to live vicariously through your adventures. When you travel to Argentina, Spain, South Africa, Maine, Idaho, or anywhere else, I feel like I get to experience these places with you. There is such a simple kind of happiness that I feel when I receive an email containing a new picture of you on a boat or a mountain somewhere, doing what you love and collecting stories to tell me when you return. I know that you are sad I am leaving Boston, but our friendship has always extended beyond geographical boundaries and I promise that it will continue to do so.

The most fulfilling experiences I have had in graduate school have been the opportunities where I was able to mentor honors students and research assistants. I feel that enabling the success of others is my true calling in life and it is the inspiration for my future career in human resources and talent development. I thank these individuals for being in the trenches with me, for elevating the quality of my work, and for making long days at the office feel like they went by in a flash.

I could not have asked for better honors students than Emily Rutter and Alex Diaz. I have no recollection of where I was or what I was doing when I found out that a paper of mine had been accepted for publication, but I have vivid memories of the joy Emily and I
felt when she wrote the final sentence and submitted her thesis minutes before the deadline and when I burst into tears after Alex called to tell me he received the Rhodes Scholarship. Emily & Alex, beyond being incredibly motivated, smart, and capable, you are wonderful people who have kind hearts, great senses of humor, and are as authentic as they come. Thank you for spending a collective three years with me. I am incredibly proud of each of you and the work that we did together.

I have long felt that research assistants are the unsung heroes of academia. They do unbelievable amounts of work that is often monotonous and uninteresting in return for the least amount of credit and little (if any) compensation beyond experience. They are often dismissed as research amateurs and therefore not having much to contribute at a higher level. In contrast, I have been fortunate enough to have research assistants who consistently elevated my work to a level that I could not have reached on my own. I was routinely in awe of their overwhelming dedication, excitement, persistence, and amazingly developed insight. Moreover, they made the work so much more fun, which energized and motivated me to keep pushing through study after study. To all of my research assistants (Alind Amedi, Hannah Birnbaum, Elizabeth “Betsy” Grether, Neela Kaushik, Christina Leonelli, Surya Menon, Helena Rabasco, Nick Richard, Erich Tusch, and Lelaina Vogel), thank you for everything you did for me and for being extraordinary colleagues. I can only hope you benefited half as much from us working together as I did. This dissertation is dedicated to you, with great gratitude and admiration for all that you are and all that you are capable of.

Finally, there is something unique about people who have known you your entire life. Their historical perspective enables them to see that it took a lifetime to get to this point, not just the five-year timespan that comprises the doctoral program. To my sister and
mini me, Candice Wilmuth, thank you for reminding me that you can be an incredibly successful and capable 35-year-old and still be the silliest person on the planet. I admire the degree to which you pursue your passions and dance to the beat of your own drummer, always with as much sparkle as possible.

There are not enough words or enough pages for me to adequately express how grateful I am to my dad, the original “Dr. Wilmuth, Ph.D.” and my favorite Golden Bear. If you’re really lucky, your dad is a great parent. If you’re me, your dad is also one of your best friends. Dad, thank you for listening to me ramble on about my day as I walk across campus, to crossfit, to the store, etc. Thank you for being an engineer who tries his hardest to live in my psychology-oriented world. Thank you for being my IT support and emotional support, depending on the day. Thank you for being the guy sitting across the table from me in my favorite cartoon from 1955. And thank you for reminding and inspiring me, no matter the situation, to just “roll on you Bears.”
For my research assistants,
with immense gratitude and admiration.
Gender Differences in Professional Advancement: 
The Role of Goals, Perceptions, and Behaviors

Introduction

Even in societies that stress the importance of gender equality, women are underrepresented in most senior-level positions (Burke & Major, 2014). For instance, recent estimates indicate that women comprise less than 5% of Fortune 500 CEOs, less than 15% of executive officers, less than 20% of board seats (Catalyst, 2014), and only 6% of partners in venture capital firms (Brush, Greene, Balachandra, & Davis, 2014). Moreover, it appears that the small percentage of women who do attain executive positions are relegated to spheres within the organization that have less influence and fewer opportunities for professional advancement (Dawson, 2014).

This is despite the fact that women have achieved parity with men in educational attainment and share of the workforce (Goldin, Katz, & Kuziemko, 2006). In fact, women are increasingly outperforming men in university settings, earning approximately 57% of the undergraduate and 60% of the master’s degrees awarded in the United States (National Center for Education, 2012). Thus, it appears that the talent pipeline at the entry level does not suffer from the same gender imbalance that exists at the top tiers within organizations. The progressive nature of this issue suggests that power and gender interact in a significant way, resulting in a leadership landscape that is increasingly devoid of women with each step up on the organizational hierarchy.

Demand- & Supply-Side Factors

Many reasons exist for the gender imbalance in high-power positions. These reasons can be grouped into two broad categories: demand-side factors and supply-side factors. The
first category is referred to by sociologists as demand side factors and is known to psychologists as interpersonal effects. These factors encompass the institutional barriers that women face because of the divergent ways in which men and women are perceived and treated by others. For example, evidence suggests that compared to men, women are perceived as less competent, lacking leadership potential, and being less committed to their career (Garcia-Retamero & López-Zafra, 2006; Heilman & Eagly, 2008; Heilman & Parks-Stamm, 2007; Moss-Racusin, Dovidio, Brescoll, Graham, & Handelsman, 2012; Parks-Stamm, Heilman, & Hears, 2008; Mathison, 1986; Ellemers, Heuvel, Gilder, Maass, & Bonvini, 2004; Reuben, Sapienza, & Zingales, 2014). These biased perceptions operate on both the implicit and explicit level (Reuben, Sapienza, & Zingales, 2014; Rudman & Glick, 2001). The standards to which men and women are expected to perform and the credit they receive are also different, such that women must go to greater lengths to prove their competence (Biernat & Kobrynowicz, 1997; Pheterson, Kiesler, & Goldberg, 1971; Ridgeway, 2001; see review by Foschi, 2000), and to have their contributions to team-based efforts fairly acknowledged (Sarsons, 2016). In both field and laboratory studies, female job candidates are less likely to be hired and promoted than male candidates, as well as receive lower levels of mentorship and financial compensation (Moss-Racusin, Dovidio, Brescoll, Graham, & Handelsman, 2012; Reuben, Sapienza, & Zingales, 2014; Sarsons, 2016), even when there is no measurable difference in the qualifications between them. Furthermore, the hiring criteria may be manipulated in ways to deem women as less suitable for the job, thus justifying subsequent gender-based discrimination (Phelan, Moss-Racusin, & Rudman, 2008; Uhlmann & Cohen, 2005). Thus at every stage of their careers, women are more likely than men to encounter challenges and skepticism about their abilities and efforts (Brescoll &
Uhlmann, 2008; Butler & Geis, 1990; Eagly & Karau, 2002; Eagly, Karau, & Makhijani, 1995; Heilman, Block, Martell, & Simon, 1989; Rudman, 1998), which have meaningful implications for the gender disparity that exists in organizations.

Interestingly, gender-based prejudice and discrimination seem to be perpetuated by men and women alike (Eagly & Steffen, 1986; Reuben, Sapienza, & Zingales, 2014). Female professors are just as likely as their male colleagues to give preferential treatment to male candidates applying for a lab manager position (Moss-Racusin, Dovidio, Brescoll, Graham, & Handelsman, 2012). Similarly, both men and women appear to question the extent to which their female colleagues have leadership potential and are committed to their careers, even when no gender difference in reported commitment is found (Ellemers, Heuvel, Gilder, Maass, & Bonvini, 2004; Garcia-Retamero & López-Zafra, 2006; Mathison, 1986; Parks-Stamm, Heilman, & Hearns, 2008). Thus, women are not only held back by demand-side barriers, they also play a role in erecting them.

The second set of factors that contribute to the gender disparity in senior-level positions is referred to by sociologists as supply-side factors and by psychologists as intrapersonal effects. In contrast to demand-side factors, which are part of the environment the individual interacts with, supply-side factors are differences in the decisions made or behaviors enacted by men and women themselves that contribute to gendered outcomes. For example, men are more likely than women to display confidence (Ehrlinger & Dunning, 2003; Kay & Shipman, 2015) and dominance (both verbally and nonverbally; Archer, 2009; Dovidio, Ellyson, Keating, Heltman, & Brown, 1988; Eagly & Steffen, 1986; LaFrance, Hecht, & Levy Paluck, 2003; Williams & Tiedens, 2016), engage in self-promotion (Moss-Racusin, Phelan, & Rudman, 2010; Rudman, 1998; Rudman & Glick, 2001; Rudman &
Phelan, 2008), initiate salary negotiations (Amanatullah & Morris, 2010; Bowles, Babcock, & Lai, 2007; Swim, 1994; Eagly & Karau, 1991), and self-select into competitive environments (Gneezy, Leonard, & List, 2009; Gneezy, Niederle, & Rustichini, 2003; Niederle & Vesterlund, 2008), all of which are behaviors likely to facilitate progression of one's career (Anderson, Brion, Moore, & Kennedy, 2012; Babcock & Laschever, 2009; Greig, 2008). Even more directly related to professional advancement, women appear to be less likely to ask for raises and promotions (Babcock & Laschever, 2009), and more likely to turn down professional opportunities (Ehrlinger & Dunning, 2003). Additionally, women are less inclined to apply for jobs that they are not 100% qualified for (Kay & Shipman, 2015; Mohr, 2014) and positions that are described using agentic terms, which tend to coincide with leadership and managerial roles (Gaucher, Friesen, & Kay, 2011; Schein, 2001). Men and women also display important differences with regard to how they regularly allocate their valuable time and attention: women are 50% more likely than men to respond favorably to requests to perform non-promotable tasks (e.g., writing a report, serving on a committee), and even display a greater tendency to volunteer for such nonessential assignments (Vesterlund, Babcock, & Weingart, 2014). While engaging in these tasks may help the organization as a whole, they have a negative impact on an individual’s career progression, detracting from the time in which she may focus on the tasks that are heavily considered during promotion evaluations.

While acknowledging that demand- and supply-side factors individually contribute to the gender disparity in senior-level positions, they are both profoundly influenced by a common external factor, namely, cultural norms and societal expectations. The stringent roles that each gender are expected to embody regulate the different ways in which men and
women are treated throughout their careers as well as their likelihood of engaging in certain professional advancement behaviors (Amanatullah & Morris, 2010; Eagly & Karau, 2002; Heilman, 2001; Heilman & Eagly, 2008; Rudman & Phelan, 2008). This is particularly apparent in high-level positions, where the male and female gender roles uniquely interact with the societal conception of those who occupy such powerful positions (Eagly, 2007). Role congruity theory specifically examines this interaction and the conflicting nature of what is means to be a leader versus what is means to be a woman (Eagly & Karau, 2002).

**The Roles of Men, Women, & Leaders**

Social roles encompass the shared beliefs and expectations attached to individuals who are part of a particular social group or occupy a certain position within society (Biddle, 1986; Eagly & Karau, 2002; Sarbin & Allen, 1968). More specifically, gender roles are the “consensual beliefs about the attributes of women and men” (pp. 574, Eagly & Karau, 2002) that inform the roles that men and women are imagined to occupy. These beliefs are the foundation of descriptive norms, which contain information related to how men and women are, and prescriptive norms, which define how men and women should be (Eagly & Karau, 2002; Heilman, 2012; Heilman & Parks-Stamm, 2007). In general, women are both thought of as and expected to be communal (i.e., warm, friendly, and other-oriented), while men are thought of as and expected to be agentic (i.e., dominant, aggressive, and achievement-oriented; Budworth & Mann, 2010; Heilman, 2001; Prentice & Carranza, 2003). These dispositional ascriptions determine the behaviors that are considered appropriate for each gender to enact (Prentice & Carranza, 2003). Additionally, what is considered acceptable behavior for one gender is thought of as unacceptable for the other. For example, women are expected to appear modest and downplay their own abilities and accomplishments, while
appearing self-assured and boasting about one’s achievements is considered befitting behavior for men (Moss-Racusin, Phelan, & Rudman, 2010). This also extends to the level of basic traits, such that a trait that is positive for men is considered negative for women and vice versa. Failing to behave in a manner consistent with these socially shared expectations is likely to result in a host of negative outcomes for the deviating individual (Rudman & Phelan, 2008; Williams & Tiedens, 2016).

In the context of professional advancement, the protocol for women and the consequences that result from deviating from it are particularly acute due to the masculinized conception of high-level positions being at odds with the female gender role. The qualities generally considered to be prerequisites for success in positions of power (e.g., managerial or executive roles) are highly agentic; successful leaders should be competitive, aggressive, self-confident, and ambitious (Heilman, 2001; Heilman, Block, Martell, & Simon, 1989; Martell, Parker, Emrich, & Crawford, 1998; Powell & Butterfield, 1989; Schein, 2001). This masculine construal of leadership is nicely aligned with the descriptive and prescriptive norms for men, but directly contradicts the socially shared beliefs about how women are and should behave (Heilman, 2001; Heilman, Block, Martell, & Simon, 1989; Martell, Parker, Emrich, & Crawford, 1998; Powell & Butterfield, 1989; Schein, 2001). This conflict is the essence of role congruity theory, which proposes that prejudice toward female leaders is the result of incongruity between the leadership role and the female gender role.

Eagly & Karau (2002) highlighted two principal outcomes of this role incongruity for women. The first outcome is that women are perceived to be less viable candidates for leadership roles. This proposition is highly related to Heilman’s (1983, 2001) lack of fit model, which states that the perceived fit between an individual’s attributes and the
requirements of the job greatly informs expectations about how successful or unsuccessful an individual will be in a particular position (Heilman & Parks-Stamm, 2007). Past research has shown that these negative performance expectations have significant effects on employee selection processes (Davison & Burke, 2000; and Olian, Schwab, & Haberfeld, 1988).

The second outcome proposed to result from incongruity between the leader and female gender roles is that women who engage in traditional leadership behaviors will be evaluated negatively and receive hostile treatment from others (Eagly & Karau, 2002; Phelan & Rudman, 2010; Rudman & Phelan, 2008). In fact, past research has shown that agentic women are viewed as significantly less likable, less suitable for leadership, and even at times less competent than similarly agentic men or non-agentic women (Bowles, Babcock, & Lai, 2007; Brescoll, 2012; Heilman, Wallen, Fuchs, & Tamkins, 2004; Rudman, 1998). Agentic women also receive fewer invitations to collaborate and recommendations for salary increases, and are generally considered less hireable (Bowles, Babcock, & Lai, 2007; Heilman, Wallen, Fuchs, & Tamkins, 2004; Rudman, 1998). Thus, women face considerable social and financial penalties for displaying behavior that is expected of leaders, such as self-promotion, high volubility (i.e., time spent talking), explicit demonstrations of dominance (e.g., making direct demands), and acting in broadly agentic or otherwise masculine ways (Budworth & Mann, 2010; Brescoll, 2012; Coffman, 2014; Okimoto & Brescoll, 2010; Rudman & Glick, 2001; Williams & Tiedens, 2016). These behaviors violate the communality norm that women are expected to embody, and it is this fundamental gender role violation that is often underlying the adverse reactions from others (Heilman & Okimoto, 2007; Okimoto & Brescoll, 2010).
Past research has shown that an awareness of the negative outcomes that women are likely to come up against as a result of behaving agentically actually guides women’s behavior (Bowles, Babcock, & Lai, 2007; Brescoll, 2012; Budworth & Mann, 2010; Moss-Racusin & Rudman, 2010). In other words, women internalize the social norms of what defines appropriate behavior, and in turn, police themselves, augmenting their own actions in accordance with gender norms. For instance, work by Brescoll (2012) and Coffman (2014) has shown that women take up less time speaking because they are acutely aware of the backlash such behavior will elicit. This kind of astute behavioral self-regulation is perhaps unsurprising given that the cultural norms and societal expectations related to gender are ingrained at a young age and reinforced throughout one’s lifetime by members of both genders (Eagly & Steffen, 1986; Leaper & Friedman, 2007; Reuben, Sapienza, & Zingales, 2014). When little boys engage in agentic behavior such as calling out answers in class, teachers usually listen to them, whereas when little girls display similar assertiveness, they are often reprimanded for breaking the rules. Similarly, as early as first grade, girls appear to be less inclined to raise their hand even when they are highly assured that they know the answer to the question, in contrast to boys, who will raise their hand to even if they are unsure of the answer (Beaman, Wheldall, & Kemp, 2006; Halim & Ruble, 2010; Jones & Dindia, 2004; Kimmel & Aronson, 2008; Altermatt, Javanovic, & Perry, 1998).

Women’s and girls’ awareness of the negative outcomes that female role violations frequently elicit and the influence this awareness has on their behavior highlight the interconnected relationship between supply- and demand-side factors. People often learn how to think and behave based on their experiences, observations, and interactions in the world. Likewise, differences in men and women’s supply-side behaviors, at least at times,
appear to be in direct response to the divergent demand-side treatment that members of each gender receive (Amanatullah & Morris, 2010; Brescoll, 2012; Moss-Racusin, Phelan, & Rudman, 2010). While it is clear that the conflict between the leadership role and the female gender role has a significant impact on women’s behavior, past research has not yet examined whether this role incongruity manifests itself on an even deeper level, by shaping the goals that women have for themselves.

**Goal Formation & Impact on Behavior**

A goal is often defined as “a cognitive representation of a desired end-point that impacts evaluations, emotions, and behaviors” (pp. 491, Fishbach & Ferguson, 2007). Goals may be indefinite and abstract (e.g., be healthier) or specific and concrete (i.e., lose 10 pounds; Jeannerod, 1997; Kornblum, Hasbroucq, & Osman, 1990; Kruglanski, Shah, Fishbach, Friedman, Chun, & Sleeth-Keppler, 2002; Miller, Galanter, & Pribram, 1960; Powers, 1973). Much of people’s decisions and behaviors revolve around the goals that they have for themselves (Bandura, 1986; Carver & Sheier, 1999; Deci & Ryan, 1985; Gollwitzer, 1990; Latham & Locke, 1990; Mischel, Cantor, & Feldman, 1996; Fiske, 1989; Miller, Galanter, & Pribram, 1960; Norman & Shallice, 1986). In fact, goals are often differentiated from related constructs, such as memories, by the extent to which they affect subsequent behavior (Aarts, Gollwitzer, & Hassin, 2004; Bargh, Gollwitzer, Lee-Chai, Barndollar, & Trötschel, 2001; Fishbach & Ferguson, 2007; Förster, Liberman, & Friedman, 2007; Kawada, Oettingen, Gollwitzer, & Bargh, 2004; Shah & Kruglanski, 2003). While all goals contain semantic knowledge, not all semantic constructs have the motivational force and impact on behavior that is necessary for a construct to be considered a goal. If attaining a high-level position is one of your goals, then you are likely to engage in behaviors that would
facilitate professional advancement, such as applying for a promotion or pursuing a position of power. On the other hand, if a high-level position is not an end-point that you consider to be highly desirable, then you are less likely to engage in professional advancement behaviors.

