

DISSERTATION

GLASS KICKERS: TRAINING MEN AS ALLIES  
TO PROMOTE WOMEN IN LEADERSHIP

Submitted by

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## ABSTRACT

### GLASS KICKERS: TRAINING MEN AS ALLIES TO PROMOTE WOMEN IN LEADERSHIP

Despite making up nearly half of today's workforce, women are disproportionately unrepresented in leadership roles—a phenomenon referred to as the glass ceiling. In an attempt to achieve workplace gender parity, organizations invest considerable resources in diversity and inclusion training programs. Such programs often fail to achieve intended outcomes, however, commonly placing the onus of responsibility on women themselves and neglecting to address the systemic cultural biases that perpetuate gender discrimination. With men holding the vast majority of leadership positions, they are in a position to use their power to advance women in leadership initiatives by actively supporting aspiring female leaders and serving as change agents to eradicate culturally embedded gender biases. The purpose of this research was to build and evaluate a training program that equips men to effectively serve as allies to women in the workplace. This randomly-assigned, treatment-control evaluation design used self- and other-report data to assess training effectiveness on skill-based, cognitive, and attitudinal outcomes. Data was collected from a sample of senior male leaders ( $n = 37$ ) from a global manufacturing company. The results provided mixed support for increased frequency of trained ally behaviors, enhanced knowledge about workplace gender equality, and more favorable attitudes about the participants' role as allies to women in the workplace. This study provides a promising first step toward effectively inviting men into workplace gender equality initiatives, empowering them to break the glass ceiling from their position above in partnership with women trying to break it from below.

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would have never accomplished my dreams. And now it's time for me to help you accomplish the wildest of yours.

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## INTRODUCTION

*Fellow males, get onboard. The closer that America comes to fully employing the talents of all its citizens, the greater its output of goods and services will be. We've seen what can be accomplished when we use 50% of our human capacity. If you visualize what 100% can do, you'll join me as an unbridled optimist about America's future (Buffett, 2015).*

What is more persuasive about the above quote by Warren Buffett: that this bold claim advocating for gender equality was espoused by a billionaire, or that this call for the advancement of *women* came from the mouth of a *man*? As Buffett (2015) attested, there is a strong business case for organizations to hire and retain more women in leadership positions (Herring, 2009; Hunt, Prince, Dixon-Fyle, & Yee, 2018). Linking gender diversity to bottom line outcomes, however, often falls short of actually mobilizing diversity and inclusion initiatives beyond mere compliance and lip service (Benschop & Verloo, 2006). “Diversity and inclusion” is defined as members from different identity groups fully and effectively contributing their varied perspectives and approaches to the workplace (Roberson, 2006). Despite devoting considerable resources in diversity and inclusion (D&I) initiatives, organizations continue to struggle to move closer to a more gender-balanced workforce (Leslie, Mayer, & Kravitz, 2014). Even worse, women and minorities themselves are often penalized for trying to advance workplace diversity (Hekman, Johnson, Foo, & Yang, 2017). The potential organizational benefits of diversity and inclusion can become overshadowed by perceptions that people advocating for the group to which they belong are motivated by self-interest (Chattopadhyay, Tluchowska, & George, 2004; Czopp, Monteith, & Mark, 2005). Thus, D&I initiatives are limited in part because they are often led by those who most stand to benefit. In other words,

Buffett's advocacy for gender equality may be more compelling not because of his credibility as a successful billionaire, but because he is a man. This study explores the potential impact men could have on accelerating workplace gender equality by advocating for more women in leadership positions.

By leveraging their status and power, men can play an important role in advancing women in leadership (Meyerson & Kolb, 2000; Ridgeway & Bourg, 2004). Enlisting dominant groups to advocate on behalf of disadvantaged others is nothing new, as members of majority groups have played a crucial role in advancing social justice movements throughout U.S. history (Washington & Evans, 1991). Consider the Whites who fought alongside African Americans throughout the Civil Rights Movement, or the heterosexuals who campaigned for the eventual legalization of same-sex marriage. In both cases, majority group members could have done nothing and continued to enjoy the benefits of their privileged status, yet they nonetheless chose to help disadvantaged others by serving as their allies. These examples highlight the power of allies, or “dominant group members who work to end prejudice in their personal and professional lives, and relinquish social privileges conferred by their group status through their support of nondominant groups” (Brown, 2015, p. 714). Sabat, Martinez, and Wessel (2013) argue that enlisting men as allies to advance gender equality is not only a viable strategy for promoting social justice, but could catalyze slowly progressing organizational initiatives to advance women in leadership by actively engaging men as a powerful—yet historically underutilized—resource.