Whether or not a particular end-point is considered a goal is influenced by many things. Goals are formed in reaction to one’s personal experiences, the experiences of others, and societal norms and expectations (Kruglanski, Shah, Fishbach, Friedman, Chun, & Sleeth-Keppler, 2002). Goals can also be heavily influenced by other goals (Fishbach, Friedman, & Kruglanski, 2003; Shah, Friedman, & Kruglanski, 2002). At any given time in life, most individuals are simultaneously pursuing multiple goals. Some goals have no bearing on one another, while others may be related to one another in some way. For example, the goal of “plant a backyard garden” is unrelated to the goal of “floss more,” yet somewhat connected to the goal of “watch less TV” in the sense that developing an outdoors hobby is likely to make reducing one’s TV consumption much easier. In contrast to the compatible relationship exhibited in the previous example, two goals may have a competing relationship to one another, such that the pursuit of one goal inhibits the successful attainment of the other goal (Fishbach & Ferguson, 2007; Fishbach, Friedman, & Kruglanski, 2003). For instance, the goal of “spend less money” is at odds with the goal of “travel more.” Unfortunately, to the extent that fulfilling the socially prescribed norms for one’s gender is considered a goal for men and women, the goal of attaining a high-level position is a compatible goal for men and a competing goal for women. In the same vein, the goal-relevant behaviors for professional advancement complement the behavioral prescriptions for men and conflict with the behavioral prescriptions for women.
Given the limited resources that an individual has to allocate toward goal pursuit, when two goals are in conflict with one another, the importance of and attention devoted to one of the goals may be diminished or eliminated (Shah & Kruglanski, 2002; Shah, Friedman, & Kruglanski, 2002). The question then becomes, what determines which goal deserves priority? By definition, in order for an end-point to be considered a goal, it must be thought of as desirable and associated with positive affect (Carver & Scheier, 1981; Custers & Aarts, 2005; Kruglanski, Shah, Fishbach, Friedman, Chun, & Sleeth-Keppler, 2002; Peak, 1955; Pervin, 1989; Shah, Friedman, & Kruglanski, 2002; Young, 1961). If two end-points are considered desirable, but one is perceived to be less desirable than the other, then the more desirable goal is likely to take priority. The feasibility of a desired end-point also factors into the priority level it is given and how doggedly it is pursued. If one goal is perceived to be significantly harder to attain than another goal, then it is likely to take a back seat to the goal that is more realistically attainable (Brehm & Self, 1989; Iyengar & Lepper, 2000; Tversky & Shafir, 1992). Thus, perceptions of the ends (e.g., desirability of the end-point) and the means (e.g., attainability of the end-point) play a significant role in determining the strength or importance of a goal, and accordingly, influence the likelihood of engaging in goal-relevant behaviors (Ajzen, 1991; Gollwitzer, 1990; Latham & Locke, 1990; Oettingen, Bulgarella, Henderson, & Gollwitzer, 2004). In light of the goal conflict that women experience as a result of the incongruity between their gender role and the leadership role, it appears that the ends and the means related to professional advancement are more unfavorable for women than for men. The current research seeks to examine this presumption by exploring potential differences in the goals held by men and women, the
perceptions underlying these goals, and the impact these goals have on downstream behavior.

**Overview of Current Research**

Past research has shown that the incongruity between the female gender role and the leader role influences women’s likelihood of engaging in behaviors that are likely to facilitate progression of one’s career. The current research seeks to investigate whether women’s goals, which are a strong predictor of downstream behavior, are similarly affected by differences in the experience that women and men anticipate encountering as they move up the organizational hierarchy. To address this, we first examine whether men and women differ in the extent to which they report professional advancement as a goal (e.g., view high-level positions as desirable or strive to attain power in the workplace). We then explore discrepancies in the perceptions of professional advancement that men and women have as potential mechanisms that are underlying gender differences in goals. In particular, we focus on perceptions related to how positive or negative the experience of being in a high-level position would be (i.e., the ends) and how attainable such positions are considered to be (i.e., the means) as factors that may be shaping the professional objectives that men and women have for themselves. Finally, we assess the relationships between these goals and perceptions and the likelihood of pursuing a promotion or high-level job opportunity. By connecting the goals and perceptions that men and women have to subsequent professional advancement behaviors, we are able to more fully conceive of the role that they play in perpetuating gender disparity in senior-level positions.
Chapter 1: Core Life Goals

The aim of Chapter 1 is to explore potential differences in the life goals held by men and women, with a focus on goals related to professional advancement. Previous research provides some evidence that men are more likely than women to strive for power in the workplace: men tend to pay more attention to power cues (Karoly, 1999) and to report being more motivated by power (Greene & DeBacker, 2004), which has been shown to play a role in producing gender differences in leadership role occupancy (Mason, Zhang, & Dyer, 2010). Similarly, in studies employing samples of talented individuals, the life values and personal views of men and women have been found to differ (Schuh, et al., 2014), with men tending to assume a more agentic, career-focused perspective, while women generally favor a more communal, holistic perspective (Diener & Fujita, 1995; Lubinski, Benbow, & Kell, 2014). These differing views appear to cause differences in how men and women allocate their time and attention (Schuh, et al., 2014), revealing the influence that these orientations have on subsequent actions and decisions. With this in mind, in Studies 1 and 2, we predicted that male participants will report a greater number of goals related to professional advancement than female participants will.

Study 1

In Study 1, we asked a large online sample of working adults (n = 781; 42.3% female; average age = 31.88) to write a list of their core goals in life. We defined core goals for participants as “things that occupy your thoughts on a routine basis, things that you deeply care about, or things that motivate your behavior and decisions. Examples of such goals are: being in a committed relationship, keeping up with sports, being organized, or attaining power or status.” This description was based on previous research on personal strivings,
defined as consciously accessible and personally meaningful objectives that people pursue in
their daily lives (Emmons, 1986; Emmons, 1999; Emmons, 2003). We asked participants to
list anywhere from 1 to 25 goals (in the order in which they came to mind) within two
minutes. Participants then categorized their goals by choosing among different goal
categories with descriptions, which were based on research on personal strivings (Emmons,
1986; Emmons, 1999; Emmons, 2003; see Appendix A2). We were particularly interested in
the number of power goals and achievement goals that participants reported, given the likely
role that these goals play in professional advancement.

As predicted, the number of power goals that men listed were significantly greater
than the number of power goals listed by women [mean_r = 0.28, SD_r = 0.68 vs. mean_m =
0.56, SD_m = 1.045, t(779) = 4.334, p < 0.001, d = 0.32], however no gender difference was
found for achievement goals [mean_r = 2.70, SD_r = 2.539 vs. mean_m = 2.50, SD_m = 2.41,
t(779) = 1.097, p = 0.273, d = 0.08]. Women additionally reported significantly more
miscellaneous goals than men did [mean_r = 1.17, SD_r = 1.931 vs. mean_m = 0.73, SD_m =
1.466, t(779) = 18.531, p < 0.001, d = 0.26], though we found no gender differences among
any of the other goal dimensions (i.e., affiliation, personal growth and health, generativity,
spirituality, and avoidance).
In Study 1, compared to men, women listed more power goals \( t(779) = 4.334, p < 0.001 \) and more miscellaneous goals \( t(779) = 18.531, p < 0.001 \). *

Interestingly, women listed more goals in total than men did \([\text{mean}_f = 9.46, \text{SD}_f = 5.63 \) vs. \( \text{mean}_m = 8.41, \text{SD}_m = 5.28, t(779) = 2.67, p = 0.008, d = 0.19\)]. When taking this total difference into account, we found that compared to men’s goals, a smaller proportion of women’s goals fell into the power category \([\text{mean}_f = 3\%, \text{SD}_f = 9\% \) vs. \( \text{mean}_m = 7\%, \text{SD}_m = 14\%, t(779) = 4.18, p < 0.001, d = 0.34\)], a greater proportion of women’s goals fell into the miscellaneous category \([\text{mean}_f = 12\%, \text{SD}_f = 17\% \) vs. \( \text{mean}_m = 9\%, \text{SD}_m = 16\%, t(779) = 2.60, p = 0.01, d = 0.18\)], and no gender differences were found for the other types of goals.
Figure 1b. Total goals listed in Study 1

In Study 1, compared to men, women listed more goals in total [$t(779) = 2.67, p = 0.008]$. *$p \leq 0.05$, **$p \leq 0.01$, ***$p \leq 0.001$.

Study 2

In Study 2, we provide a conceptual replication of Study 1 and also address a potential confound regarding the gender difference in total number of goals reported: that women listed more goals than men did because they cared more about pleasing the experimenter. We asked 437 adults from an online panel of employed individuals (50.3% female; average age = 48.41) provided by ClearVoice to complete a short survey. Participants listed their core goals (up to 20 this time, instead of 25) and then categorized them, using the same categories as in Study 1 (see Appendix A2). After listing their goals, to test the alternative explanation about level of effort in the study, we asked participants to list their favorite foods under the same two-minute time limit. Finally, after answering demographic questions, participants indicated the extent to which they tried to please the experimenter while completing the study, using a 7-point scale (1 = not at all, 7 = very much so).
Mirroring the power-related results of Study 1, compared to men, women listed fewer power goals [mean_t = 0.43, SD_t = 1.098 vs. mean_m = 0.76, SD_m = 1.155, t(435) = 3.006, p = 0.003, d = 0.29]. While there was not a statistically significant difference between men and women’s achievement goals, the effect was marginal in the opposite direction, with women reporting more achievement-related goals than men [mean_t = 2.47, SD_t = 2.236 vs. mean_m = 2.10, SD_m = 2.156, t(435) = 1.767, p = 0.078, d = 0.17]. Female participants also listed more affiliation goals [mean_t = 1.68, SD_t = 1.863 vs. mean_m = 1.19, SD_m = 1.574, t(435) = 2.986, p = 0.003, d = 0.28], personal growth and health goals [mean_t = 2.46, SD_t = 2.194 vs. mean_m = 1.92, SD_m = 2.181, t(435) = 2.567, p = 0.011, d = 0.25], and avoidance goals [mean_t = 0.19, SD_t = 0.594 vs. mean_m = 0.10, SD_m = 0.326, t(435) = 1.95, p = 0.052, d = 0.19].

Figure 2a. Goals listed by category in Study 2

In Study 2, compared to men, women listed more power goals [t(435) = 3.006, p = 0.003], more affiliation goals [t(435) = 2.986, p = 0.003], more personal growth and health goals [t(435) = 2.567, p = 0.011], and more avoidance goals [t(435) = 1.95, p = 0.052]. *p ≤ 0.05, **p ≤ 0.01, ***p ≤ 0.001.
As for the overall number of goals listed, women reported more goals in total than did men [mean\(_f\) = 9.47, SD\(_f\) = 4.81 vs. mean\(_m\) = 7.90, SD\(_m\) = 4.63, \(t(435) = 3.48, p = 0.001, d = 0.34\)]. Importantly, female and male participants listed about the same number of favorite foods [mean\(_f\) = 13.54, SD\(_f\) = 5.21 vs. mean\(_m\) = 12.76, SD\(_m\) = 5.70, \(t(435) = 1.50, p = 0.14, d = 0.14\)] and were similarly disinterested in pleasing the experimenter during the study [mean\(_f\) = 2.69, SD\(_f\) = 2.06 vs. mean\(_m\) = 2.68, SD\(_m\) = 1.91, \(t(435) = 0.047, p = 0.96, d = 0.005\)]. Even when controlling for the number of favorite foods respondents reported, women still listed more life goals than men [\(F(1,434) = 10.23, p = 0.001, d = 0.33\)].

**Figure 2b. Number of goals and foods listed in Study 2**

In Study 2, compared to men, women listed more goals [\(t(435) = 3.48, p = 0.001\)], but an equal number of favorite foods [\(t(435) = 1.50, p = 0.14\)]. Error bars represent standardized errors. *\(p \leq 0.05\), **\(p \leq 0.01\), ***\(p \leq 0.001\).
In Study 2, compared to men, women were similarly disinterested in pleasing the experimenter during the study \( t(435) = 0.047, p = 0.96 \). Error bars represent standardized errors. \(^* p \leq 0.05, ^{**} p \leq 0.01, ^{***} p \leq 0.001.\)

Taking this difference in total number of goals into account, we found that, similar to Study 1, the proportion of women’s goals related to power was significantly lower than the proportion of men’s goals related to power \([\text{mean}_f = 5\%, \text{SD}_f = 11\% \text{ vs. mean}_m = 10\%, \text{SD}_m = 13\%], t(435) = 4.51, p < 0.001, d = 0.42\). However, of the gender differences found for the number of non-power goals listed (i.e., those related to achievement, affiliation, personal growth and health, or avoidance), the only category of goals that remained significant when looked at as a percentage of total goals reported was avoidance goals \([\text{mean}_f = 2\%, \text{SD}_f = 7\% \text{ vs. mean}_m = 1\%, \text{SD}_m = 4\%], t(435) = 2.15, p = 0.032, d = 0.18\).

**Discussion**

The studies in Chapter 1 sought to examine whether men and women differ in the extent to which they hold professional advancement goals. Men listed more power-related goals than women did in both Studies 1 and 2. However, there was no significant difference
in achievement goals in Study 1, and women listed marginally more achievement goals than men did in Study 2. Though the relationship between gender and achievement goals did not reach statistical significance, the reason why the achievement data were not in the predicted direction in Study 2 may be due to the loose connection between how achievement goals were defined and professional advancement. Power goals were defined for participants as the desire “to have an impact on, control or manage other people, influence other people, or control resources others depend on,” while achievement goals were defined for participants as the desire “to achieve success by doing things better than before or by surpassing some internal or external standards of excellence.” In contrast to the definition of power goals, which appears rather applicable to career progression, the achievement category seems to be more focused on general development and excellence, which may be realized at all levels within an organizational hierarchy or even in domains that are completely unrelated to one’s career.

In both Studies 1 and 2, women also listed a greater number of goals in total. Study 2 determined that this was not the result of female participants having a strong desire to please the experimenter or trying harder during the study. This difference in number of life goals may reflect the different levels of overlap between men and women’s gender roles and what is expected of those in leadership or managerial positions. The high degree of confluence between the goals associated with men’s gender role and professional advancement is likely to result in men holding fewer discrete goals than women, whose gender and professional roles--and the goals that delineate from each--are quite distinct. Unfortunately, this greater number of goals may lead to further complications for women. Individuals have a finite amount of resources (e.g., time, effort, motivation, money) to
devote to goal pursuit, and thus, more often than not, having more goals reduces an individual’s ability to attain any particular goal let alone all of them (Kruglanski, Shah, Fishbach, Friedman, Chun, & Sleeth-Keppler, 2002). While some behaviors or means may promote the attainment of more than one goal at a time, such efficient pathways are often quite hard to come by (Fishbach & Ferguson, 2007).

The studies in Chapter 2 aimed to replicate the basic gender differences in goals found in Chapter 1, but to do so using methodologies that did not rely on spontaneous reporting of one’s goals or self-categorization of goals, both of which may be subject to reporting bias due to women being reluctant to disclose their desire to seek positions of power (Okimoto & Brescoll, 2010). The next chapter also seeks to build upon the findings of this chapter by exploring potential gender differences in the perceived attainability of professional advancement goals.

Chapter 2: Perceived Attainability of Professional Advancement Goals

One of the reasons that women are less inclined to report power goals, or goals related to professional advancement more generally, may be due to women’s perception that such goals are less attainable for them than men perceive them to be. Since the failure to attain a goal (i.e., a desirable end-point) will result in a host of negative emotions (Bandura, 1997; Carver & Scheier, 1999; Clore, 1994; Higgins, Shah, & Friedman, 1997) and the resources required for goal pursuit are limited, when an individual encounters a goal that is not realistically attainable, it is likely that the goal will be downgraded and one’s efforts will be redirected toward other more feasible goals (Fishbach & Ferguson, 2007).

Past research has suggested that the path to acquiring a high-level position is in fact more difficult for women. Studies have shown that women have less access to development
opportunities related to career progression (Lyness & Thompson, 1997; Ohlott, Ruderman, & McCauley, 1994) and are promoted at a lower rate than men (Lyness & Judiesch, 1999). Women are also held to higher competence standards than men, requiring that women prove their value over and above the degree to which men must perform (Biernat & Kobrynowicz, 1997; Pheterson, Kiesler, & Goldberg, 1971; Ridgeway, 2001; see review by Foschi, 2000).

Finally, from a descriptive standpoint, since there are fewer women in senior-level positions (Catalyst, 2014), women may infer that the feasibility of attaining positions of power is low. Another factor that may contribute to women viewing professional advancement goals as less attainable is a lack of confidence in their own abilities. Women have been shown to underestimate their skills and performance and report lower levels of self-confidence (Cecha, Rubineau, Silbey, & Seron, 2011; Correll, 2001; Ehrlinger & Dunning, 2003; Instone, Major, & Bunker, 1983; Reuben, Sapienza, & Zingales, 2014). Whether these self-perceptions are accurate or not, women’s lower levels of confidence should theoretically translate into lower attainability perceptions related to professional advancement goals.

**Study 3**

In Study 3 we asked an online panel of 247 adults (61.1% female; average age = 29.93) to “think about the things you’d like to accomplish in your life and the goals you have for yourself.” We specifically asked participants to think about two statements that focused on goals related to professional advancement: (i) “As one of my core goals in life, I would like to have a powerful position in an organization,” and (ii) “As one of my core goals in life, I would like to have power over others.” Participants rated the desirability and attainability of these two goals on 7-point scales (1 = not at all, 7 = very much so).
The desirability of each of the two goals and attainability of each of the two goals were highly reliable and thus were collapsed into one measure of desirability (α = 0.824) and one measure of attainability (α = 0.849). Consistent with Studies 1 and 2, which showed that women reported fewer power-related goals, female participants rated these goals as less desirable than men did [mean_f = 3.73, SD_f = 1.67 vs. mean_m = 4.19, SD_m = 1.52, t(245) = 2.24, p = 0.026, d = 0.29].

Surprisingly, women and men did not differ in their perceived attainability of these goals [mean_f = 4.25, SD_f = 1.67 vs. mean_m = 4.35, SD_m = 1.56, t(245) = 0.49, p = 0.63, d = 0.06]. Moreover, while men perceived the goals to be equally desirable and attainable [mean_desirable = 4.188, SD_desirable = 1.517 vs. mean_attainable = 4.353, SD_attainable = 1.558, F(1,135) = 1.637, p = 0.203, d = 0.107], women perceived the goals to be significantly more attainable than desirable [mean_desirable = 3.734, SD_desirable = 1.666 vs. mean_attainable = 4.252, SD_attainable = 1.668, F(1,110) = 11.83, p = 0.001, d = 0.311].

Figure 3a. Perceptions of desirability and attainability in Study 3
In Study 3, compared to men, women rated two power-related goals as less desirable \( t(245) = 2.24, p = 0.026 \), but similarly attainable \( t(245) = 0.49, p = 0.63 \). Women also considered the goals to be significantly more attainable than desirable \( F(1,110) = 11.83, p = 0.001 \), while men perceived the goals to be equally attainable and desirable \( F(1,135) = 1.637, p = 0.203 \). Error bars represent standardized errors. *\( p \leq 0.05 \), **\( p \leq 0.01 \), ***\( p \leq 0.001 \).

Study 4

In Study 4, we contacted 1,762 MBA students who had graduated from a top MBA program in the last two years (i.e., 2013 and 2014) via email and asked them to fill out a short survey; six hundred and thirty-five of them replied (44.9% female; average age = 29.7). Participants were shown a ladder with rungs numbered from 1 to 10 and told to imagine it represented the hierarchy of professional advancement in their current professional industry. The instructions noted that “at the top of the ladder are positions like CEO and CFO or Members of the Board (if applicable), and at the bottom of the ladder are jobs that are usually acquired immediately after undergrad, such as Analyst (for consulting or investment banking).” We asked participants to think about their own careers and to indicate three different positions (i.e., rungs) on the ladder: (i) their current position in their industry, (ii) their ideal position, and (iii) the highest position they could realistically attain. An advantage of this study design is that it allowed us to examine differences in the professional goals (i.e., ideal positions) and attainability perceptions held by men and women without explicitly invoking the concept of power, which has previously been shown to be less appealing to women than to men (Hays, 2013; Offermann & Schrier, 1985).

There were no significant differences between men and women in the current position that they reported \( \text{mean}_t = 5.39, \text{SD}_t = 1.85 \) vs. \( \text{mean}_m = 5.63, \text{SD}_m = 2.11, t(633) = -1.46, p = 0.145, d = 0.12 \). Controlling for their current position, compared to male
participants, female participants reported a lower ideal position [$\text{mean}_f = 9.04$, $\text{SD}_f = 1.14$ vs. $\text{mean}_m = 9.59$, $\text{SD}_m = 0.92$, $F(1,632) = 41.99$, $p < 0.001$, $d = 0.531$], thus showing that men and women exhibit different professional goals even when they are not clearly related to power.

**Figure 4a. Current position reported by participants in Study 4**

In Study 4, the current position reported by female MBA alumni from 2013 and 2014 was not significantly different than the current position reported by male MBA alumni [$t(633) = -1.46$, $p = 0.145$]. Error bars represent standardized errors. *$p \leq 0.05$, **$p \leq 0.01$, ***$p \leq 0.001$.

Mirroring the null attainability results found in Study 3, the highest attainable positions reported by men and women were equally high [$\text{mean}_f = 9.29$, $\text{SD}_f = 0.88$ vs. $\text{mean}_m = 9.41$, $\text{SD}_m = 0.98$, $F(1,632) = 1.58$, $p = 0.21$, $d = 0.129$]. Furthermore, the highest attainable position reported by men was significantly lower than their ideal position [$\text{mean}_{\text{desirable}} = 9.588$, $\text{SD}_{\text{desirable}} = 0.915$ vs. $\text{mean}_{\text{attainable}} = 9.41$, $\text{SD}_{\text{attainable}} = 0.983$, $F(1,387) = 13.617$, $p < 0.001$, $d = 0.187$], while the highest attainable position reported by women was significantly higher than their ideal position [$\text{mean}_{\text{desirable}} = 9.04$, $\text{SD}_{\text{desirable}} = 1.143$ vs. $\text{mean}_{\text{attainable}} = 9.29$, $\text{SD}_{\text{attainable}} = 0.88$, $F(1,633) = 41.99$, $p < 0.001$, $d = 0.531$].
mean_{attainable} = 9.287, SD_{attainable} = 0.876, F(1,246) = 15.192, p < 0.001, d = 0.243. In other words, men most desired a position that was above the level that they believed they could realistically attain, while women most desired a position that was below the level that they believed they could realistically attain.

**Figure 4b. Ideal and highest attainable positions reported by participants in Study 4**

In Study 4, the ideal position reported by female MBA alumni was significantly lower than the ideal position reported by male MBA alumni [F(1,632) = 41.99, p < 0.001], yet the highest attainable position did not differ by gender [F(1,632) = 1.58, p = 0.21]. Women’s ideal position was also significantly lower than their self-reported highest attainable position [F(1,246) = 15.192, p < 0.001], whereas men’s ideal position was significantly higher than their self-reported highest attainable position [F(1,387) = 13.617, p < 0.001]. Error bars represent standardized errors. *p ≤ 0.05, **p ≤ 0.01, ***p ≤ 0.001.

**Discussion**

The studies in Chapter 2 replicated the gender difference in professional advancement goals found in Chapter 1 and additionally revealed that perceived attainability is not the driving force underlying this difference. In fact, female participants in both Studies 3 and 4 reported higher perceptions of attainability than desirability, suggesting that
women believe that they could achieve a high-level position if they really wanted to, but they simply see the prospect as less desirable than men do. In contrast to previous research documenting women’s underconfidence and reduced likelihood of reaching positions of power, the female participants in our studies displayed strong confidence in their own abilities and appear unaware of the significant difficulties that they are likely to face on the path to acquiring a high-level position.

In Chapter 3, we shift our attention from perceptions of the means related to goal fulfillment to perceptions of the ends, exploring the positive and negative outcomes that men and women associate with promotions and high-level positions. Women may consider professional advancement goals as less desirable not because the path to getting there is less feasible, but rather because once the end-point is reached, the experience itself is more negative. The studies in Chapter 3 connect also these perceptions and goals to the likelihood of pursuing opportunities that would enable progression of one’s career.

**Chapter 3: Positive & Negative Outcomes Associated with Professional Advancement**

The aim of Chapter 3 is to explore why women see professional advancement as less desirable by asking participants to rate the likelihood of experiencing positive outcomes (e.g., opportunity, satisfaction) and negative outcomes (e.g., goal conflict, time constraints) upon receiving a promotion at work or acquiring a high-power position. As we learned in Chapter 1, women have more life goals than men do. Given the limited motivational and logistical resources at one’s disposal, this elevated number of goals may lead to greater goal conflict for women, requiring them to make more difficult trade-offs and experience higher levels of stress. Adding to this, the role that women play outside of work, including their familial and
domestic responsibilities, is much larger than men’s non-professional role (Hall & MacDermid, 2009; Hochschild, 2012; U.S. Department of Labor, 2014). Even in dual-income heterosexual couples where the woman receives a larger salary than the man, women still appear to perform the majority of childcare and household duties (Bertrand, Kamenica, & Pan, 2015). Furthermore, the behaviors expected of women and the notion of how a leader should act are in conflict with one another, whereas the leadership and male gender role are highly compatible (Eagly & Karau, 2002). All together, women’s larger role outside of the workplace, their greater number of goals in total, and the conflicting relationship between their gender role and the managerial role may result in women associating more negative outcomes with professional advancement (and the associated expansion of one’s role at work) than men do.

In light of the significant influence that goals have on behavior and the role that supply-side behaviors play in the perpetuation of gender inequality in organizations, in Chapter 3 we also seek to make connections between one’s goals, perceptions of positive and negative outcomes, and behavioral inclinations. As previously discussed, if an end-point is not associated with positive affect, then it will not be considered desirable enough to be a goal (Oettingen, Bulgarella, Henderson, & Gollwitzer, 2004). Moreover, it is the positivity associated with an end-point that imbues a goal with motivational force and drives the individual to engage in goal-relevant behaviors (Fishbach & Ferguson, 2007). Thus we predict that if women anticipate experiencing a high level of negative outcomes upon receiving a promotion at work, then she is less inclined to consider a step up in her career as desirable and less likely to actively pursue such opportunities.
Study 5

In Study 5, we asked 465 working adults from an online database (35.3% female; average age = 29.46) to imagine being promoted to a higher-level position in their current organization. Participants were told that as a result of this promotion, their level of power over others would increase substantially. Participants predicted the extent to which they would experience nine different outcomes if they received the promotion (on a 10-point scale). Some outcomes were positive (opportunity, money, status, influence, and satisfaction or happiness) whereas others were negative (conflict with other life goals, difficult tradeoffs or sacrifice, time constraints, burden of responsibility, and stress or anxiety). Participants also indicated how desirable the promotion would be to them and their likelihood of pursuing the promotion (on 7-point scales).

Participants’ ratings on the nine outcomes loaded onto two separate factors: positive outcomes (α = 0.77) and negative outcomes (α = 0.84; see Appendix A3). Men and women expected a statistically equivalent level of positive outcomes to occur with the promotion [mean_1 = 7.13, SD_1 = 1.44 vs. mean_2 = 7.23, SD_2 = 1.28, t(442) = 0.79, p = 0.43, d = 0.07], however, compared to male participants, female participants anticipated a greater level of negative outcomes [mean_1 = 6.73 out of 10, SD_1 = 1.56 vs. mean_2 = 6.23, SD_2 = 1.39, t(442) = 3.43, p = 0.001, d = 0.34]. We additionally computed a dichotomous measure for whether participants anticipated more negative than positive outcomes to be associated with the potential promotion (1 if they did, 0 otherwise) and found that more women than men [37.7% (58/154) vs. 24.5% (71/290)] anticipated experiencing greater negative outcomes with the hypothetical promotion [$\chi^2(1, N = 444) = 8.48, p = 0.004$, Cramer’s $V = 0.14$.]
In Study 5, compared to men, women perceived a promotion to be equally associated with positive outcomes \( t(442) = 0.79, p = 0.43, d = 0.07 \) and more associated negative outcomes \( t(442) = 3.43, p = 0.001, d = 0.34 \). Error bars represent standardized errors. *\( p \leq 0.05 \), **\( p \leq 0.01 \), ***\( p \leq 0.001 \).

Female participants also viewed the potential promotion as less desirable than men did [mean\( _f \) = 5.12, SD\( _f \) = 1.46 vs. mean\( _m \) = 5.48, SD\( _m \) = 1.32, \( t(442) = 2.6, p = 0.01, d = 0.26 \)] and indicated that they would be less likely to go after the promotion [mean\( _f \) = 4.77, SD\( _f \) = 1.41 vs. mean\( _m \) = 5.25, SD\( _m \) = 1.43, \( t(442) = 3.35, p = 0.001, d = 0.34 \)].
In Study 5, compared to men, women perceived the promotion to be significantly less desirable \([t(442) = 2.6, p = 0.01]\), and reported a lower likelihood of pursuing the promotion \([t(442) = 3.35, p = 0.001]\). Error bars represent standardized errors. \(* p \leq 0.05, ** p \leq 0.01, *** p \leq 0.001.\)

Mediation analyses revealed that the negative outcomes expected by women fully explained women’s perception of the promotion as less desirable, and partially explained their reduced likelihood of pursuing the promotion. When including expected negative outcomes as a mediator in the model, the effect of gender on desirability of the promotion became only marginally significant [from \(\beta = 0.126, p = 0.006\) to \(\beta = 0.083, p = 0.064\)], and expected negative outcomes predicted lower desirability of the promotion [\(\beta = -0.281, p < 0.001\)]. Similar regression analyses using likelihood of pursuing the promotion as the dependent measure revealed a weakened but still statistically significant effect of gender [from \(\beta = 0.163, p < 0.001\) to \(\beta = 0.133, p = 0.004\)] and a negative effect of negative outcomes associated with the potential promotion [\(\beta = -0.192, p < 0.001\)]. The Sobel test indicated that perceptions of negative outcomes significantly mediated the relationships.
between gender and (i) desirability of the promotion \([\bar{z} = 2.96, p = 0.003]\) and (ii) likelihood of pursuit \([\bar{z} = 2.71, p = 0.007]\). We found comparable results when conducting mediation analyses that controlled for the level of positive outcomes associated with the hypothetical promotion, when the mediator was comprised of the single item “conflict with other life goals,” or when the mediator was an aggregate of the two items “conflict with other life goals” and “difficult tradeoffs.”

**Figure 5c. Mediation of desirability in Study 5**

In Study 5, perceptions of negative outcomes associated with a promotion fully mediated the relationship between gender and desirability of the promotion [Sobel test: \(\bar{z} = 2.96, p = 0.003\)].

**Figure 5d. Mediation of likelihood of pursuit in Study 5**

In Study 5, perceptions of negative outcomes associated with a promotion partially mediated the relationship between gender and one’s likelihood of pursuing a promotion [Sobel test: \(\bar{z} = 2.71, p = 0.007\)].
Study 6

In Study 6, we tested the same relationships in a sample of executives who were likely to already occupy positions of power and had displayed an interest in furthering their careers by enrolling in executive education courses focused on leadership, decision making, and negotiation at a top US business school. Two hundred and four executives (25.5% female; average age = 37.94) completed the same scenario and measures as in Study 5 as part of their required coursework.

Mirroring the results of Study 5, compared to male participants, female participants anticipated statistically equivalent levels of positive outcomes with the hypothetical promotion [mean\(_f\) = 7.39, SD\(_f\) = 1.38 vs. mean\(_m\) = 7.11, SD\(_m\) = 1.43, \(t(202) = 1.22, p = 0.22, d = 0.20\)] and associated more negative outcomes with the promotion [mean\(_f\) = 7.09, SD\(_f\) = 1.71 vs. mean\(_m\) = 6.17, SD\(_m\) = 2.33, \(t(202) = 2.61, p = 0.01, d = 0.45\)]. We also computed the same dichotomous measure for whether participants expected more negative than positive outcomes with the potential promotion (1 if they did, 0 otherwise) used in Study 5. We found that a greater number of women than men perceived more negative outcomes than positive outcomes [46.2% (24/52) vs. 25.7% (39/152)] to be associated with the potential promotion [\(\chi^2 (1, N = 204) = 7.63, p = 0.006, \text{Cramer's } V = 0.19\)].
In Study 6, compared to male executives, female executives perceived a promotion to be equally associated with positive outcomes \(t(202) = 1.22, p = 0.22, d = 0.20\) and more associated negative outcomes \(t(202) = 2.61, p = 0.01, d = 0.45\). Error bars represent standardized errors. \(*p \leq 0.05, **p \leq 0.01, ***p \leq 0.001.\)

Female participants also reported viewing the potential promotion as less desirable \([\text{mean}_f = 5.69, \text{SD}_f = 1.15 \text{ vs. mean}_m = 6.02, \text{SD}_m = 0.91, t(202) = 2.09, p = 0.038, d = 0.32]\) and indicated that they would be marginally less likely to pursue the promotion, compared to male participants \([\text{mean}_f = 5.71, \text{SD}_f = 1.33 \text{ vs. mean}_m = 6.07, \text{SD}_m = 1.15, t(202) = 1.84, p = 0.067, d = 0.29].\)
Figure 6b. Desirability and likelihood of pursuit in Study 6

Figure X. In Study 6, compared to male executives, female executives perceived the promotion to be significantly less desirable \([t(202) = 2.09, p = 0.038]\), and reported a marginally lower likelihood of pursuing the promotion \([t(202) = 1.84, p = 0.067]\). Error bars represent standardized errors. \(† ≤ 0.09, *p ≤ 0.05, **p ≤ 0.01, ***p ≤ 0.001\).

Contrary to the significant mediation we found in Study 5, perceptions of negative outcomes did not significantly explain the relationship between gender and (i) desirability of a promotion [Sobel: \(z = 1.62, p = 0.105\)], or (ii) likelihood of pursuing a promotion [Sobel: \(z = 1.73, p = 0.083\)]. However, if perceptions of positive outcomes are entered into the model as a control variable, then we do find significant mediation for both of these outcome variables. Controlling for expected positive outcomes, the effect of gender on desirability of the promotion weakened though still remained significant [from \(β = 0.17, p = 0.01\) to \(β = 0.13, p = 0.044\)], indicating partial mediation, and negative outcomes associated with the promotion predicted lower desirability of the promotion \([β = −0.278, p < 0.001]\). Similar regression analyses using likelihood of pursuing the promotion as the dependent measure revealed a weakened and no longer significant effect of gender [from \(β = 0.15, p = 0.029\) to
\[ \beta = 0.109, p = 0.104 \], indicating full mediation, and a negative effect of negative outcomes associated with the potential promotion \[ \beta = -0.272, p < 0.001 \]. The Sobel test indicated that, when controlling for perceptions of positive outcomes, perceptions of negative outcomes significantly mediated the relationships between gender and (i) desirability of the promotion \[ \xi = 2.035, p = 0.042 \] and (ii) likelihood of pursuit \[ \xi = 2.021, p = 0.043 \]. We also find similar results when conducting mediation analyses focused on the single item “conflict with other life goals” or an aggregate of the two items “conflict with other life goals” and “difficult tradeoffs.”

**Figure 6c. Mediation of desirability in Study 6**

In Study 6, perceptions of negative outcomes associated with a promotion partially mediated the relationship between gender and desirability of the promotion, controlling for perceptions of positive outcomes [Sobel test: \( \xi = 2.04, p = 0.042 \)].

**Figure 6d. Mediation of likelihood of pursuit in Study 6**
Figure 6d (Continued).

In Study 6, perceptions of negative outcomes associated with a promotion fully mediated the relationship between gender and one’s likelihood of pursuing a promotion, controlling for perceptions of positive outcomes [Sobel test: \( z = 2.02, p = 0.043 \)].

Given that Studies 5 and 6 utilize the same methodology, but employed different sample populations, we can further explore our findings by comparing the data from each study to one another. In comparison to the relatively low-power online participants in Study 5, it is possible that the high level of achievement already attained by the executives in Study 6 attenuates the relationship between gender and perceptions of negative outcomes, and orientation toward (i.e., desire for and pursuit of) promotions.

Our analyses revealed that gender did not significantly interact with sample population (i.e., online participants in Study 5 vs. executives in Study 6) for perceptions of negative outcomes \( [F(1, 665) = 2.021, p = 0.156, \eta^2_p = 0.003] \), desirability of the promotion \( [F(1, 665) = 0.03, p = 0.864, \eta^2_p < 0.001] \), or likelihood of pursuing the promotion \( [F(1, 665) = 0.29, p = 0.59, \eta^2_p < 0.001] \). There was however a strong main effect of sample population on desirability \( [F(1, 665) = 21.972, p < 0.001, \eta^2_p = 0.032] \) and likelihood of pursuit \( [F(1, 665) = 45.495, p < 0.001, \eta^2_p = 0.064] \), with executives exhibiting greater desire for and pursuit of potential promotions.

Study 7

In Study 7, we slightly modified the design of Study 6 to examine whether the results held in a sample of undergraduates at a top US university. Similar to the executive sample, these individuals were likely to be interested in professional advancement based on the prestigious academic environment they had elected to be a part of; however, in contrast to the executive sample, these participants had not yet entered the professional workforce.
We asked 516 undergraduate students (53.1% female; average age = 22.14) to imagine that upon graduation they were presented with a high-power job opportunity. We asked them to describe the high-power job they were imagining and then list the outcomes or feelings they would associate with occupying such a position. Participants could list anywhere from 1 to 15 items. Participants also indicated how desirable the position would be to them, their likelihood of pursuing the position if it required extra effort, and their likelihood of pursuing the position if it did not require any extra effort (on 7-point scales). Next, we presented participants with the outcomes they anticipated experiencing with the high-power job and asked them to categorize these outcomes as positive, neutral, or negative.

Compared to male participants, female participants listed a smaller number of outcomes in total \(\text{mean}_f = 3.84, \text{SD}_f = 2.605 \text{ vs. mean}_m = 4.93, \text{SD}_m = 2.752, t(514) = 4.603, p < 0.001, d = 0.407\], a smaller number of positive outcomes \(\text{mean}_f = 2.15, \text{SD}_f = 2.042 \text{ vs. mean}_m = 2.76, \text{SD}_m = 2.179, t(514) = 3.282, p = 0.001, d = 0.407\] and neutral outcomes \(\text{mean}_f = 0.75, \text{SD}_f = 1.105 \text{ vs. mean}_m = 1.04, \text{SD}_m = 1.201, t(514) = 2.887, p = 0.004, d = 0.255\], and a marginally smaller number of negative outcomes \(\text{mean}_f = 0.95, \text{SD}_f = 1.238 \text{ vs. mean}_m = 1.12, \text{SD}_m = 1.289, t(514) = 1.605, p = 0.109, d = 0.142\].

Given the large difference in number of outcomes listed by men and women, looking at the proportions of total outcomes that fall into the three categories (positive, neutral, and negative) may provide a clearer picture of men and women’s perceptions than the raw numbers themselves. Compared to men, women reported a lower proportion of positive outcomes \(\text{mean}_f = 50.1\%, \text{SD}_f = 38.9\% \text{ vs. mean}_m = 56.6\%, \text{SD}_m = 32.9\%, t(514) = 2.05, p = 0.041, d = 0.18\], an equal proportion of neutral outcomes \(\text{mean}_f = 19.9\%, \text{SD}_f = 18.2\% \text{ vs. mean}_m = 19.9\%, \text{SD}_m = 18.1\%\]
= 29.9% vs. mean\(_m\) = 20.9%, SD\(_m\) = 24.2%, \(t(514) = 0.39, p = 0.70, d = 0.03\), and a higher proportion of negative outcomes \([\text{mean}_\ell = 30\%, \text{SD}_\ell = 37\% \text{ vs. } \text{mean}_m = 22.5\%, \text{SD}_m = 25.8\%], \(t(514) = 2.65, p = 0.008, d = 0.24\). While this replicated the results for negative outcomes found in the previous two studies, neither Study 5 nor Study 6 found the difference in perceptions of positive outcomes that we find in this study.