Organizations can implement workplace training programs to teach men how to be effective allies to women in the workplace, thus equipping men with the competencies needed to become active gender diversity advocates (Joshi, Neely, Emrich, Griffiths, & George, 2015). Such training can also provide men with direction and clarity about how to best interact with

women in the workplace. In the aftermath of #MeToo and post-Harvey Weinstein revelations that have exposed workplace sexism and toxic company cultures, some men are feeling so unsettled and confused about what is acceptable cross-gender communication that they are avoiding female colleagues altogether in fear that their behaviors may lead to unintended negative consequences (Miller, 2017a). One might wonder whether training already exists to protect and promote women in the workplace. Unfortunately, most organizations implement gender diversity and sexual harassment trainings as preventative measure to mitigate discriminatory behaviors, and as such, focus on what *not* to do (Bisom-Rapp, 2001). Thus, I propose building a training that focuses on what men *can* do to help women in the workplace. Such a training would reframe men as an important part of the solution, launching them into action to help eradicate toxic workplace cultures and work effectively alongside women so that everyone can thrive regardless of their gender.

The purpose of my study is to design and evaluate a training program with the purpose of creating more male allies to accelerate women's advancement in leadership. There are two primary contributions of this effort. First, I will create a practical, foundational workplace training program meeting the timely and important need for creating more male allies to advance gender diversity throughout the leadership pipeline. Second, this study will test the efficacy of my training program using summative evaluation methods, and thus, begin to validate its further use for organizational applications. I begin by summarizing research that builds the business case for increasing the number of women in leadership positions.

### **Why Organizations Need More Women Leaders**

There are clear advantages for organizations to increase the number of women in leadership roles. Greater gender diversity is positively correlated with increased sales revenue, a

broader customer base, and more relative profits (Herring, 2009). Research has found that corporate boards with more women financially outperform less gender-diverse boards (Curtis, Schmid & Struber, 2012; Sinar, Wellins, Ray, Abel, & Neal, 2015). Women earn 57% of all college degrees in the U.S., making them a rich source of talent, especially amid today's knowledge economy in which well-educated and skilled workers are the leading commodity for a company's success (Altbach, 2002; U.S. Department of Education, 2014). Specific to succession planning, research shows that companies with gender-diverse leadership pipelines have a stronger overall leadership bench, resulting in higher-quality senior leadership in general (Sinar et al., 2018). Moreover, women make the majority of purchasing decisions and are projected to control 75% of worldwide discretionary spending by the year 2028 (Silverstein, Fitzgerald, & Sayre, 2009). Having a leadership team that better represents consumer demographics is good for business, not to mention that 77% of women prefer investing in companies with gender-diverse leadership teams (Hewlett, Moffitt, & Marshall, 2014). Gender-diverse organizations are more profitable and tend to outperform companies with a more male-dominated workforce (Badal, 2014).

Gerzema and D'Antonio (2013) argued that the 21<sup>st</sup> century workplace needs more women leaders altogether insofar as feminine leadership characteristics are vital to achieve success in today's society compared to more traditional masculine leadership styles. While I do not agree with the authors that leader traits can be (or should be) classified as "masculine" or "feminine," the point is that the discussion of how to engage more women in leadership roles can broaden our understanding of what effective leadership looks like. Gender scholars categorize feminine leadership as compassionate, sympathetic, and warm—attributes more commonly associated with stereotypical female rather than male behavior (Bem, 1974; Kolb, 1999). A

global sample of over 64,000 people across 13 countries found that the majority of respondents were dissatisfied with the conduct of men in their country and two-thirds of believed they would be a better place if men thought more like women (Gerzema & D’Antonio, 2013). These beliefs are not unfounded, as research shows that teams benefit from female leadership as evidenced by more cohesion, cooperative learning, and participative communication compared to teams led by men (Post, 2015). Eagly and Johnson (1990) found that women tend to be more democratic and participative in their leadership styles compared to men. Research has also found that women leaders tend to be better than men at building supportive relationships with followers (Eagly, Johannesen-Schmidt, & van Engen, 2003), which is especially important as the 21<sup>st</sup> century workplace continues to place more value on interpersonal skills over technical skills the further a leader progresses through organizational ranks (Rosette & Tost, 2010).

I do not believe that stereotypically feminine leadership styles are superior to masculine, or vice versa. Rather, I prefer to take a more egalitarian approach to promoting workplace gender equality insofar as I believe that the purpose of increasing the number of women in leadership positions should not be to tip the scale so that there are *more* women leaders than men. Rather, the end goal of women in leadership initiatives should be to achieve a healthy balance of men and women leaders across all organizational levels. I am not alone in promoting the narrative that everyone—women *and* men—benefit from a more gender diverse workforce. For example, Alder (1997) acknowledged that the best leaders are not confined to the boundaries of their identified gender, but rather, “The interplay of women’s and men’s styles of leadership will define the contours of potential success of twenty-first century society” (pg. 192). Additionally, acclaimed Wharton Business School professor Adam Grant and Sheryl Sandberg, Facebook’s COO and one of the most vocal advocates for workplace gender equality, wrote a series of New

York Times articles that made the business case for advancing women in leadership. Citing evidence-based research, they argued that, “Equality is not a zero-sum game. More profits mean more rewards and promotions to go around. The risk is in not including women. Teams that fail to leverage the skills of a diverse work force fall behind. [Companies] can’t be competitive in the global economy without increasing their percentage of female executives (Grant & Sandberg, 2015).”

Unfortunately, the percentage of women in leadership positions is not representative of the global population. Worldwide, women only hold 24% of all senior leadership positions, even though they comprise 47% of the global workforce (Pew Research Center, 2017). With only 6.4% of women holding the Chief Executive title at Fortune 500 companies, there are more CEOs named John than there are women (Miller, Quealy, & Sanger-Katz, 2018). And the few women who do succeed in attaining leadership roles do not enjoy as much personal success as their male counterparts, whether because they earn about 20% less pay on average (Bureau of Labor Statistics, 2017), or because they have to endure ongoing sexism as a woman of power in a world that continues to equate leadership with masculinity (e.g., Ely & Rhode, 2010). To better understand how to accelerate the advancement of women in leadership, I now identify common barriers that women face when attempting to climb the leadership ranks within a gender-biased organizational context.

### **What is Stalling Women in Leadership**

The barriers women face in advancing their careers largely fall into two categories. First, compared to men, women do not have as much access to developmental opportunities and resources crucial to growing one’s career. Second, many organizations suffer from non-inclusive cultures that systematically disadvantage women from being able to thrive as leaders.

**Lack of developmental opportunities and resources.** Access to leadership development, whether it is formal training or individualized coaching from a mentor or supervisor, is a strong predictor of career success (Collins & Holton, 2004; Eby, Allen, Evans, Ng, & DuBois, 2008). Unfortunately, women are often not afforded the same developmental opportunities compared to men (Ely & Rhode, 2010). For example, women tend to comprise a mere fourth of the high potential pools companies use to identify and grow future leaders (Sinar et al., 2018). In addition to the issues they face in securing developmental opportunities, women are also less likely to obtain crucial career-building resources. For example, women have less access to professional networks and the benefits they provide (Michailidis, Morphitou, & Theophylatou, 2012). And even when women get access to such networks, they tend to receive fewer rewards of membership compared to their male counterparts (Brands & Kilduff, 2014). For example, Eagly (2009) reported that it is more socially acceptable for men to leverage workplace friendships to get ahead in their careers, whereas women are reluctant to and even penalized for leveraging their professional networks for personal gain. Additionally, men tend to be awarded more up-front resources when they take a leadership position – including greater funding and larger team size – compared to newly promoted women leaders (Silva, Carter, & Beninger, 2012). These resources can contribute to initial success as a leader, which, in turn, may lead to more promotional opportunities.

Research has also found that companies are more likely to appoint women to their boards following an extended period of poor performance and stock market decline (Ryan & Haslam, 2005). In other words, women are more likely to be awarded top leadership positions when the likelihood of failure is greatest. For example, Mary Barra became the first woman to lead General Motors, but only after it emerged from bankruptcy. As another example, Yahoo



appointed Melissa Meyer as their CEO amid volatile conditions including falling profits and stock prices and a quickly draining talent pool due to years of poor board and senior level leadership (Miller, 2012). When Meyers resigned from Yahoo, the media emphasized her role as a *woman* CEO, insinuating that her gender was to blame for her perceived leadership failings, a practice common to journalists when writing about highly-visible leading businesswomen (Lee & James, 2007). Woman leaders are more often than not judged in the context of their gender, regardless of how exceptionally they lead (Ibarra & Hansen, 2009). For example, a meta-analysis investigating gender differences in performance evaluations found that even when women outperform men on job performance measures, supervisors continue to evaluate women as less promotable than men (Roth, Purvis, & Bobko, 2012).