**Figure 7a. Perceptions of positive, neutral, and negative outcomes in Study 7**

In Study 7, compared to male undergraduates, female undergraduates perceived a high-power job opportunity to be associated with a lower proportion of positive outcomes \([\ell(514) = 2.05, p = 0.041]\), an equal proportion of neutral outcomes \([\ell(514) = 0.39, p = 0.70]\), and a higher proportion of negative outcomes \([\ell(514) = 2.65, p = 0.008]\). Error bars represent standardized errors. *\(p \leq 0.05\), **\(p \leq 0.01\), ***\(p \leq 0.001\).

In line with our previous results regarding professional advancement goals, female participants reported viewing the high-power position as less desirable than male participants did \([\text{mean}_\ell = 5.02, \text{SD}_\ell = 1.09 \text{ vs. } \text{mean}_m = 5.37, \text{SD}_m = 1.43, \ell(514) = 3.16, p = 0.002, d = 0.28]\). Compared to men, women were also less likely to pursue the position, regardless of whether it necessitated extra effort on their part \([\text{mean}_\ell = 5.07, \text{SD}_\ell = 1.14 \text{ vs. } \text{mean}_m = 5.41, d = 0.28]\).
In Study 7, compared to male undergraduates, female undergraduates considered the high-power job opportunity to be significantly less desirable \( t(514) = 3.16, p = 0.002 \), and reported a lower likelihood of pursuing the job, regardless of whether doing so would require any additional effort on their part \( t(514) = 3.09, p = 0.002 \) or not \( t(514) = 4.29, p < 0.001 \). Error bars represent standardized errors. *\( p \leq 0.05 \), **\( p \leq 0.01 \), ***\( p \leq 0.001 \).

**Discussion**

The studies in this chapter revealed that perceptions regarding the negative outcomes associated with professional advancement are underlying the gender difference in desirability of promotions and high-power positions. Women anticipate experiencing more conflict amongst their life goals, and being forced to make more trade-offs and sacrifices, which then leads them to be less inclined to view career progression in a favorable light. These perceptions of increased negativity and reduced desirability factor into behavioral tendencies, contributing to women being less likely to pursue advancement opportunities.
While the percentage of women who anticipated a greater degree of negative outcomes than positive outcomes was larger than the percentage of men who did so, the majority of men and women in these studies anticipated a greater degree of positive outcomes than negative outcomes with a promotion. This would suggest that even if women are associating a greater amount of negative outcomes with professional advancement than men are, that the positives they predict experiencing should outweigh the negatives. However, past research has shown that positive and negative stimuli do not equally impact decision-making and behavior. Negative stimuli appear to have much greater weight, such that the influence of a small number of negative items may override the effect of a larger number of positive items (Baumeister, Bratslavsky, Finkenauer, & Vohs, 2001; Rozin, & Royzman, 2001). Supporting this presumption, Kahneman & Tversky (1984) have shown that potential losses are a greater determinant of one’s decisions and actions than potential gains (see also Tversky & Kahneman, 1991).

A limitation of the studies in Chapter 3 is that all of the professional advancement opportunities were explicitly coupled with an increase in power over others. While Study 4 in Chapter 2 did not invoke the concept of power and found results similar to the studies that did mention power, the studies in Chapter 4 engage in a deeper exploration of the necessity of power in producing these gender-based differences in goals, perceptions, and behaviors.

Chapter 4: The Relationship Between Power and Professional Advancement

The aim of Chapter 4 is to replicate the findings of the previous chapter and investigate the impact of power on men and women’s professional advancement goals and goal-related behavior. Past research has shown that women are more likely to hold negative
attitudes toward having power (Offermann & Schrier, 1985) and desire power less than men do (Hays, 2013). Furthermore, when jobs or roles are described as powerful or hierarchy-enhancing, women find them to be less appealing (Konrad, Ritchie, Lieb, & Corrigall, 2000; Pratto, Stallworth, Sidanius, & Siers, 1997). Women are also less likely to pursue positions that are described in masculine or agentic terms, which often overlap with the concepts of power and dominance (Gaucher, Friesen, & Kay, 2011; Weisgram, Dinella, Fulcher, 2011). Studies in the previous chapter involved a hypothetical promotion (Studies 5 & 6) or high-power job opportunity (Study 7) that included the following sentence in their descriptions: “As a result of this promotion, your level of power over others would increase substantially.” Given previous work documenting the aversive response that women have to power, it is possible that our results in Chapter 3 were unduly influenced by explicitly mentioning power. If that is the case, then amplifying or attenuating the emphasis placed on power as a corollary of professional advancement should moderate the effect of gender on the perception of negative outcomes, desirability of advancement opportunities, and likelihood of pursuit.

Study 8

In Study 8, 484 online participants (37.8% female; average age = 32.57) were asked to imagine the possibility of being promoted to a higher-level position in their current organization, similar to Studies 5 and 6. Unlike in previous studies, participants were randomly assigned to one of two promotion description conditions: (i) promotion with power or (ii) promotion with power defined. In the promotion with power condition, participants were told, “As a result of this promotion, your level of power would increase substantially” (as participants were told in studies 5 and 6). Participants in the promotion
with power defined condition were additionally told, “By power, we mean your relative ability to control other people’s outcomes, experiences, or behaviors.”

We then asked participants to indicate the extent to which they thought such a promotion would conflict with their other life goals and to what extent it would require them to make tradeoffs and sacrifices (on 7-point scales). We aggregated across these two items to create a measure of expected conflict ($\alpha = 0.85$). Participants then rated the desirability of the promotion (on a 7-point scale) and answered the question “How do you view having power in a job?” by selecting one of two possible answers: (i) “This is a goal that I am not that interested in pursuing” or (ii) “This is a goal I definitely want to pursue.” Finally, we asked participants to list two or three words they associated with having power at work.

The promotion description manipulation (promotion with power vs. promotion with power defined) did not have a significant effect on expected conflict [$F(1,480) = 1.44, p = 0.23, \eta^2_p = 0.003$] and had only a marginally significant effect on desirability of the promotion [$F(1,480) = 3.13, p = 0.08, \eta^2_p = 0.005$]. The interactions between the promotion description manipulation and gender were insignificant for both expected conflict [$F(1,480) = 1.15, p = 0.28, \eta^2_p = 0.002$] and promotion desirability [$F(1,480) < 1, p = 0.98, \eta^2_p = 0.000$]. However, while there was not a significant interaction, in the promotion with power defined condition, men and women did not significantly differ with regard to their expected conflict ratings, whereas we found a significant gender difference in the promotion with power condition. This is contrary to what we predicted, which was that amplifying the emphasis on power would increase women’s anticipation of conflict, trade-offs, and sacrifice. It is possible that the elaboration of what an increase in power would translate to
(i.e., increased “control over other people’s outcomes, experiences, and behaviors”) made women feel like they possessed a greater ability to manage their goals and mitigate potential conflicts. Though given that the interaction did not reach statistical significance and both conditions display a similar pattern, with women reporting higher levels of expected conflict than men did, it is unclear how much weight this specific null result should be given.

Compared to male participants, female participants anticipated experiencing more conflict with other life goals [mean\(_f\) = 3.81, SD\(_f\) = 1.58 vs. mean\(_m\) = 3.41, SD\(_m\) = 1.37, \(F(1,480) = 8.26, p = 0.004, d = 0.27\)], and rated the promotion as less desirable [mean\(_f\) = 5.18, SD\(_f\) = 1.50 vs. mean\(_m\) = 5.45, SD\(_m\) = 1.32, \(F(1,480) = 4.36, p = 0.037, d = 0.19\)]. Additionally, more female than male participants [41.0% (75/183) vs. 30.9% (93/301)] indicated that they were not interested in pursuing power as a goal [\(\chi^2(1,N = 484) = 5.11, p = 0.024\), Cramér’s V = 0.10].

**Figure 8a. Expected conflict by condition in Study 8**

In Study 8, the interaction between the promotion description manipulation (promotion with power or promotion with power defined) and gender was insignificant for the expected
conflict composite \[F(1,480) = 1.15, p = 0.28\]. There was a main effect of gender, such that women associated significantly more conflict with other life goals, trade-offs, and sacrifices with a promotion opportunity \[F(1,480) = 8.26, p = 0.004; d = 0.27\]. Error bars represent standardized errors. \(*p \leq 0.05, **p \leq 0.01, ***p \leq 0.001.\)

**Figure 8b. Desirability by condition in Study 8**

In Study 8, the interaction between the promotion description manipulation (promotion with power or promotion with power defined) and gender was not significant for desirability of the promotion \[F(1,480) < 1, p = 0.98, \eta^2_p = 0.000\]. There was a main effect of gender, such that men perceived the promotion opportunity to be significantly more desirable \[F(1,480) = 4.36, p = 0.037; d = 0.19\]. Error bars represent standardized errors. \(*p \leq 0.05, **p \leq 0.01, ***p \leq 0.001.\)

Based on our results from previous studies, we predicted that the conflict women expect to experience in a position of high power would explain their lower ratings of promotion desirability. Thus, we conducted regression analyses with desirability of the promotion as the dependent measure and expected conflict with other goals as the potential mediator. The effect of gender disappeared \([from \beta = 0.092, p = 0.043 to \beta = 0.028, p = 0.488]\), indicating full mediation, and expected conflict with other goals predicted lower ratings of promotion desirability \([\beta = −0.49, p < 0.001]\). The Sobel test further supported
that expected conflict significantly mediated the relationship between gender and desirability of the promotion \([\beta = 2.853, p = 0.004]\). Full mediation was similarly found when entering in the promotion description manipulation as a control variable [Sobel: \(\beta = 2.828, p = 0.005\); see Appendix A4].

**Figure 8c. Mediation of desirability in Study 8**

In Study 8, expected conflict associated with a promotion fully mediated the relationship between gender and perceived desirability of the promotion opportunity [Sobel test: \(\beta = 2.853, p = 0.004\)].

The words participants associated with having power at work were coded by four gender-blind coders, two female and two male. Each word was assigned a code of positive, negative, or neutral, and we averaged across the codes provided by all four coders for our analyses (all \(\alpha >0.70\), average \(\alpha = 0.83\)). Examples of words that were assigned to each of these three categories are as follows: *beneficial, desirable,* and *rewarding* for positive words, *career, meetings* and *beliefs* for neutral words, and *exhausting, alienating,* and *unappealing* for negative words. Mirroring the pattern of results found in our previous studies, we found no gender differences in the number of positive words [\(\text{mean}_f = 1.49, \text{SD}_f = 0.90\) vs. \(\text{mean}_m = 1.52, \text{SD}_m = 0.79\), \(F(1,483) = 0.24, p = 0.627, d = 0.04\)] or neutral words [\(\text{mean}_f = 0.79, \text{SD}_f = 0.57\) vs. \(\text{mean}_m = 0.83, \text{SD}_m = 0.57\), \(F(1,483) = 0.68, p = 0.41, d = 0.07\)] listed by participants, but female participants listed significantly more negative words associated with having power at work than men did [\(\text{mean}_f = 0.50, \text{SD}_f = 0.73\) vs. \(\text{mean}_m = 0.37, \text{SD}_m = 0.37\).
In Study 9, we sought to replicate the results of Study 8 in a sample of executives, and we added an experimental condition that completely removed all explicit emphasis on power as a necessary consequence of professional advancement. We collected data from 265 executives (43.4% female; average age = 37.18) enrolled in executive education courses focused on influence, decision making, and negotiation at a top US business school.

Participants were randomly assigned to one of three promotion description conditions: (i) promotion with power, (ii) promotion with power defined, or (iii) basic promotion. The prompts for the first two conditions were the same as in Study 8. In the basic promotion condition, an increase in power as a result of the promotion was not explicitly mentioned. Participants were then presented with the same positive and negative outcomes as in Studies 5 and 6 and asked to report how much they expected to experience each of them if they received the promotion. Finally, participants indicated the desirability of the promotion and their likelihood of pursuing it.

Similar to the findings of the previous study, the promotion description did not affect the results. The results of 2 (men vs. women) x 3 (promotion with power vs. promotion with power defined vs. basic promotion) ANOVAs conducted on dependent measures revealed no main effects for the promotion description manipulation or significant interactions (all \( p > 0.11 \)). Across our analyses, the only significant effects were main effects of gender on our dependent measures.

Compared to male participants, female participants associated about the same level of positive outcomes [mean\(_f\) = 6.15, SD\(_f\) = 0.88 vs. mean\(_m\) = 6.26, SD\(_m\) = 0.82; \( F(1,259) = \)]
1.36, \( p = 0.25, d = 0.13 \), but more negative outcomes with the promotion [mean\(_f\) = 5.68, \( SD_f = 1.13 \) vs. mean\(_m\) = 5.02, \( SD_m = 1.46 \); \( F(1,259) = 15.89, p < 0.001, d = 0.51 \)]. Women also reported viewing the potential promotion as less desirable than men did [mean\(_f\) = 5.35, \( SD_f = 1.38 \) vs. mean\(_m\) = 6.05, \( SD_m = 1.12 \), \( F(1,259) = 20.90, p < 0.001, d = 0.56 \)], and indicated that they would be less likely to pursue it [mean\(_f\) = 4.98, \( SD_f = 1.51 \) vs. mean\(_m\) = 5.83, \( SD_m = 1.36 \), \( F(1,259) = 22.93, p < 0.001, d = 0.59 \)].

**Figure 9a. Perceptions of positive outcomes by condition in Study 9**

In Study 9, the interaction between gender and promotion description condition was not significant for expected positive outcomes. For all conditions, men and women associated a similar level of positive outcomes with a promotion [\( F(1,259) = 1.36, p = 0.25 \)]. Error bars represent standardized errors. *\( p \leq 0.05 \), **\( p \leq 0.01 \), ***\( p \leq 0.001 \).
In Study 9, the interaction between gender and promotion description condition was not significant for expected negative outcomes. For all conditions, compared to men, women associated a significantly higher level of negative outcomes with a promotion \([F(1,259) = 20.90, p < 0.001]\). Error bars represent standardized errors. \(\dagger \leq 0.09, *p \leq 0.05, **p \leq 0.01, ***p \leq 0.001\).

**Figure 9c. Desirability by condition in Study 9**

In Study 9, the interaction between promotion description and gender was not significant for perceived desirability of the promotion. For all conditions, compared to men, women
perceived the promotion opportunity to be significantly less desirable \[ F(1,259) = 20.90, p < 0.00 \]. Error bars represent standardized errors. *\( p \leq 0.05 \), **\( p \leq 0.01 \), ***\( p \leq 0.001 \).

**Figure 9d. Likelihood of pursuit by condition in Study 9**

In Study 9, the interaction between promotion description and gender was not significant for likelihood of pursuing a promotion opportunity. For all conditions, compared to men, women were significantly less likely to pursue a promotion \[ F(1,259) = 22.93, p < 0.001 \]. Error bars represent standardized errors. *\( p \leq 0.05 \), **\( p \leq 0.01 \), ***\( p \leq 0.001 \).

Regression analyses conducted with desirability of the promotion as the dependent measure, and perceptions of negative outcomes as the potential mediator revealed that perceptions of negative outcomes partially explained the relationship between gender and desirability of the promotion. The effect of gender slightly weakened [from \( \beta = 0.272, p < 0.001 \) to \( \beta = 0.231, p < 0.001 \)], indicating partial mediation, and expected conflict with other goals predicted lower ratings of promotion desirability [\( \beta = -0.17, p = 0.005 \)]. The Sobel test confirmed that perceptions of negative outcomes significantly mediated the relationship between gender and desirability \[ z = 2.729, p = 0.006 \].
In Study 9, perceptions of negative outcomes associated with a promotion partially mediated the relationship between gender and perceived desirability of the promotion opportunity [Sobel test: $z = 2.729, p = 0.006$].

When we conducted the same set of regressions with likelihood of pursuit as the outcome variable, we found that perceptions of negative outcomes also partially mediated the relationship between gender and behavioral pursuit. The effect of gender slightly weakened [from $\beta = 0.285, p < 0.001$ to $\beta = 0.253, p < 0.001$], suggesting partial mediation, and expected conflict with other goals predicted lower ratings of promotion desirability [$\beta = -0.13, p = 0.033$]. The Sobel test supported the notion that perceptions of negative outcomes significantly mediated the relationship between gender and likelihood of pursuit [$z = 2.467, p = 0.014$].
Partial mediation was similarly found for desirability and likelihood of pursuit when entering the promotion description manipulation as a control variable in the model [Sobel for desirability: \( z = 2.725, p = 0.006 \); Sobel for pursuit: \( z = 2.464, p = 0.014 \); see Appendices A5 & A6].

**Discussion**

Taken together, the results of Studies 8 and 9 replicated the findings from Studies 5–7 showing that women’s greater perception of negative outcomes is underlying their reduced desirability and likelihood of pursuing advancement opportunities. The studies in this chapter also revealed that our findings are not contingent on the emphasis placed on power as a corollary of professional advancement: whether power was accentuated or completely stripped from the description of the advancement opportunity yielded no effect on the dependent variables. In light of previous research showing differences in men and women’s orientation to power, it is unlikely that these results mean that power does not play an important role in the gender differences we observe. Rather, we suspect that people automatically associate professional advancement with an increase in power and highlighting this association is merely redundant.

Despite finding that the mention of power does not moderate our findings, in the final two chapters, we do not explicitly acknowledge power when referring to opportunities likely to advance one’s career. This is because we are primarily interested in men and women’s goals, perceptions, and behaviors related to professional advancement, not to the concept of power more generally. Studies 10-12 also employ a study design that enables us to explore differences in men and women’s perceptions of and orientations toward positions at different levels within an organizational hierarchy.
Chapter 5: Exploring Different Levels of Professional Advancement

A limitation of the studies discussed in Chapters 1-4 is that they only look at high-level positions, promotions, or power-related goals. Without exploring the perceptions that men and women have regarding mid- and low-level positions, we are unable to claim that there is something unique about the views that each gender has toward high-level positions. In other words, looking at high-level positions in isolation limits our insight regarding the scope of gender differences in perceptions, goals, and behaviors. The design of Study 10 broadens our examination to include mid- and low-level positions in the hopes of yielding a more comprehensive understanding of these phenomena.

Study 10 also aimed to more adequately address the issue that is of central concern in Chapter 4, which is the emphasis placed on power in describing the advancement opportunities to which participants are asked to respond. By having participants think about different levels (i.e., low, mid, and high) on an organizational hierarchy without any mention of power, we can more precisely examine the relationship between gender and perceptions of professional advancement.

Finally, in Study 10, we revisit the relationship between gender and perceived attainability that was explored in Studies 3 and 4, with online and MBA alumni participants respectively. While these studies both had fairly large sample sizes (245 and 633), we are cautious about making conclusions based on null results. With that in mind, Study 10 employs a sample size of over 600 participants in an attempt to increase our confidence in the lack of difference between men and women’s perceptions of how feasible acquiring a high-level position would be.
Study 10

In Study 10, 601 online participants (53.7% female; average age = 34.83) were shown a ladder with rungs numbered from 1 to 10 that represented a hierarchy of professional advancement in the industry in which they currently work or plan to go into. The instructions noted that “at the top of the ladder are positions like CEO and CFO or Members of the Board (if applicable), and at the bottom of the ladder are jobs that are usually acquired immediately after undergrad, such as Analyst (for consulting or investment banking).” We asked participants to indicate the rung that represented where they believed they currently are on the ladder. Participants then rated the desirability and attainability of a lower-level position, a medium-level position, and a higher-level position (rungs 3, 6, and 9, respectively), using 10-point scales (1 = not at all desirable/attainable, 10 = very desirable/attainable). Finally, participants were asked to report the likelihood of pursuing a job at each of the three positions, if the opportunity to acquire such a position was available to them right now, using a 7-point scale (1 = definitely not, 7 = definitely yes).