Heilman (2012) argued that a woman who has made it to the highest ranks of leadership most likely did so with limited resources, during tumultuous times, all while being scrutinized – and even penalized– because of her gender. In addition to having to overcome the aforementioned challenges related to access to resources, aspiring women leaders typically have to navigate workplace cultures that systematically disadvantage them, further lessening their likelihood of achieving career success (Wittenberg-Cox, 2015).

**Non-inclusive workplace cultures.** Although explicit sexism has declined over time, women continue to encounter gender discrimination as members of today’s workforce (Fitzgerald, 2017; Ilies, Hauserman, Schwochau, & Stibal, 2003; Hennekam & Bennett, 2017). In the modern workplace, gender discrimination can take many forms. For example, *Time Magazine’s* 2017 “Person of the Year” was awarded to the many women “silent breakers” who courageously disclosed that workplace sexual harassment is alive and well. Even with the widespread adoption of workplace anti-discrimination policies and mandates, the modern-day

organization is still ridden with the more subtle and difficult to identify acts of “second-generation sexism” (Kolb & Blake-Beard, 2009). For example, consider the commonly held misconception that women willingly leave their organizations because they choose caretaking over advancing their career (Thomas, Yee, Cooper, Krivkovich, Konar, et al., 2017). Research shows, however, that the primary reason employees quit is the same regardless of gender (i.e., choosing to take a position at another company), and only 1% and 2% of men and women choose to leave the workforce to focus on family, respectively (Thomas et al., 2017). Non-inclusive organizational cultures reinforce socially-ingrained implicit biases in which women’s “underrepresentation in leader positions validates entrenched systems and beliefs that prompt and support men’s bids for leadership, which in turn, maintains the status quo” (Ely, Ibarra, & Kolb, 2011, pg. 475). It can be argued that society places undue fault and responsibility on women themselves for their inability to effectively ascend into leadership roles. Nevertheless, the majority of aspiring women leaders who continue to persist at achieving success within male-dominated organizational cultures fail to attain their career goals (Eagly & Karau, 2002).

Lee and James (2007) argue that a woman in power is likely to be perceived as a less effective leader before she even has the opportunity to demonstrate her leadership ability, simply because she is not a man. Many organizations still operate in an antiquated “think manager, think male” paradigm (Schein, 1973, 1975) resulting in stereotypical views that the prototypical leader is male (Koenig, Eagly, Mitchell, & Ristikari, 2011). According to social role theory, people are penalized when violating their ascribed roles according to group status (Eagly & Steffen, 1984). Because the prototypical leader is male, those who hold stereotypical views may feel surprised and even unnerved when a woman is assigned to a high-profile leadership role. For example, the most frequent question posed to Margaret Thatcher during her time holding the most

distinguished political role in Great Britain was, “What is it like being a *woman* prime minister?” (Thatcher, 1995). Cunningly, Thatcher refused to answer, as she would have had no way to know the alternative.

Like many other women in power, Thatcher was a victim of the “double bind,” or the phenomenon in which women leaders face the near impossible task of simultaneously playing two roles – woman and leader – that are often perceived as mutually exclusive identities (Eagly & Carli, 2007). Women in power must strike the difficult balance between being perceived as a competent leader – often characterized by stereotypically “masculine” leadership qualities such as decisiveness, assertiveness and independence – while not violating the feminine gender norms expected of her as a woman (Ely & Rhode, 2010). A woman’s career accomplishments can even be held against her due to misaligned gender expectations that she should be an inferior leader compared to men. For example, Inesi and Cable (2015) found that evaluators tend to penalize accomplished women on performance appraisals as a result of feeling threatened by their competence as leaders, having nothing to do with her actual performance.

Even when successful women leaders are viewed as competent, however, they tend to be perceived as less likeable compared to their male counterparts (Eagly, 2013). For example, Heilman (2012) found that women leaders are more likely to be denied rightful credit for their success and face more instances of personal derogation and social disapproval compared to men. Rudman and Glick (1999) found that women in power who take a more feminine approach to their leadership style may be more likeable, but risk being perceived as less competent because their feminine qualities do not align with prototypically masculine leadership characteristics. The double bind puts women in power in a “damned if you do, damned if you don’t” predicament

imposed on them by socialized biases about the relationship between gender and leadership (Allen, French, & Poteet, 2016).

I believe that women in leadership will not reach a place of true gender parity until the societal and organizational norms that systematically discriminate against them are eradicated. For example, consider Sheryl Sandberg who is credited as a major catalyst in launching the present-day women in leadership movement with her 2013 book, *Lean In*. Sandberg (2013) emphasized the individual responsibility one has in career success, arguing that if women were more confident and assertive that they could effectively obtain leadership roles. By chalking up the success of female leaders—herself included—to sheer perseverance and tenacity, Sandberg was criticized for being tone deaf about the role organizational culture plays in shaping the success of aspiring female leaders (Dowd, 2013; White, Rumsey, & Amidon, 2016). As stated by Dr. Frene Ginwala, the former Speaker of the South African National Assembly, “[T]he institutions that discriminate are man-shaped and must be made people-shaped. Only then will women be able to function as equals within those institutions” (Iqtidar & Webster 1996, p. 10). In other words, it is arguably more important for those in power to *lean out* and make room for aspiring women leaders who are leaning in (White, Rumsey, & Amidon, 2016). As opposed to forcing women to adapt who they are to fit into a system originally built for a male-dominated workforce, research supports that institutional-level factors such as the overall health and culture of an organization are more predictive of a woman’s success as a leader (Cook & Glass, 2014; Haslam et al., 2000). Indeed, critics of D&I interventions that target behavior change of women and other minorities often attribute their ineffectiveness to the fact that they try to fix “other” employees rather than fix the system itself (Benschop, Holgersson, Van den Brink, & Wahl, 2016).

Instead of placing the burden of workplace gender inequality on women as their personal problem to solve, women in leadership researchers and advocates emphasize the importance of breaking the glass ceiling, or the systemic barrier women encounter when trying to advance into executive ranks of organizations (Kanter, 1977). The glass ceiling symbolizes the fact that women can clearly see the path to executive success yet remain stuck at lower levels (Bass & Avolio, 1994). Built upon the gender norms that systematically disadvantage women and are hardened into place by becoming an embedded part of the organizational culture, the glass ceiling prevents women from breaking their way into the highest levels of leadership. Fortunately, men—and senior male leaders in particular—are in a prime position to kick in the glass ceiling and shatter the barriers and cultural norms holding women back from achieving leadership success.

### **Men's Role in Advancing Women in Leadership**

I have suggested that women's access to leadership position can improve more rapidly through re-examining culture and through the active support of men in power. I expand on the latter point here. Although women comprise nearly half of the total global workforce, men hold 76% of all senior leadership positions (Pew Research Center, 2017). Therefore, men primarily serve as the organizational gatekeepers who make key decisions about who is selected and promoted into leadership roles. Because gatekeepers have the power to shape the career advancement of others, they also have the authority select and promote a gender diverse workforce (Vinkenburg, 2017).

Several lines of research indicate that engaging those who hold the most power in organizations is paramount to the success of workplace D&I interventions (Benschop & Van den Brink, 2014; Pendry et al., 2007). Indeed, such interventions are more likely to fail when they

lack the support of executive leadership (Dobbin & Kalev, 2016; Kalev, Dobbin, & Kelly, 2006). Not only do more men serve as influential decision makers, their majority status provides easier access to many career-building resources that women lack (Ely & Rhode, 2010). If men were to share these resources with aspiring female leaders, they could help address the two primary barriers to advancing women in leadership – lack of developmental resources and non-inclusive workplace cultures. Tactics that men can use to promote the advancement of women to leadership roles by means of fostering individual development include sponsoring, mentoring, and building the confidence of aspiring female leaders.

### **Men as Allies to Fill the Developmental Gap**

**Sponsoring.** Because men are more likely hold upper-level leadership roles, they can serve as an influential sponsor to a more junior employee. A sponsor is a person of power who advocates for a protégé’s career advancement via influencing, increased exposure and visibility, and providing access to high-profile opportunities and assignments (Ibarra, Carter, & Silva, 2010). A sponsor can therefore facilitate greater access to resources otherwise difficult for women to obtain. For example, a sponsor could help women obtain the line management experience that tends to be most difficult for women to secure yet is often required for leadership promotions (Wellington, Kropf, & Gerkovich, 2003). Sponsors can help women obtain the experience critical to their career progression by intentionally nominating them for management roles that have been historically dominated by men.