Significant differences between men and women were found for their current position, age, and number of children, with men occupying a higher position [mean_\text{f} = 3.59, SD_\text{f} = 1.9 vs. mean_\text{m} = 3.91, SD_\text{m} = 1.94; F(1,600) = 4.162, p = 0.042, d = 0.17], being younger [mean_\text{f} = 36.51, SD_\text{f} = 11.43 vs. mean_\text{m} = 33.38, SD_\text{m} = 9.90, F(1,600) = 12.95, p < 0.001, d = 0.29], and having fewer children [mean_\text{f} = 1.03, SD_\text{f} = 1.28 vs. mean_\text{m} = 0.50, SD_\text{m} = 0.97, F(1,600) = 34.35, p < 0.001, \eta^2_p = 0.47]. Given these differences and their relevance to one’s views on professional advancement, we controlled for these three variables in all subsequent analyses that compare the responses provided by male and female participants.
A repeated measures ANOVA with a Greenhouse-Geisser correction determined that gender did not significantly interact with position level to produce effects on perceived attainability \([F(1.552,925.284) = 0.784, \rho = 0.428, \eta^2_p = 0.001]\). Pairwise comparisons revealed that at each of the three levels (low, mid, and high), men and women did not differ in the extent to which they viewed the position as realistically attainable (low-level: \(F(1,596) = 0.307, \rho = 0.580, \eta^2_p = 0.001\); mid-level: \(F(1,596) = 3.017, \rho = 0.083, \eta^2_p = 0.005\); high-level: \(F(1,596) = 8.99, \rho < 0.001, \eta^2_p = 0.029\). \(^1\)

**Figure 10a. Perceived attainability of low, mid, and high-level positions in Study 10**

In Study 10, there was no significant interaction between gender and position level (low, mid, high) on perceived attainability, controlling for participant age, number of children, and current position \([F(1.552,925.284) = 0.784, \rho = .428]\). \(*p \leq 0.05, **p \leq 0.01, ***p \leq 0.001.\)

There was however a significant interaction effect between gender and position level on desirability \([F(1.555,927.021) = 8.54, \rho = 0.001, \eta^2_p = 0.014]\) and likelihood of pursuit.

\(^1\) While the attainability difference is trending toward significance \((\rho = 0.083)\) for rung 6, with men perceiving mid-level positions as more attainable than women do, there is no theoretical explanation for why there would be a valid gender difference at rung 6, but not at rung 9.
[\text{F}(1.673,997.126) = 8.697, p < 0.001, \eta^2_p = 0.014]. Pairwise comparisons revealed that men perceived high-level positions to be more desirable than women did, and that men were more likely to go after such positions than women were [desirability: \text{F}(1,600) = 8.275, p = 0.004, \eta^2_p = 0.014; likelihood of pursuit: \text{F}(1,600) = 7.815, p = 0.005, \eta^2_p = 0.013]. Yet, at the mid-level position, gender is no longer significantly related to the either outcome variables (desirability: \text{F}(1,600) = 1.632, p = 0.202, \eta^2_p = 0.003; likelihood of pursuit: \text{F}(1,600) = 0.03, p = 0.864, \eta^2_p = 0.000], and at the low-level position, the relationship is actually negative [desirability: \text{F}(1,600) = 3.758, p = 0.053, \eta^2_p = 0.006; likelihood of pursuit: \text{F}(1,600) = 3.954, p = 0.047, \eta^2_p = 0.007].

**Figure 10b. Desirability of low, mid, and high-level positions in Study 10**

In Study 10, there was a significant interaction between gender and position level (low, mid, high) on perceived desirability, controlling for participant age, number of children, and current position [\text{F}(1.555,927.021) = 8.54, p = .001]. *p \leq 0.05, **p \leq 0.01, ***p \leq 0.001.
In Study 10, there was a significant interaction between gender and position level (low, mid, high) on likelihood of pursuit, controlling for participant age, number of children, and current position \[F(1.673,997.26) = 8.697, p < 0.001\]. *p ≤ 0.05, **p ≤ 0.01, ***p ≤ 0.001.

In summary, we find that women consider low-level positions to be more desirable than men do and are more likely to go after them than men are, whereas this pattern flips at the other end of the corporate ladder, with high-level positions being viewed as more desirable and more likely to be pursued by men than by women.

Mediation analyses revealed that perceived desirability of the position fully explained the relationship between gender and likelihood of pursuing the position at the low- and high-level positions. To look specifically at the low-level position (rung 3), we conducted regression analyses with likelihood of pursuing the position as the dependent measure, desirability of the position as the potential mediator, and current position, age, and number of children as the control variables. The effect of gender became nonsignificant [from \(β = 0.07, p = 0.047\) to \(β = 0.039, p = 0.215\)], indicating full mediation, and women’s greater desire for the position predicted an increased likelihood of pursuit \([β = 0.411, p < 0.001]\).
The Sobel test for mediation was marginally significant \([z = 1.912, p = 0.056]\). Women found low-level positions to be more desirable than men did, which then predicted a greater likelihood of pursuit.

**Figure 10d. Mediation of likelihood of pursuing low-level positions in Study 10**

In Study 10, perceived desirability marginally mediated the relationship between gender and the likelihood of pursuing a low-level position (rung 3), controlling for participant age, number of children, and current position [Sobel test: \(z = 1.912, p = 0.056\)].

We conducted a similar set of regression analyses to look at the high-level position (rung 9), and found that the effect of gender became nonsignificant [from \(\beta = -0.112, p = 0.005\) to \(\beta = -0.032, p = 0.27\)], indicating full mediation, and women’s reduced desire for the position predicted a lower likelihood of pursuit [\(\beta = 0.677, p < 0.001\)]. The Sobel test confirmed that perceived desirability significantly mediated the relationship between gender and likelihood of pursuing a high-level position \([z = 2.855, p = 0.004]\). Thus, women found high-level positions to be less desirable than men did, which then predicted a reduced likelihood of pursuit. We also found significant mediation for both low- and high-level positions when all of the control variables (e.g., age, number of children, and current position) were omitted from the model (see Appendices A7 & A8).
In Study 10, perceived desirability fully mediated the relationship between gender and the likelihood of pursuing a high-level position (rung 9), controlling for participant age, number of children, and current position [Sobel test: \( z = 2.855, p = 0.004 \)].

Despite not finding an effect of gender on attainability of the position, we did find evidence supporting the importance of perceived attainability overall and the complicated relationship it has with the other variables of interest. For the high-level position (rung 9), controlling for current position of the participant, perceived attainability reported by all participants (men and women) predicted greater desirability of the position \([\beta = 0.225, p < 0.001]\) and likelihood of pursuit \([\beta = 0.265, p < 0.001]\). This is consistent with the notion that if a goal (i.e., a desired end-point) is considered to be so out of reach as to be unattainable, then individuals are motivated to attenuate the desirability of said end-point and reduce efforts related to goal pursuit in order to minimize the potential for dissonance and disappointment, and direct one’s efforts to more promising pursuits (Oettingen, Bulgarella, Henderson, & Gollwitzer, 2004). A similar pattern was found for the mid-level position (rung 6), however the positive relationships between perceived attainability and (i) desirability and (ii) likelihood of pursuit were statistically weaker than the relationships between these variables for high-level positions [desirability: \( \beta = 0.055, p = 0.181 \); likelihood of pursuit: \( \beta = 0.08, p = 0.05 \)]. In contrast, at the low-level position (rung 3), we found a negative relationship between attainability and each of the two dependent variables.
Given that the average current position of participants (3.764 out of 10) fell between the low- and mid-level positions (rungs 3 and 6, respectively), we hypothesize that this change from a positive relationship at the high-level position to a negative relationship for the low-level position reflects the notion that just because an end-point is attainable does not mean that it is a desirable goal that one is striving to achieve. For many participants in this study, the low-level position was seen as a professional step-down and thus, despite being easier to acquire, it was not seen as desirable. On the other hand, the mid- and high-level positions were each seen as a step up in their careers, and thus were viewed as desirable end-points.

These findings also address any potential concerns that attainability and desirability are constructs that are so closely related as to be indistinguishable from one another. First of all, the fact that we find a gender difference in desirability but not in attainability shows that they are uniquely influenced by another variable. Secondly, the finding that attainability has a positive relationship to desirability and likelihood of pursuit at rung 9, but a negative relationship to desirability and likelihood of pursuit at rung 3 reveals (i) the dynamic relationship that attainability and desirability have to one another, and (ii) the distinctive impact they each have on a third variable. These findings collectively provide strong evidence that attainability and desirability are in fact two separate constructs.

**Discussion**

The primary aim of Chapter 5 was to examine whether the findings of the previous studies are unique to high-level opportunities or extend to mid- and low-level positions. The results of Study 10 reveal that men and women differ in their perceptions of desirability and their likelihood of pursuing a job opportunity based on the level of the position, with men
being more oriented toward top-level positions and women being more oriented toward lower-level positions. Two secondary aims of this chapter were (i) to further explore perceptions of professional advancement in the absence of any explicit mention of power, and (ii) to increase our confidence in the insignificant relationship between gender and perceived attainability found in Chapter 2. By employing a study design that has a large sample size and conveys the concept of professional advancement without any reference to power, we were able to directly address both of these issues.

Across the previous five chapters, we have explored differences in the goals and behaviors pertaining to professional advancement exhibited by men and women. We have also investigated two factors that may be underlying these gender differences: (i) perceived attainability of advancement opportunities, and (ii) perceptions of the negative outcomes associated with career progression. In the final chapter, we explore two additional factors that may be motivating these gender differences: (iii) perceptions of resistance and backlash to one’s ideas and abilities, and (iv) perceived belonging and acceptance among one’s coworkers.

Chapter 6: Perceptions of Backlash and Belonging at Work

Collectively, the studies in the previous chapters have provided overwhelming evidence for a gender difference in desirability of advancement opportunities and likelihood of pursuing them. The previous chapter expanded this understanding by additionally revealing a gender difference for low-level positions. One of the primary aims of Chapter 6 is to replicate the pattern of results that we find across all three levels (low, mid, high) of professional advancement, using the same study design employed in Study 10.
The second objective of this chapter is to explore two additional factors that may be underlying the gender differences in perceived desirability and likelihood of pursuit: (i) perceived resistance and backlash, and (ii) perceived belonging. In previous studies, we have found significant gender differences in the perception of negative outcomes associated with advancement opportunities. In particular, women anticipated facing higher levels of goal conflict, trade-offs, sacrifice, and time constraints than men do, suggesting that women perceive their professional and non-professional lives to be in conflict with one another. However, these results do not touch upon perceptions related to the experience of the job itself, separate from any impact that it may have on one's non-professional life.

An extensive amount of past research has shown that women are much more likely than men to encounter resistance and backlash in response to their ideas and efforts, and that this is increased in positions of leadership (Brescoll, 2012, Coffman, 2014, Eagly & Karau, 2002; Heilman & Okimoto, 2007; Hoyt, 2010; Schein, 2001). It is possible that women are acutely aware of these challenges and that this perception is contributing to the gender differences we find in desirability and likelihood of pursuit. Providing evidence in support of this possibility, studies have shown that an awareness of the potential for backlash influences women's likelihood of engaging in certain agentic behaviors that are generally considered to lead to professional advancement (Bowles, Babcock, & Lai, 2007; Brescoll, 2012; Rudman, 1998).

Another underlying factor may be a difference in men and women's sense of belonging at various levels within an organization. A sense of belonging is a fundamental human need such that people are motivated to pursue situations that fulfill this need and motivated to avoid situations that may lead to one feeling ostracized or like an out-group.
member (Baumeister & Leary, 1995). If women anticipate being less accepted and liked by their colleagues at high-level positions, then such positions are likely to be considered less desirable and sought after. Given the negative relationship between likeability and success in leadership or managerial roles for women (Fiske, Cuddy, Glick, & Xu, 2002; Heilman & Okimoto, 2007), it seems that women in high-level positions are particularly vulnerable to feeling like they do not belong. This is likely exacerbated by the fact that women comprise a very low percentage of those who occupy positions of power (Catalyst, 2014; Dawson, 2014). By virtue of being in the numerical minority, women in high-level positions may feel more isolated than accepted, due to an increase in the salience of their gender and out-group membership status (Pichevin & Hurtig, 1996).

In summary, the studies in Chapter 6 explore men and women’s perceptions of what their experience at work will be like, with particular focus on the extent to which they anticipate encountering resistance and backlash (Study 11), and feel like they belong (Study 12). The studies in this chapter utilize the same ladder-based methodology employed in Study 10, which allows these studies to explore multiple levels of professional advancement (low, mid, and high) in the absence of any explicit mention of power. This design enables us to investigate gender differences in goals and behaviors related to career progression as they spontaneously emerge, without priming other concepts that may influence the results.

Study 11

The design of Study 11 was analogous to that of Study 10, with the exception of the attainability question, which was replaced with a question related to perceptions of resistance and backlash. Seven hundred and forty-eight online participants (43.6% female; average age = 33.43) were shown a ladder with rungs numbered from 1 to 10 that represented a
hierarchy of professional advancement and asked to indicate their current position on the ladder. Participants then rated the extent to which they believed that they would experience “resistance, skepticism, and/or backlash in response to your ideas, abilities, and efforts” while having a job at a specified position on the ladder. Participants responded to this prompt for a lower-level position (rung 3), a mid-level position (rung 6), and a higher-level position (rung 9) using a 10-point scale (1 = not at all, 10 = very much). Participants then rated the desirability of each of these positions using a 10-point scale (1 = not at all desirable, 10 = very desirable). Finally, participants were asked to report the likelihood of pursuing a job at each of the three positions, if the opportunity to acquire such a position was available to them right now, using a 7-point scale (1 = definitely not, 7 = definitely yes).

Significant differences between men and women were found for their age and number of children, with men being younger [mean$_r$ = 35.56, SD$_r$ = 10.22 vs. mean$_m$ = 33.32, SD$_m$ = 10.91; $F(1, 747) = 8.329, p = 0.004, d = 0.21$], and having fewer children [mean$_r$ = 1.05, SD$_r$ = 1.373 vs. mean$_m$ = 0.49, SD$_m$ = 0.998; $F(1,747) = 40.68, p < 0.001, d = 0.47$]. Given these differences and their relevance to one’s views on professional advancement, we controlled for these two variables in all subsequent analyses that compare the responses provided by male and female participants. While we did not find a significant difference between men and women’s current position [mean$_r$ = 4.01, SD$_r$ = 1.955 vs. mean$_m$ = 4.11, SD$_m$ = 2.015; $F(1,747) = 0.538, p = 0.463, d = 0.05$], we still controlled for this variable in subsequent analyses given its likely influence on participants’ responses.

A repeated measures ANOVA with a Greenhouse-Geisser correction determined that gender did not significantly interact with position level to produce effects on perceived resistance and backlash [$F(1.175,872.92) = 0.711, p = 0.421, \eta^2_p = 0.001$], controlling for
current position, age, and number of children. Pairwise comparisons revealed that at each of
the three levels (low, mid, and high), men and women did not differ in the extent to which
they viewed the position as associated with resistance and backlash in response to their ideas
and efforts [low-level: $F(1,743) = 0.032, p = 0.857, \eta^2_p = 0.000$; mid-level: $F(1,743) = 2.696,$
$p = 0.101, \eta^2_p = 0.004$; high-level: $F(1,743) = 0.232, p = 0.63, \eta^2_p = 0.000$].

Figure 11a. Anticipated backlash in low, mid, and high-level positions in Study 11

In Study 11, there was no significant interaction between gender and position level (low,
mid, high) on perceptions of resistance and backlash, controlling for participant age, number
of children, and current position [$F(1.175,872.92) = 0.711, p = 0.421$]. *$p \leq 0.05$, **$p \leq 0.01$,
***$p \leq 0.001$.

For desirability, the interaction effect between gender and position level was also not
significant [$F(1.521,1130.103) = 2.082, p = 0.138, \eta^2_p = 0.003$], though the data trended in a
direction that is similar to that found in Study 10, with women reporting more desire for
low-level positions and less desire for high-level positions, compared to men [low-level:
$F(1,743) = 2.206, p = 0.138, \eta^2_p = 0.003$; high-level: $F(1,743) = 1.24, p = 0.266, \eta^2_p = 0.002$].
In Study 11, there was no significant interaction between gender and position level (low, mid, high) on perceived desirability, controlling for participant age, number of children, and current position \(F(1.175,872.92) = 0.711, p = 0.421\). * \(p \leq 0.05\), ** \(p \leq 0.01\), *** \(p \leq 0.001\).

Likelihood of pursuit on the other hand did display a significant interaction between gender and position level \(F(1.586,1178.456) = 4.537, p = 0.017, \eta^2 p = 0.006\). Pairwise comparisons revealed that women were more likely to go after low-level positions than men were \(F(1,743) = 4.982, p = 0.026, \eta^2 p = 0.007\), replicating the result for rung 3 found in Study 10. At the mid-level and high-level positions, we did not find a significant difference between men and women, however the pattern of the data at rung 9 was in the anticipated direction based on Study 10’s findings, with men being more likely to pursue high-level positions than women were [mid-level: \(F(1,743) = 2.076, p = 0.15, \eta^2 p = 0.003\); high-level: \(F(1,743) = 1.521, p = 0.218, \eta^2 p = 0.002\)].
Figure 11c. Likelihood of pursuing low, mid, and high-level positions in Study 11

In Study 11, there was a significant interaction between gender and position level (low, mid, high) on likelihood of pursuit, controlling for participant age, number of children, and current position \(F(1.586,1178.456) = 4.537, p = 0.017\). *\(p \leq 0.05\), **\(p \leq 0.01\), ***\(p \leq 0.001\).

Despite not finding an effect of gender on perceived resistance and backlash, we did find evidence supporting the importance of perceived resistance and backlash overall. At all three levels (rungs 3, 6, and 9), the more resistance and backlash that participants anticipated encountering, the less desirable the position was reported to be \([\text{rung 3}: \beta = -0.191, p < 0.001; \text{rung 6}: \beta = -0.058, p = 0.112; \text{rung 9}: \beta = -0.189, p < 0.001]\), and the less likely participants were to go after the position \([\text{rung 3}: \beta = -0.162, p < 0.001; \text{rung 6}: \beta = -0.086, p = 0.018; \text{rung 9}: \beta = -0.212, p < 0.001]\). These findings underscore the importance of perceived resistance and backlash in reaction to one’s ideas and efforts in how appealing and sought out a particular job is, regardless of participant gender or level of the position.

Study 12

The design of Study 12 resembled that of Study 11, with the exception of the resistance and backlash question, which was replaced with a question related to perceived
belonging. Eight hundred and sixty-two participants (42% female; average age = 35.46) were shown a ladder with rungs numbered from 1 to 10 that represented a hierarchy of professional advancement and asked to indicate their current position on the ladder. Participants then rated the how much they felt they would be “accepted and liked by [their] coworkers” while occupying a specified position on the ladder. This item served as our measure of perceived belonging and is based on the items used in the Need to Belong Scale (Leary, Kelly, Cottrell, & Schreindorfer, 2013). Participants responded to this prompt for a lower-level position (rung 3), a mid-level position (rung 6), and a higher-level position (rung 9) using a 10-point scale (1 = not at all, 10 = very much). Participants then rated the desirability of each of these positions using a 10-point scale (1 = not at all desirable, 10 = very desirable). Finally, participants were asked to report the likelihood of pursuing a job at each of the three positions, if the opportunity to acquire such a position was available to them right now, using a 7-point scale (1 = definitely not, 7 = definitely yes).

Significant differences between men and women were found for their current position, age, and number of children, with men occupying a higher position [mean_f = 4.02, SD_f = 2.019 vs. mean_m = 4.36, SD_m = 2.044; F(1,861) = 5.865, p = 0.016, d = 0.17], being younger [mean_f = 37.70, SD_f = 11.71 vs. mean_m = 33.83, SD_m = 10.276; F(1,861) = 26.487, p < 0.001, d = 0.35], and having fewer children [mean_f = 1.20, SD_f = 1.393 vs. mean_m = 0.64, SD_m = 1.072; F(1,861) = 44.424, p < 0.001, d = 0.45]. Given these differences and their relevance to one’s views on professional advancement, we controlled for these three variables in all subsequent analyses that compare the responses provided by male and female participants.
A repeated measures ANOVA with a Greenhouse-Geisser correction determined that gender did not significantly interact with position level to produce effects on perceived belonging \( [F(1.311,1123.167) = 0.268, \ p = 0.668, \ \eta^2p = 0.000] \), controlling for current position, age, and number of children. Pairwise comparisons revealed that at each of the three levels (low, mid, and high), men and women did not differ in the extent to which they felt a sense of belonging [low-level: \( F(1,857) = 0.402, \ p = 0.526, \ \eta^2p = 0.000; \) mid-level: \( F(1,857) = 0.918, \ p = 0.338, \ \eta^2p = 0.001; \) high-level: \( F(1,857) = 0.023, \ p = 0.88, \ \eta^2p = 0.000] \).

**Figure 12a. Sense of belonging in low, mid, and high-level positions in Study 12**

In Study 12, there was no significant interaction between gender and position level (low, mid, high) on perceived belonging, controlling for participant age, number of children, and current position \( [F(1.311,1123.167) = 0.268, \ p = 0.668] \). *\( p \leq 0.05 \), **\( p \leq 0.01 \), ***\( p \leq 0.001 \).

There was however a significant interaction effect between gender and position level on desirability \( [F(1.555,1332.527) = 5.799, \ p = 0.006, \ \eta^2p = 0.007] \) and likelihood of pursuit \( [F(1.657,1419.905) = 6.992, \ p = 0.002, \ \eta^2p = 0.008] \). Pairwise comparisons revealed that men perceived high-level positions to be more desirable than women did, and that men are
more likely to go after such positions than women are [desirability: $F(1,857) = 11.579, p = 0.001, \eta^2_p = 0.013$; likelihood of pursuit: $F(1,600) = 7.815, p = 0.005, \eta^2_p = 0.013$]. This replicates the finding for high-level positions found in Study 10 (as well as many other previous studies), and the pattern of data found in Study 11. At the mid- and low-level positions, gender did not significantly interact with position level to impact either of the outcome variables [mid-level desirability: $F(1,857) = 0.027, p = 0.870, \eta^2_p = 0.000$; mid-level likelihood of pursuit: $F(1,857) = 0.001, p = 0.973, \eta^2_p = 0.000$; low-level desirability: $F(1,857) = 0.002, p = 0.966, \eta^2_p = 0.000$; low-level likelihood of pursuit: $F(1,857) = 1.936, p = 0.164, \eta^2_p = 0.002$], though the pattern of results for likelihood of pursuit at rung 3 was in the predicted direction with women reporting a greater tendency to go after low-level positions.

**Figure 12b. Desirability of low, mid, and high-level positions in Study 12**

![Desirability Graph](image)

In Study 12, there was a significant interaction between gender and position level (low, mid, high) on perceived desirability, controlling for participant age, number of children, and current position [$F(1.555,1332.527) = 5.799, p = 0.006$]. *$p \leq 0.05$, **$p \leq 0.01$, ***$p \leq 0.001$. **
In Study 12, there was a significant interaction between gender and position level (low, mid, high) on likelihood of pursuit, controlling for participant age, number of children, and current position \( F(1.657,1419.905) = 6.992, p = 0.002 \). *\( p \leq 0.05 \), **\( p \leq 0.01 \), ***\( p \leq 0.001 \).

Despite not finding an effect of gender on perceived belonging, we did find evidence for the importance of sense of belonging at work overall. At all three levels (rungs 3, 6, and 9), the more that participants anticipated feeling accepted and liked by their coworkers, the more desirable the position was reported to be \( \beta = 0.321, p < 0.001; \beta = 0.282, p < 0.001; \beta = 0.372, p < 0.001 \), and the more likely participants were to go after the position \( \beta = 0.246, p < 0.001; \beta = 0.167, p < 0.001; \beta = 0.365, p < 0.001 \). These findings highlight the weight of perceived belonging in how appealing and sought out a particular job is, regardless of participant gender or level of the position.

**Discussion**

The first aim of Chapter 6, similar to Chapter 5, was to examine gender differences in perceptions and behaviors related to low-, mid-, and high-level positions. Study 10 in the
previous chapter showed that women are more attracted to low-level positions, and men are more attracted to high-level positions, with no gender difference found for mid-level positions. The result found for low-level positions was replicated in Study 11 and the result found for high-level positions was replicated in Study 12, with neither study displaying a gender difference for mid-level positions. Collectively, it appears that perceptions and behaviors related to both ends of the spectrum, high and low, are influenced by gender, though the effects seem to be greater for high-level positions.

The second aim of this chapter was to investigate the experience that men and women anticipated having while at work. In particular, we were interested in examining the extent to which they anticipated experiencing (i) resistance and backlash to their ideas and efforts, and (ii) a reduced sense of belonging among their coworkers. Our hypothesis regarding resistance and backlash was that women’s diminished desire for and pursuit of high-level positions may in part be due to an awareness of the poor treatment that they stand to encounter. Additionally, given that men significantly outnumber women at the top of organizational hierarchies, we predicted that women may anticipate being less accepted and well-liked by their coworkers, and that this limited sense of belonging would be a factor that significantly influences the desirability and pursuit of high-level positions. Our findings in Studies 11 and 12 reveal that while perceptions of backlash and belonging are significant predictors of desirability and likelihood of going after a position, these perceptions did not differ for men and women. Thus, we conclude that a difference in the experience that men and women anticipate having at work is not underlying the gender differences we see in how attractive or sought after a position is.
Though we hypothesized that women would be aware of the backlash that they are more likely to encounter in high-level positions than men are, some research has similarly displayed the tendency for individuals to be blissfully unaware of their disadvantage. Crosby (1984) has shown that members of disadvantaged social groups often exhibit a discrepancy between their perception of personal and group discrimination, where they perceive their group to receive a higher level of discrimination than they have experienced themselves as an individual member of the group (Crosby, Clayton, Alksnis, & Hemker, 1986; Crosby, Pufall, Snyder, O’Connell, & Whalen, 1989). Moreover, having such an optimistic and positive bias about your future experiences may actually be beneficial. Taylor and colleagues (1988, 1994) have shown that such positive illusions lead to greater mental and physical health. System justification theory likewise proposes that being ignorant of the lack of legitimacy in a hierarchy enables individuals to address various epistemic, existential, and relational needs (Jost & Banaji, 1994; Jost, Banaji, & Nosek, 2004). Groups with little power or of lower status, which women have been shown to be (Fiske & Berdahl, 2007), are more likely to exhibit high levels of system justification, due to the distressing prospect of being unfairly disadvantaged by a system that you are powerless to change (Van der Toorn, Feinberg, Jost, Kay, Tyler, Willer, & Wilmuth, 2015; Van der Toorn, Tyler, & Jost, 2011).

General Discussion

Across 12 studies, employing a total of 6,245 participants, we examined differences in the goals, perceptions, and behaviors related to professional advancement exhibited by men and women. Our findings reveal that, compared to men, women have more goals

\[\text{Studies 1-9 were published in the Proceedings of the National Academy of Sciences in 2015 (Gino, Wilmuth, & Brooks, 2015). At the time of this dissertation, Studies 10-12 remained unpublished.}\]
(Studies 1 & 2) and view attaining power at work as less of a goal (Studies 1, 2, & 8). By definition, in order for an end-point to be viewed as a goal and influence behavior related to pursuit of said end-point, it must be viewed as highly desirable. The current research shows that women view advancement opportunities (e.g., a promotion or high-level position) as less desirable than men consider such opportunities to be (Studies 3, 5-10, & 12), suggesting that women are less likely to have goals related to acquiring power in the workplace due to a reduced desirability associated with such goals.

To explore what may be underlying these gender differences in goals and desirability, we examined men’s and women’s perceptions of how realistically attainable these advancement opportunities are (i.e., the means), and once achieved, how positive or negative the experience of the opportunity would be (i.e., the ends). No gender difference in perceived attainability was found (Studies 3, 4, & 10), indicating that men and women view professional goals as equally achievable. We also found no gender differences in perceptions of resistance and backlash that one may face in a high-level position (Study 11) or perceived belonging among one’s coworkers (Study 12). However, men and women did differ in the level of positive (e.g., money, status) and negative outcomes (e.g., conflict amongst one’s goals, time constraints) they anticipated encountering upon receiving a promotion.

Compared to men, women more strongly associated negative outcomes with professional advancement in several studies (Studies 5-9), and reported a significantly lower amount of positive outcomes in one study (Study 7). Furthermore, this perception of heightened negativity partially (or at times, fully) explained the relationship between gender and desirability of the advancement opportunities (Studies 5, 6, 8, & 9).

Given the strong influence that goals have on subsequent behavior, we also assessed
the relationship between the desirability of professional advancement (as a proxy of goal commitment) and the likelihood of pursuing an advancement opportunity if it was in fact available at the moment. Men were much more likely to pursue promotions and high-level positions than women were (Studies 5-10, & 12). This behavioral difference was predicted by the divergent levels of desirability men and women reported as well as differences in their perceptions of the negative outcomes associated with advancement (Studies 5-10, & 12).

To acquire a more comprehensive understanding of the goals, perceptions, and behaviors related to professional advancement exhibited by men and women, we explored two potential moderators: (i) level of position, and (ii) the emphasis placed on power in describing the advancement opportunities. In our studies exploring different position levels (low, mid, and high) within an organizational hierarchy, in contrast to men’s greater orientation to high-level positions, we found no gender difference for mid-level positions, and the opposite result for low-level positions, with women reporting greater desire for and likelihood of pursuing these positions than men did (Studies 10 & 11). Since many of the advancement opportunities we described to participants emphasized a corresponding increase in power over others, we explored whether amplifying or attenuating this emphasis affected our results (Studies 4, 8-12). Even when power was completely removed from the description of professional advancement, our results held and were comparable to all of the studies in which power was explicitly mentioned (Studies 4, 9-12).

Limitations & Future Directions

The most crucial finding from the current set of studies is that the greater amount of negative outcomes women associate with professional advancement is underlying their reduced desire for and pursuit of advancement opportunities. While Study 7 looked at
negative outcomes in general (by asking participants to list outcomes and then categorize them as positive or negative), in most of the studies exploring men and women's perceptions of negative outcomes, participants were asked to specifically rate the likelihood of experiencing the following: conflict amongst one’s life goals, trade-offs, sacrifice, time constraints, stress or anxiety, and burden of responsibility (Studies 5, 6, 8, & 9). In hindsight, we presume that these outcomes were eliciting the notion of one’s professional life conflicting with one’s non-professional life; thus when a participant was rating how likely she is to make trade-offs in a high-level position, she was thinking about reducing the time she spends with her family in order to fulfill her work obligations, or even more abstractly, compromising the extent to which she can live up to society’s expectations of her as a woman in favor being a successful professional. However, this is simply our hypothesis, as the current data do not precisely assess whether these negative outcomes are directly related to conflict between one’s professional and non-professional roles and objectives. Future research that zeros in on men and women’s perceptions of their professional and non-professional roles and the degree of conflict between them would help clarify the nature of the mechanism driving our results. Moreover, studies that manipulate the perception of conflict between one’s professional and non-professional roles and show an effect on the desire for and pursuit of high-level positions would underscore the weight in addressing this concern and provide organizations with a tool for addressing them.

Given past research documenting women’s lower levels of reported confidence (Correll, 2001; Ehrlinger & Dunning, 2003; Kay & Shipman, 2015; Reuben, Sapienza, & Zingales, 2014), we were surprised to not find gender differences in perceived attainability (Studies 3, 4, & 10). It is possible that the gender differences in confidence found in
previous studies are measuring men and women’s compliance with gender prescriptions rather than an actual difference in confidence. The attainability measures used in our studies focus on the position or goal itself rather than asking about one’s own abilities. This difference may be enough to enable women to answer honestly about the extent to which they believe they could attain high-level positions without fear of violating the modesty norm imposed upon their gender. Lending greater support to this presumption, past work on this topic often required participants to share their self-perceptions with another person, which would increase the importance of conforming to societal expectations, compared to a methodology like ours, which does not require participants to share their responses with other participants. Studies that aim to explore these distinctions and resolve the inconsistencies between their findings would lend great insight into whether women actually have less confidence in their abilities or are merely downplaying their confidence in order to align their behavior with gender-based norms.

We were also surprised to not find a difference in the extent to which men and women anticipated experiencing resistance, skepticism, and backlash to their ideas, abilities, and efforts upon attaining a high-level position (Study 11). Past research on negotiations, volubility, and self-promotion has shown that women are less likely to behave in an agentic fashion because they are aware of the backlash that women receive, whether it be in the form of economic or social penalties, as a result of enacting such male-typed behavior (Bowles, Babcock, & Lai, 2007; Brescoll, 2012; Budworth & Mann, 2010; Moss-Racusin & Rudman, 2010; Rudman, 1998). Perhaps we did not find similar results because of the abstract nature of our questions, in contrast to the specific behaviors that are examined in previous research. When a woman chooses to withhold from boasting about her
accomplishments or initiate a negotiation, she makes a decision about a concrete behavior. For such specific behaviors, the societal gender norms may be readily accessible and more easily tied to the fundamental communal and agentic prescriptions for women and men. This may be distinct from the more holistic experience of being in a high-level position that our participants were asked to imagine. While the prescriptive or proscriptive nature of certain behaviors may be deeply encoded in the minds of men and women, it is possible that the general experience of being an executive is not. Similarly, even though past research has shown that simply occupying a leadership position leads to unfavorable evaluations and reduced likability for women (Heilman, Wallen, Fuchs, & Tamkins, 2004; Heilman & Eagly, 2008), it is unclear if women are aware of this. Future work should explore the specific behaviors and conditions under which women are aware of the negative demand-side treatment that awaits them and those in which they are not, with particular focus on concrete behaviors versus abstract experiences.

A final trajectory for future research relates to the framing of high-level positions. Many of the studies within the current set described advancement opportunities as being associated with power (Studies 3, & 5-9). While we found the same gender differences in studies or conditions that did not explicitly mention the concept of power (Studies 4 & 8-12), investigating the effect of alternative concepts related to professional advancement that may be more attractive to women may yield valuable insight into how to address these gender differences. For example, by characterizing a high-level position as an opportunity to enable the success of others, thus describing the position in communal rather than agentic terms, women may find such opportunities to be more desirable. Similarly, emphasizing an increase in status, which is considered to be more other-oriented than power, may also make
high-level positions more desired and pursued by women (Magee & Galinsky, 2008).

Another option would be to describe the position as allowing its occupant to accomplish the professional goals that are meaningful to him or her. Of the three alternatives we have proposed, we have the most confidence in the first one (“an opportunity to enable the success of others”), due to its highly communal nature. Our research suggests that women are already aware of the status and happiness or satisfaction associated with advancement, and that reinforcing these specific positive outcomes may not have any additional effect (Studies 5, 6, 8, & 9). Though, given the conflict that women perceive between their female gender role and the leadership role, it is possible that by injecting an air of communality into a high-level position, women may view the two roles to be less antagonistic than they are normally considered to be.

**Organizational Implications**

Organizations have increasingly become invested in addressing gender disparity issues, instituting initiatives aimed at increasing the number of women in senior-level positions. The main components of these efforts are often comprised of (i) bias training that aims to increase awareness of prejudicial thinking and discriminatory behavior, (ii) increased standardization of evaluation processes, which then reduces the potential for bias to inhibit the advancement of women, (iii) providing women with networking and sponsorship opportunities that are usually difficult for women to gain access to, and (iv) training programs designed to increase women’s enactment of behaviors that are thought to lead to professional advancement (Bohnet, 2016). The first two components aim to address the demand-side factors that significantly contribute to women’s underrepresentation in managerial roles. For example, by standardizing hiring criteria, it lowers the likelihood that
evaluators may manipulate the competence standards in order to justify discrimination against female candidates (Uhlmann & Cohen, 2005). Sponsorship programs also address the disadvantage that women encounter in the workplace by acknowledging the significant advantage that having a sponsor has on the progression of one’s career, and the greater difficulty that women have in forming these crucial relationships (Ibarra, Carter, & Silva, 2010). However, the fourth component, comprised of efforts aimed at changing the behaviors engaged in by women, does not seem to take into account the divergent treatment that men and women receive as a result of engaging in agentic behaviors. For instance, while self-promotion is an important aspect of professional advancement, men who broadcast their abilities and achievements are praised for their confidence and success, while women are seen as self-interested and penalized for such counterstereotypical behavior (Rudman & Phelan, 2008). Thus these skill development workshops may make the situation worse, by encouraging women to act in ways that will lead to backlash from their colleagues.

Furthermore, by focusing on the behaviors and abilities of women, these initiatives implicitly communicate that women are underrepresented in leadership roles due to a deficiency in their own skills, rather than emphasizing the role of the environment and biased organizational processes. Unfortunately, skill development and sponsorship programs are frequently offered as a unified package and are not separately assessed for their effectiveness. Therefore organizations are not able to identify whether the training portion or the sponsorship portion is responsible for the success of the initiative. It is possible that the advantage conferred by the increase in sponsorship is so great that it overshadows the disadvantage that women are being subject to through the training programs.
Regrettably, none of these four components address women’s perceptions of negative outcomes that are highlighted in the current research. Presumably to maintain an air of positivity, companies often emphasize the benefits of gender diversity at the senior-level both for individuals themselves as well as for the organization overall. Our findings suggest that companies would be better served by minimizing the trade-offs and sacrifice that women anticipate having to make in high-level positions. By communicating that professional advancement will not cause a greater amount of conflict amongst one’s goals, women may exhibit greater desire for and pursuit of advancement opportunities. Two ways that organizations may do this are: (i) provide employees with elements of a secure base relationship as an expansion of the sponsorship and mentorship programs already established, and (ii) implement policies that increase employees’ ability to balance their professional and non-professional goals and responsibilities.

Qualitative research on dual-career heterosexual couples has shown that individuals whose significant other provides a secure base are more likely to pursue professional opportunities that enable the development of one’s professional identity. Core components of having a secure base include feeling encouraged to take calculated risks and supported in the case that things do not work out (Petriglieri & Obodaru, 2016). Given the societal emphasis placed on women’s communal and domestic responsibilities, it is likely that women are more often the secure base provider than the secure base receiver, and as a result of this imbalance, they are also more likely to view professional advancement as less desirable and more in conflict with one’s non-professional goals and duties. However, perhaps one’s spouse is not the only potential source of a secure base. Mentors provide guidance to their employees and sponsors advocate on behalf of those whom they are sponsoring. Extending
these relationships to encompass a high degree of support and encouragement, and implementing an organizational culture that further endorses these elements of a secure base may bolster the extent to which women feel comfortable pursuing high-level positions.

Additionally, by improving policies related to maternity and paternity leave, on-site childcare, and flexible work schedules, organizations may provide an environment in which both individuals within a couple are able to pursue their professional goals. In goal-related terms, this would be the equivalent of providing employees with multifinal means of goal attainment. Multifinal means are those that promote attainment of multiple goals at once. For example, biking to work satisfies the goal of spending less money and getting more exercise (Fishbach & Ferguson, 2007). Similarly, providing on-site childcare enables parents to see their children more throughout the day while allowing them to maintain their involvement at work. When professional environments are rigid and unyielding to outside responsibilities, one individual within a couple is usually forced to make trade-offs and sacrifice in order to enable the professional advancement of the other individual. By making it easier for all employees, men and women, to fulfill the various non-professional commitments that come with being a part of a family unit, it is less likely that these constraints will continue to disproportionately inhibit women from pursuing professional advancement.

Conclusion

The considerable underrepresentation of women in senior-level positions is perpetuated by both demand-side factors (e.g., bias and discrimination) and supply-side factors (e.g., the different behavioral tendencies of men and women). While each of these categories distinctly contribute to the gender disparity issue, they are also inextricably linked,
such that differences in supply-side behaviors are often elicited in response to the divergent
demand-side treatment that members of each gender receive. A major determinant of the
biased treatment that men and women encounter corresponds to the disparate expectations
that society imposes upon them: women are expected to be and behave communally and
men are expected to be and behave in an agentic fashion. Delineating from these socially
shared expectations, the relationship between professional advancement and the fulfillment
of women’s gender role is highly antagonistic, resulting in goal conflict, trade-offs, and
sacrifice. This is in contrast to the synergistic relationship between professional
advancement and men’s gender role, where the pursuit of the former increases fulfillment of
the latter. The current research suggests that women are aware of this conflict and
perceptions related to it are underlying their reduced desire for and pursuit of high-level
positions. While past research has shown that women’s behaviors are constrained by an
awareness of the negative outcomes associated with engaging in agentic actions, our findings
reveal that this dynamic manifests itself on an even deeper level, affecting the goals that
women have for themselves, which then in turn influence their downstream behavior. To
the extent that companies are invested in minimizing the significant gender disparity that
exists at the upper echelons of organizational hierarchies, we suggest that they continue to
support initiatives that combat demand-side factors, and strive to address supply-side issues,
while making sure to acknowledge the different societal constraints imposed upon men and
women, and the effects they have on their goals, perceptions, and behaviors related to
professional advancement.
Appendices

Appendix A1. Participant information for all Studies (1-12)

<table>
<thead>
<tr>
<th>Study</th>
<th>Number of Participants</th>
<th>Sample Population</th>
<th>Percent Female/Male</th>
<th>Average Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>781</td>
<td>Amazon Mechanical Turk workers, employed individuals</td>
<td>42/58</td>
<td>31.9</td>
</tr>
<tr>
<td>2</td>
<td>437</td>
<td>Online panel provided by ClearVoice, employed individuals</td>
<td>50/50</td>
<td>48.4</td>
</tr>
<tr>
<td>3</td>
<td>247</td>
<td>Amazon Mechanical Turk workers</td>
<td>61/39</td>
<td>29.9</td>
</tr>
<tr>
<td>4</td>
<td>635</td>
<td>Harvard Business School MBA alumni from 2013 &amp; 2014</td>
<td>45/55</td>
<td>29.7</td>
</tr>
<tr>
<td>5</td>
<td>465</td>
<td>Amazon Mechanical Turk workers, employed individuals</td>
<td>35/65</td>
<td>29.5</td>
</tr>
<tr>
<td>6</td>
<td>204</td>
<td>Harvard Business School executive education participants</td>
<td>26/74</td>
<td>37.9</td>
</tr>
<tr>
<td>7</td>
<td>516</td>
<td>Harvard undergraduates</td>
<td>53/47</td>
<td>22.1</td>
</tr>
<tr>
<td>8</td>
<td>484</td>
<td>Amazon Mechanical Turk workers</td>
<td>38/62</td>
<td>32.6</td>
</tr>
<tr>
<td>9</td>
<td>265</td>
<td>Amazon Mechanical Turk workers</td>
<td>43/57</td>
<td>37.2</td>
</tr>
<tr>
<td>10</td>
<td>601</td>
<td>Amazon Mechanical Turk workers</td>
<td>54/46</td>
<td>34.8</td>
</tr>
<tr>
<td>11</td>
<td>748</td>
<td>Amazon Mechanical Turk workers</td>
<td>44/56</td>
<td>33.4</td>
</tr>
<tr>
<td>12</td>
<td>862</td>
<td>Amazon Mechanical Turk workers</td>
<td>42/58</td>
<td>35.5</td>
</tr>
</tbody>
</table>

Individuals who participate in studies via Amazon Mechanical Turk are called “workers.”
### Appendix A2. Goal category descriptions provided to participants in Studies 1 & 2

<table>
<thead>
<tr>
<th>Goal category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power</td>
<td>To have an impact on, control or manage other people, influence other people, or control resources others depend on</td>
</tr>
<tr>
<td>Achievement</td>
<td>To achieve success by doing things better than before or by surpassing some internal or external standards of excellence</td>
</tr>
<tr>
<td>Affiliation</td>
<td>To have close and warm relationships with others (e.g., spend time with others, be involved in social relationships)</td>
</tr>
<tr>
<td>Personal growth &amp; health</td>
<td>To engage in behaviors that improve one’s health or knowledge (e.g., to eat more vegetables, get in better shape, learn more about gardening)</td>
</tr>
<tr>
<td>Generativity</td>
<td>To make a lasting contribution to society</td>
</tr>
<tr>
<td>Spirituality</td>
<td>To deepen one’s relationship with God or other religious entities</td>
</tr>
<tr>
<td>Avoidance</td>
<td>To avoid letting anything upset you or get in the way</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>Goals that do not belong to the above categories</td>
</tr>
</tbody>
</table>

### Appendix A3. Rotated component matrix of outcomes in Study 5

<table>
<thead>
<tr>
<th>Outcome associated with promotion</th>
<th>Factor 1</th>
<th>Factor 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stress or anxiety</td>
<td>0.813</td>
<td>-0.020</td>
</tr>
<tr>
<td>Difficult tradeoffs or sacrifice</td>
<td>0.809</td>
<td>0.008</td>
</tr>
<tr>
<td>Time constraints</td>
<td>0.782</td>
<td>0.154</td>
</tr>
<tr>
<td>Burden of responsibility</td>
<td>0.781</td>
<td>0.194</td>
</tr>
<tr>
<td>Conflict with other life goals</td>
<td>0.695</td>
<td>-0.064</td>
</tr>
<tr>
<td>Satisfaction or happiness</td>
<td>0.071</td>
<td>0.803</td>
</tr>
<tr>
<td>Opportunity</td>
<td>0.119</td>
<td>0.798</td>
</tr>
<tr>
<td>Money</td>
<td>-0.221</td>
<td>0.763</td>
</tr>
<tr>
<td>Status or influence</td>
<td>0.181</td>
<td>0.698</td>
</tr>
</tbody>
</table>

Extraction method: principal component analysis.
Rotation method: varimax with Kaiser normalization
Appendix A4. Mediation of desirability in Study 8, controlling for promotion description manipulation

Regression analyses were conducted with desirability of the promotion as the dependent measure, expected conflict with other goals as the potential mediator, and the promotion description manipulation as the control variable. The effect of gender weakened [from $\beta = 0.095, p = 0.037$ to $\beta = 0.031, p = 0.44$], indicating full mediation, and expected conflict with other goals predicted lower ratings of promotion desirability [$\beta = -0.49, p < 0.001$]. The Sobel test for mediation was significant [$z = 2.828, p = 0.005$]. These results mirror the full mediation found for the same set of regressions without controlling for the promotion description manipulation [$z = 2.853, p = 0.004$].

Appendix A5. Mediation of desirability in Study 9, controlling for promotion description manipulation

Regression analyses were conducted with desirability of the promotion as the dependent measure, perceptions of negative outcomes as the potential mediator, and the promotion description manipulation as the control variable. The effect of gender slightly weakened [from $\beta = 0.274, p < 0.001$ to $\beta = 0.233, p < 0.001$] and perceptions of negative outcomes predicted lower ratings of promotion desirability [$\beta = -0.174, p = 0.004$]. The Sobel test for mediation was significant [$z = 2.725, p = 0.006$]. These results mirror the full mediation found for the same set of regressions without controlling for the promotion description manipulation [$z = 2.729, p = 0.006$].
Appendix A6. Mediation of likelihood of pursuit in Study 9, controlling for promotion description manipulation

Regression analyses were conducted with likelihood of pursuit as the dependent measure, perceptions of negative outcomes as the potential mediator, and the promotion description manipulation as the control variable. The effect of gender slightly weakened [from β = 0.286, p < 0.001 to β = 0.255, p < 0.001], indicating partial mediation, and perceptions of negative outcomes predicted lower likelihood of pursuit [β = −0.132, p = 0.03]. The Sobel test for mediation was significant [z = 2.464, p = 0.014]. These results mirror the full mediation found for the same set of regressions without controlling for the promotion description manipulation [z = 2.467, p = 0.014].

Appendix A7. Mediation of likelihood of pursuing low-level positions (rung 3) in Study 10, omitting all control variables from the model

Regression analyses were conducted with likelihood of pursuing the position as the dependent measure and desirability of the position as the mediator. The effect of gender became non-significant [from β = 0.103, p = 0.012 to β = 0.051, p = 0.128], indicating full mediation, and desirability predicted greater likelihood of pursuit [β = 0.567, p < 0.001]. The Sobel test for mediation was significant [z = 2.206, p = 0.027]. These results mirror the (marginally significant) full mediation found for the same set of regressions that included age, number of children, and current position as control variables in the model [z = 1.912, p = 0.056].
Appendix A8. Mediation of likelihood of pursuing high-level positions (rung 9) in Study 10, omitting all control variables from the model

Regression analyses were conducted with likelihood of pursuing the position as the dependent measure and desirability of the position as the mediator. The effect of gender became marginally significant \( [\beta = -0.16, p = 0.001 \text{ to } \beta = -0.06, p = 0.06] \), indicating full mediation, and desirability predicted greater likelihood of pursuit \( [\beta = 0.71, p < 0.001] \). The Sobel test for mediation was significant \( [z = 3.77, p < 0.001] \). These results mirror the full mediation found for the same set of regressions that included age, number of children, and current position as control variables in the model \( [z = 2.855, p = 0.004] \).

Appendix A9. Study Materials for Study 1

[Attention check]

Research on careers has often evaluated people’s passion for the work they do by investigating whether they would still do it if they did not have to. However, we are using this question to check the degree of attention with which you read instructions. Please ignore the following question and simply write “yes” in the box marked “other, please specify.”

- If I won the lottery, I would do the same work I do now.
- If I won the lottery, I would do a different work.
- If I won the lottery, I would not work anymore.
- Other (please specify)…. ____________

[NEXT SCREEN]

************************ TASK 1 ************************

Welcome!

In this first task, you will be asked to list the goals that you would like to accomplish in your life or that you consider to be of central importance to you. By core goals we mean things
that occupy your thoughts on a routine basis, things that you deeply care about, and/or things that motivate your behavior, decisions, etc. Examples of such core goals are: “being in a committed relationship,” “keeping up with sports,” “being organized,” or “attaining power or status.”

On the next screen, you’ll see 25 open text boxes. Please write each goal in a box. You can list anywhere from one to 25 goals. You do not have to rank the goals in order of importance. Just list the goals in the order in which they come to mind. You will be given 2 minutes to list the goals.

[NEXT SCREEN]

Please list your goals below. Remember, you have only 2 minutes to complete this task. The >> button will appear after the 2 minutes are over.

Goal 1: ____________
Goal 2: ____________
Goal 3: ____________
Goal 4: ____________
Goal 5: ____________
Goal 6: ____________
Goal 7: ____________
Goal 8: ____________
Goal 9: ____________
Goal 10: ____________
Goal 11: ____________
Goal 12: ____________
Goal 13: ____________
Goal 14: ____________
Goal 15: ____________
Goal 16: ____________
Goal 17: ____________
Goal 18: ____________
Goal 19: ____________
Goal 20: ____________
Goal 21: ____________
Goal 22: ____________
Goal 23: ____________
Goal 24: ____________
Goal 25: ____________

[NEXT SCREEN]

Now, please look back to the goals you listed. We would like you to indicate the category to which the goals belong to, using the categories provided below.

Categories:
• **Affiliation / Intimacy**: To have close and warm relationships with others (e.g., spend time with others, be involved in social relationships).

• **Power**: To have an impact on, control or manage other people, influence other people, or control resources other depend on.

• **Achievement**: To achieve success by doing things better than before or by surpassing some internal or external standards of excellence.

• **Personal growth and health**: To engage in behaviors that improve one’s health or knowledge (e.g., “To eat more vegetables,” “To get in better shape,” “To learn more about gardening.”)

• **Generativity**: To make a lasting contribution to society.

• **Spirituality**: To deepen one’s relationship with God or other religious entities.

• **Avoidance**: To avoid letting anything upset you or get in the way.

• **Miscellaneous**: Goals that do not belong to the above categories.

---

[Table of goals with checkboxes indicating whether the goal is selected or not.]

[NEXT SCREEN]

******************************************* TASK 2 *******************************************

Now please answer the following questions about you.

Which gender do you most identify with?

• Male

• Female

What is your age? ________

Are you married or in a committed relationship?

• Yes

• No

Do you have any children?

• Yes
Appendix A10. Study Materials for Study 2

[Attention check]

Research on careers has often evaluated people’s passion for the work they do by investigating whether they would still do it if they did not have to. However, we are using this question to check the degree of attention with which you read instructions. Please ignore the following question and simply write “yes” in the box marked “other, please specify.”

- If I won the lottery, I would do the same work I do now.
- If I won the lottery, I would do a different work.
- If I won the lottery, I would not work anymore.
- Other (please specify).... ____________

[NEXT SCREEN]

****************************************************************** TASK 1 ******************************************************************

Welcome!

In this first task, you will be asked to list the goals that you would like to accomplish in your life or that you consider to be of central importance to you. By core goals we mean things that occupy your thoughts on a routine basis, things that you deeply care about, and/or things that motivate your behavior, decisions, etc. Examples of such core goals are: “being in a committed relationship,” “keeping up with sports,” “being organized,” or “attaining power or status.”

On the next screen, you’ll see 20 open text boxes. Please write each goal in a box. You can list anywhere from one to 20 goals. You do not have to rank the goals in order of importance. Just list the goals in the order in which they come to mind. You will be given 2 minutes to list the goals.

[NEXT SCREEN]

Please list your goals below. Remember, you have only 2 minutes to complete this task. The >> button will appear after the 2 minutes are over.

Goal 1: __________
Goal 2: __________
Goal 3: __________
Goal 4: __________
Goal 5: __________
Goal 6: __________
Goal 7: ____________
Goal 8: ____________
Goal 9: ____________
Goal 10: ____________
Goal 11: ____________
Goal 12: ____________
Goal 13: ____________
Goal 14: ____________
Goal 15: ____________
Goal 16: ____________
Goal 17: ____________
Goal 18: ____________
Goal 19: ____________
Goal 20: ____________

[Next Screen]

Now, please look back to the goals you listed. We would like you to indicate the category to which the goals belong to, using the categories provided below.

Categories:

- **Affiliation / Intimacy**: To have close and warm relationships with others (e.g., spend time with others, be involved in social relationships).
- **Power**: To have an impact on, control or manage other people, influence other people, or control resources other depend on.
- **Achievement**: To achieve success by doing things better than before or by surpassing some internal or external standards of excellence.
- **Personal growth and health**: To engage in behaviors that improve one’s health or knowledge (e.g., “To eat more vegetables,” “To get in better shape,” “To learn more about gardening.”)
- **Generativity**: To make a lasting contribution to society.
- **Spirituality**: To deepen one’s relationship with God or other religious entities.
- **Avoidance**: To avoid letting anything upset you or get in the way.
- **Miscellaneous**: Goals that do not belong to the above categories.
*************** TASK 2 ***************

Now, you will be asked to list your favorite foods. 

On the next screen, you’ll see 20 open text boxes. Please write each type of food in a box. You can list anywhere from one to 20 foods. You do not have to rank the foods in order of preference. Just list the foods in the order in which they come to mind. You will be given 2 minutes to list the foods.

[NEXT SCREEN]

Please list your favorite foods below. Remember, you have only 2 minutes to complete this task. The >> button will appear after the 2 minutes are over.

Food 1: ____________
Food 2: ____________
Food 3: ____________
Food 4: ____________
Food 5: ____________
Food 6: ____________
Food 7: ____________
Food 8: ____________
Food 9: ____________
Food 10: ____________
Food 11: ____________
Food 12: ____________
Food 13: ____________
Food 14: ____________
Food 15: ____________
Food 16: ____________
Food 17: ____________
Food 18: ____________
Appendix A11. Study Materials for Study 3

Welcome to the Behavior Survey.

This survey consists of several questions and tasks that study individuals’ decision making behavior in different cognitive and social contexts.

Please follow the instructions of each question and answer all questions in one sitting while you are NOT eating food, listening to music, or interrupted by other people.
In this study, we can tell whether research participants simply click through items. In this case, you won’t be able to finish the survey and receive payment.

The study itself should take no more than 3-5 minutes, but it is imperative that you take your time and answer each question completely, as your answers are very important to us. Thank you for your cooperation!

[Next Screen]

[Attention check]

Recent research on decision making shows that choices are affected by context. Differences in how people feel, their previous knowledge and experience, and their environment can affect choices. To help us understand how people make decisions, we are interested in information about you. Specifically, we are interested in whether you actually take the time to read the directions; if not, some results may not tell us very much about decision making in the real world. To show that you have read the instructions, please ignore the question below about how you are feeling and instead check only the "none of the above" option as your answer. Thank you very much.

[Next Screen]

************ REFLECTION TASK ***************

Please take a few moments to think about the things you’d like to accomplish in your life and the goals you have for yourself.

Once you’ve had the chance to think about your goals and desires, please click on >>

[Next Screen]

Now please indicate the extent to which you agree/disagree with each of the following statement.
1 = Strongly disagree
2 = Disagree
3 = Somewhat disagree
AS ONE OF MY CORE GOALS IN LIFE I WOULD LIKE...

1. ...to have a powerful position in an organization
2. ...to have power over others

[NEXT SCREEN]

Now please indicate the extent to which you think each of the above goals is attainable to you.
1 = Not at all
2
3
4
5
6
7 = Very much so

1. To have a powerful position in an organization
2. To have power over others

[NEXT SCREEN]

Now please answer a few questions about yourself.

What is your gender?
• Male
• Female

How old are you? __________

Are you a student?
• Yes
• No

Appendix A12. Study Materials for Study 4

Imagine that the ladder below reflects the hierarchy of professional advancement in the industry in which you currently work.
At the top of the ladder are positions like CEO and CFO or Members of the Board (if applicable). At the bottom of the ladder are jobs that are usually acquired immediately after undergrad, such as Analyst (for consulting or investment banking).

Now think about your own career. Please tell us where you think you are on the ladder at the moment, given your current job.

Using the ladder, please answer...

What is the title of your current position?

What is the highest position that you would want to reach in your career, but not go beyond? In other words, what is your ideal position?

What is the title of your ideal position?
Using the ladder, please answer...

What do you feel is the highest position that is realistically attainable for you (regardless of what your ideal position is)?

What is the title of the highest position that you feel you could realistically attain?

_____________________________________

[Next Screen]

Please remember that all information you provide in this survey is 100% confidential.

We'll now ask you a few questions about yourself.

What industry are you in?

- Investment Banking
- Consulting
- Tech
- Other (Please specify below)

________________________

How old are you? __________

What is your gender?

- Male
- Female
Which of the below most accurately describes your racial or ethnic identity?

- Asian
- White
- Black
- Latino/Latina
- Other (Please specify.)

What country do you live in?

- United States
- Other (please specify below)

Appendix A13. Study Materials for Study 5

[Attention check #1]

Recent research on decision making shows that choices are affected by context. Differences in how people feel, their previous knowledge and experience, and their environment can affect choices. To help us understand how people make decisions, we are interested in information about you. Specifically, we are interested in whether you actually take the time to read the directions; if not, some results may not tell us very much about decision making in the real world. To show that you have read the instructions, please ignore the question below about how you are feeling and instead check only the "none of the above" option as your answer. Thank you very much.

[Attention check #2]

The picture below represents…
• a house
• a glass
• a forest
• a notebook
• toys (stuffed animals)
• a pen

[NEXT SCREEN]

PLEASE IMAGINE THE FOLLOWING SCENARIO.

You are satisfied with your current job, but there is the possibility for you to be promoted to a higher-level position in the organization where you work. As a result of this promotion, your level of power over others would increase substantially.

Please indicate how much you think you would experience each of the outcomes below if you in fact received this promotion.
How desirable would you find such a promotion to be?
1 = Not at all
2
3
4
5
6
7 = Very much

If the chance to get such type of promotion was available to you right now, but required effort on your part, would you go after the promotion?
1 = Definitely not
2
Appendix A14. Study Materials for Study 6

PLEASE IMAGINE THE FOLLOWING SCENARIO.

You are satisfied with your current job, but there is the possibility for you to be promoted to a higher-level position in the organization where you work. As a result of this promotion, your level of power over others would increase substantially.

Please indicate how much you think you would experience each of the outcomes below if you in fact received this promotion by circling the appropriate response.

<table>
<thead>
<tr>
<th>Outcome</th>
<th>1 = not at all</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10 = a lot</th>
</tr>
</thead>
</table>

[Next Screen]
How desirable would you find such a promotion to be?

1 2 3 4 5 6 7
= Not at all
= Very much

If the chance to get such type of promotion was available to you right now, but required effort on your part, would you go after the promotion?

1 2 3 4 5 6 7
= Definitely not
= Definitely yes
Now please answer a few questions about yourself.

How old are you? __________

What is your gender?
- Male
- Female

Appendix A15. Study Materials for Study 7

[Attention check]

Research on careers has often evaluated people’s passion for the work they do by investigating whether they would still do it if they did not have to. However, we are using this question to check the degree of attention with which you read instructions. Please ignore the following question and simply write “yes” in the box marked “other, please specify.”

- If I won the lottery, I would do the same work I do now.
- If I won the lottery, I would do a different work.
- If I won the lottery, I would not work anymore.
- Other (please specify).... __________

[NEXT SCREEN]

In this survey, you will be asked to imagine a certain scenario and then answer a few questions about it.

Please read the scenario carefully and try your best to imagine it.

[NEXT SCREEN]

Imagine the following scenario:

Soon after graduation, you have the opportunity to take a position in an organization that will give you a lot of power over other people and resources. In thinking about this position, what are the primary outcomes or feelings you associate with it (e.g., opportunity, difficult trade-offs)?

In the text boxes below, please:

a) state the high-power job that you are imagining, and
b) list the main things that come to mind when you imagine what it would be like to be in this position.
What kind of power job are you imagining?
_____________________

1) ______________________________
2) ______________________________
3) ______________________________
4) ______________________________
5) ______________________________
6) ______________________________
7) ______________________________
8) ______________________________
9) ______________________________
10) ______________________________
11) ______________________________
12) ______________________________
13) ______________________________
14) ______________________________
15) ______________________________

How desirable would you find such a job to be?
1 = Not at all
2
3
4
5
6
Securing a job after graduation typically requires a decent amount of time and effort. If a job like the one you were asked to imagine was available to you post-graduation, but required extra effort on your part to achieve (that is, effort above and beyond that required for other jobs), would you pursue the job?

1 = Definitely not
2
3
4
5
6
7 = Definitely yes

If a job like this was available to you post-graduation, but required no extra effort on your part, would you pursue the job?

1 = Definitely not
2
3
4
5
6
7 = Definitely yes

Now, please look back to the reactions you listed to the high-power job you were asked to imagine. We would like you to indicate the nature of your reactions, using the categories provided below (i.e., positive, negative, or neutral).

<table>
<thead>
<tr>
<th>Reaction</th>
<th>POSITIVE</th>
<th>NEUTRAL</th>
<th>NEGATIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Finally, please answer the following questions about yourself.
How old are you (in years)? __________

What is your gender? (Note: If you are transgender, please select the gender that you most identify with.)

- Male
- Female

What is your country of residence?

- United States
- Other (please specify below) ______________

What's your school year?

____________

Appendix A16. Study Materials for Study 8

[Attention check #1]

Recent research on decision making shows that choices are affected by context. Differences in how people feel, their previous knowledge and experience, and their environment can affect choices. To help us understand how people make decisions, we are interested in information about you. Specifically, we are interested in whether you actually take the time to read the directions; if not, some results may not tell us very much about decision making in the real world. To show that you have read the instructions, please ignore the question below about how you are feeling and instead check only the "none of the above" option as your answer. Thank you very much.

[Attention check #2]
The picture below represents…

- a house
- a glass
- a forest
- a notebook
- toys (stuffed animals)
- a pen

As a reminder: This study will take about 5 minutes to complete. Your participation is completely voluntary and none of your answers will ever be able to be traced to you.

PLEASE IMAGINE THE FOLLOWING SCENARIO.

[Condition: Promotion with Power]

You are satisfied with your current job, but there is the possibility for you to be promoted to a higher-level position in the organization where you work. As a result of this promotion, your level of power would increase substantially.

[Condition: Promotion with Power Defined]

You are satisfied with your current job, but there is the possibility for you to be promoted to a higher-level position in the organization where you work. As a result of this promotion, your level of power would increase substantially. By power, we mean your relative ability to control other people's outcomes, experiences or behaviors.
Please imagine you in fact received this promotion.

To what extent do you think such a promotion would create conflicts with other life goals you have?  
(1=Not at all, 7=Very much)

To what extent do you think such a promotion would require you to make trade-offs and sacrifice given the other life goals you have?  
(1=Not at all, 7=Very much)

How desirable would you find such a promotion to be?  
(1=Not at all, 7=Very much)

Now please think about having power in a job more generally. Which words do you associate with such a concept? (Please list 2 or 3 words below).

How do you view having power in a job?

- A goal that I am not that interested in pursuing,
- A goal I definitely want to pursue.

Now please answer a few questions about yourself.

How old are you? ________

What gender do you most identify with?  
- Male  
- Female

Do you have any children?  
- Yes  
- No

Are you currently employed?  
- Yes  
- No

Which country do you live in?
Appendix A17. Study Materials for Study 9

[Condition: Basic Promotion]
Please imagine the following scenario. There is a possibility for you to be promoted to the position just above your current job in the organization where you work.

[Condition: Promotion with Power]
Please imagine the following scenario. There is a possibility for you to be promoted to the position just above your current job in the organization where you work. As a result of this promotion, your level of power would increase substantially.

[Condition: Promotion with Power – Defined]
Please imagine the following scenario. There is a possibility for you to be promoted to the position just above your current job in the organization where you work. As a result of this promotion, your level of power would increase substantially. By power, we mean your relative ability to control other people’s outcomes, experiences or behaviors.

[ALL Conditions]
How much do you think you would experience each of the outcomes below if you received this promotion?

<table>
<thead>
<tr>
<th>Outcome</th>
<th>1 = not at all</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7 = a lot</th>
</tr>
</thead>
<tbody>
<tr>
<td>Status or influence</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>Stress or anxiety</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>Time constraints</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>Burden of responsibility</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>Satisfaction or happiness</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>10</td>
</tr>
</tbody>
</table>
Money

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Difficult trade-offs or sacrifice</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>Opportunity</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>Conflict with other life goals</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>10</td>
</tr>
</tbody>
</table>

How desirable would you find a promotion at your current job to be?

1 2 3 4 5 6 7
= Not at all
= Very much

If the chance to get a promotion was available to you right now, but required a lot of effort on your part, would you go after the promotion?

1 2 3 4 5 6 7
= Definitely not
= Definitely yes

Now please answer a few questions about yourself.

How old are you? _________

What is your gender?
• Male
• Female

Appendix A18. Study Materials for Study 10

Imagine that the ladder below reflects the hierarchy of professional advancement in the industry in which you currently work. At the top of the ladder are positions like CEO and CFO or Members of the Board (if applicable). At the bottom of the ladder are jobs that are usually acquired immediately after college, such as Analyst (for consulting or investment banking).
Now think about your own career. Please tell us where you think you are on the ladder at the moment, given your current job.

**Students:** If you are currently a full-time student (undergrad or graduate school), please select the number that represents the job you are likely to get upon graduation.

[IMAGE OF LADDER WITH RUNGS]

[NEXT SCREEN]

Please answer the following questions with the specified rung in mind.

For **RUNG 3:**

How **desirable** is a job at this position to you?

1 = Not at all desirable
2
3
4
5
6
7
For **RUNG 6:**

How **desirable** is a job at this position to you?
1 = Not at all desirable
2
3
4
5
6
7
8
9
10 = Very desirable

For **RUNG 9:**

How **desirable** is a job at this position to you?
1 = Not at all desirable
2
3
4
5
6
7
8
9
10 = Very desirable

[NEXT SCREEN]

**Please answer the following questions with the specified rung in mind.**
For **RUNG 3**:  

Realistically, how **attainable** do you think a job at this position is to you?  
1 = Not at all attainable  
2  
3  
4  
5  
6  
7  
8  
9  
10 = Very attainable  

For **RUNG 6**:  

Realistically, how **attainable** do you think a job at this position is to you?  
1 = Not at all attainable  
2  
3  
4  
5  
6  
7  
8  
9  
10 = Very attainable  

For **RUNG 9**:  

Realistically, how **attainable** do you think a job at this position is to you?  
1 = Not at all attainable  
2  
3
10 = Very attainable

[NEXT SCREEN]

Please answer the following questions with the specified rung in mind.

For **RUNG 3:**

If the chance to get a job at this position was available to you right now, but required effort on your part to get it, would you go after the job?

1 = Definitely Not
2
3
4
5
6
7 = Definitely Yes

For **RUNG 6:**

If the chance to get a job at this position was available to you right now, but required effort on your part to get it, would you go after the job?

1 = Definitely Not
2
3
4
5
For **RUNG 9:**

If the chance to get a job at this position was available to you right now, but required effort on your part to get it, would you go after the job?

1 = Definitely Not
2
3
4
5
6
7 = Definitely Yes

[NEXT SCREEN]

**Now please answer a few questions about yourself.**

**What is your highest level of education?**
- Some high school
- Graduated high school
- Some college
- Graduated college
- Some graduate school
- Master’s degree
- Doctoral degree (PhD, MD, JD, etc.)

**What is your gender?**
(If transgender, please select the gender with which you most strongly identify.)
- Male
- Female

**What is your age?  __________**

**Are you currently a FULL-TIME student?**
- Yes
- No

**Do you currently have a job that you are paid for?**
- Yes, FULL-TIME
- Yes, PART-TIME
- No
How many children do you have?
• 0
• 1
• 2
• 3
• 4
• 5
• 6
• 7

What country do you live in?
• United States
• Other (please specify below)
________________________

What race of ethnicity do you most identify as?
• Asian
• Black
• White
• Latino/Latina
• Other
________________________

[NEXT SCREEN]

[Attention check]

Recent research has shown that choices are affected by context. Differences in how people feel, their previous knowledge and experience, and their environment can affect choices. To help us understand these topics more, we are interested in information about you. Specifically, we are interested in whether you actually take the time to read the directions; if not, some results may not tell us very much about decision making in the real world. To show that you have read the instructions, please ignore the question below about how you are feeling and instead check only the "none of the above" option as your answer. Thank you very much.

Please check all words that describe how you are currently feeling.
Appendix A19. Study Materials for Study 11

Imagine that the ladder below reflects the hierarchy of professional advancement in the industry in which you currently work. At the top of the ladder are positions like CEO and CFO or Members of the Board (if applicable). At the bottom of the ladder are jobs that are usually acquired immediately after college, such as Analyst (for consulting or investment banking).

Now think about your own career. Please tell us where you think you are on the ladder at the moment, given your current job.

Students: If you are currently a full-time student (undergrad or graduate school), please select the number that represents the job you are likely to get upon graduation.

[NEXT SCREEN]

Please answer the following questions with the specified rung in mind.
For **RUNG 3:**

How **desirable** is a job at this position to you?
1 = Not at all desirable
2
3
4
5
6
7
8
9
10 = Very desirable

For **RUNG 6:**

How **desirable** is a job at this position to you?
1 = Not at all desirable
2
3
4
5
6
7
8
9
10 = Very desirable

For **RUNG 9:**

How **desirable** is a job at this position to you?
1 = Not at all desirable
2
3
For **RUNG 3:**

How much do you think having a job at this position would result in you experiencing **resistance, skepticism, and/or backlash** in response to your ideas, abilities, and efforts?

1 = Not at all

2

3

4

5

6

7

8

9

10 = Very much

For **RUNG 6:**

How much do you think having a job at this position would result in you experiencing **resistance, skepticism, and/or backlash** in response to your ideas, abilities, and efforts?
For **RUNG 9:**

How much do you think having a job at this position would result in you experiencing **resistance, skepticism, and/or backlash** in response to your ideas, abilities, and efforts?

1 = Not at all
2
3
4
5
6
7
8
9
10 = Very much

[NEXT SCREEN]

Please answer the following questions with the specified rung in mind.

For **RUNG 3:**
If the chance to get a job at this position was available to you right now, but required effort on your part to get it, would you go after the job?
1 = Definitely Not
2
3
4
5
6
7 = Definitely Yes

For RUNG 6:

If the chance to get a job at this position was available to you right now, but required effort on your part to get it, would you go after the job?
1 = Definitely Not
2
3
4
5
6
7 = Definitely Yes

For RUNG 9:

If the chance to get a job at this position was available to you right now, but required effort on your part to get it, would you go after the job?
1 = Definitely Not
2
3
4
5
6
7 = Definitely Yes

[NEXT SCREEN]

Now please answer a few questions about yourself.

What is your highest level of education?
• Some high school
• Graduated high school
• Some college
• Graduated college
• Some graduate school
• Master's degree
• Doctoral degree (PhD, MD, JD, etc.)

What is your gender?
(If transgender, please select the gender with which you most strongly identify.)
• Male
• Female

What is your age? __________

Are you currently a FULL-TIME student?
• Yes
• No

Do you currently have a job that you are paid for?
• Yes, FULL-TIME
• Yes, PART-TIME
• No

How many children do you have?
• 0
• 1
• 2
• 3
• 4
• 5
• 6
• 7

What country do you live in?
• United States
• Other (please specify below)

What race of ethnicity do you most identify as?
• Asian
• Black
• White
• Latino/Latina
• Other

[NEXT SCREEN]
Recent research has shown that choices are affected by context. Differences in how people feel, their previous knowledge and experience, and their environment can affect choices. To help us understand these topics more, we are interested in information about you. Specifically, we are interested in whether you actually take the time to read the directions; if not, some results may not tell us very much about decision making in the real world. To show that you have read the instructions, please ignore the question below about how you are feeling and instead check only the "none of the above" option as your answer. Thank you very much.

Please check all words that describe how you are currently feeling.

- Interested
- Distressed
- Excited
- Uppset
- Strong
- Guilty
- Enthusiastic
- Hostile
- Enthusiastic
- Proud
- Irritated
- Alert
- Ashamed
- Inspired
- Nervous
- Determined
- Attentiv
- Irritated
- Active
- Afraid
- None of the above

Appendix A20. Study Materials for Study 12

Imagine that the ladder below reflects the hierarchy of professional advancement in the industry in which you currently work. At the top of the ladder are positions like CEO and CFO or Members of the Board (if applicable). At the bottom of the ladder are jobs that are usually acquired immediately after college, such as Analyst (for consulting or investment banking).

Now think about your own career. Please tell us where you think you are on the ladder at the moment, given your current job.

**Students:** If you are currently a full-time student (undergrad or graduate school), please select the number that represents the job you are likely to get upon graduation.
Please answer the following questions with the specified rung in mind.

For **RUNG 3**:

How **desirable** is a job at this position to you?
1 = Not at all desirable
2
3
4
5
6
7
8
9
10 = Very desirable

For **RUNG 6**:

How **desirable** is a job at this position to you?
1 = Not at all desirable
2
3
4
5
6
7
8
For **RUNG 9:**

How *desirable* is a job at this position to you?
1 = Not at all desirable
2
3
4
5
6
7
8
9
10 = Very desirable

[Next Screen]

Please answer the following questions with the specified rung in mind.

For **RUNG 3:**

If you occupied a job at this position, how much do you feel like you would be *accepted and liked* by your co-workers?
1 = Not at all
2
3
4
5
6
7
8
9
10 = Very much

For **RUNG 6:**

If you occupied a job at this position, how much do you feel like you would be **accepted and liked** by your co-workers?
1 = Not at all
2
3
4
5
6
7
8
9
10 = Very much

For **RUNG 9:**

If you occupied a job at this position, how much do you feel like you would be **accepted and liked** by your co-workers?
1 = Not at all
2
3
4
5
6
7
8
9
10 = Very much

[NEXT SCREEN]

**Please answer the following questions with the specified rung in mind.**
For RUNG 3:

If the chance to get a job at this position was available to you right now, but required effort on your part to get it, would you go after the job?
1 = Definitely Not
2
3
4
5
6
7 = Definitely Yes

For RUNG 6:

If the chance to get a job at this position was available to you right now, but required effort on your part to get it, would you go after the job?
1 = Definitely Not
2
3
4
5
6
7 = Definitely Yes

For RUNG 9:

If the chance to get a job at this position was available to you right now, but required effort on your part to get it, would you go after the job?
1 = Definitely Not
2
3
4
5
6
Now please answer a few questions about yourself.

What is your highest level of education?
• Some high school
• Graduated high school
• Some college
• Graduated college
• Some graduate school
• Master’s degree
• Doctoral degree (PhD, MD, JD, etc.)

What is your gender?
(If transgender, please select the gender with which you most strongly identify.)
• Male
• Female

What is your age? __________

Are you currently a FULL-TIME student?
• Yes
• No

Do you currently have a job that you are paid for?
• Yes, FULL-TIME
• Yes, PART-TIME
• No

How many children do you have?
• 0
• 1
• 2
• 3
• 4
• 5
• 6
• 7

What country do you live in?
• United States
• Other (please specify below)

________________________

What race of ethnicity do you most identify as?
• Asian
• Black
• White
• Latino/Latina
• Other

________________________

[NEXT SCREEN]

[Attention check]

Recent research has shown that choices are affected by context. Differences in how people feel, their previous knowledge and experience, and their environment can affect choices. To help us understand these topics more, we are interested in information about you. Specifically, we are interested in whether you actually take the time to read the directions; if not, some results may not tell us very much about decision making in the real world. To show that you have read the instructions, please ignore the question below about how you are feeling and instead check only the "none of the above" option as your answer. Thank you very much.

Please check all words that describe how you are currently feeling.

☐ Interested ☐ Hostile ☐ Nervous
☐ Distressed ☐ Enthusiastic ☐ Determined
☐ Excited ☐ Proud ☐ Attentive
☐ Upset ☐ Irritated ☐ Jittery
☐ Strong ☐ Alert ☐ Active
☐ Guilty ☐ Ashamed ☐ Afraid
☐ Enthusiastic ☐ Inspired ☐ None of the above
References


Bertrand, M., Kamenica, E., & Pan, J. (2015). Gender identity and relative income within


Prentice, D. A., & Carranza, E. (2003). What women and men should be, shouldn’t be, are allowed to be, and don’t have to be: The contents of prescriptive gender stereotypes. *Psychology of Women Quarterly, 26*(4), 269-281.


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