Sponsors can also invite women to high-status networking events, helping counteract their limited contact to such networks (Casciaro & Lobo, 2005). Additionally, a sponsor can enhance a woman’s reputation by sharing examples of her performance and capabilities with influential peers, increasing her visibility among key stakeholders (Kim, 2013; Wayne, Liden,

Kraimer, & Graf, 1999). When a sponsor praises and vouches for a woman to other leaders, her reputation and value increases without having to promote herself. This is especially important because women are more likely to be penalized for self-promotion due to gender bias (Rudman, 2004). On the contrary, research has found that male leaders can *enhance* their own image or company's reputation by engaging in diversity-valuing behaviors (Hekman et al., 2017). By promoting a female colleague, a male sponsor not only helps her avoid the negative ramifications of self-promotion, but he can also reap personal and organizational benefits from engaging in visible displays of gender diversity advocacy.

**Mentoring.** In addition to helping women from a position of power, men across all levels of the organization can offer guidance and developmental resources to women by serving as a mentor. A mentor is someone who provides professional and psychosocial support to a less experienced protégé who in the process can gain both objective career-related outcomes (e.g., promotion and increased compensation) and subjective outcomes such as increased career/job satisfaction (Allen, Eby, Poteet, Lentz & Lima, 2004). A mentor can also serve as a role model, someone a protégé can look up to as an example and prototype of his or her desired professional success (Ragins, 2016). Male-dominated organizational hierarchies supply an abundance of role models for men, who can essentially replicate these leaders' path to success (Sealy & Singh, 2010). When the number of women in senior leadership roles is limited, ambitious women professionals are significantly less likely to have female mentors and/or role models who have already successfully broken through the glass ceiling (Hoobler, Lemmon, & Wayne, 2011).

Moreover, research has found that men tend to receive more career-specific support critical to professional success from their mentors; whereas women tend to receive more psychosocial support, which, albeit helpful, is not as directly related to career advancement

(Wanberg, Welsh, & Hezlett, 2003). After analyzing performance review data across three large technology firms, Correll and Simard (2016) found that women were more likely to receive vague feedback that was not related to business outcomes compared to their male counterparts. The researchers also found a negative correlation between vague feedback and performance ratings, yet this finding did not hold true for men (Correll & Simard, 2016). Women are therefore doubly penalized by receiving sub-par feedback, as their opportunities for development *and* performance ratings can both suffer as a result. Mentors can help close the feedback gap many women face by providing valuable business-centric guidance and support.

Successful senior female leaders attest that effective mentorship played a crucial role in their career advancement, and yet 63% of women have never had a formal mentor (Neal, Boatman, & Miller, 2013). Therefore, male leaders should challenge the implicit assumption that mentors and proteges should be of the same gender by actively mentoring women in their organizations. To be an effective mentor to women, male allies should convey acceptance and positivity, all while providing targeted, ongoing feedback and effective coaching (Ruggs, Martinez, & Hebl, 2011; Valerio & Sawyer, 2016).

Male leaders themselves can also benefit from cross-gender mentoring relationships by gaining an unconsidered perspective that could lead to more gender-inclusive decision making and/or culture building as a result (e.g., reconsidering organizational policies or practices that disadvantage women; Gubbi, Hubbard, & Smith, 2017). Moreover, researchers predict that cross-gender mentoring might increase a woman's confidence in her leadership ability. Valerio and Sawyer (2016) analyzed interview data from 75 Fortune 500 senior-level female leaders who were asked to identify common behaviors among the "male champions" who helped contribute to their success. Highlighting the finding that male allies help the women they mentor better



understand their leadership capacity, a woman executive shared that receiving early-career support from a male leader, “gives you the confidence that you belong at the table and that you have a right to be there” (Valerio & Sawyer, 2016). A male mentor’s ability to boost confidence in leadership ability is especially important considering women tend to underestimate their potential and not pursue new opportunities as a result (Ehrlinger & Dunning, 2003).

**Confidence-building.** The confidence gap is a well-documented phenomenon that finds that women experience more self-doubt and lack self-assuredness about the job performance and career potential than men (Kay & Shipman, 2014). Kolb (1999) found a positive correlation between self-confidence and leader emergence ( $r = .28$ ), yet the relationship between self-confidence and masculinity was more than twice as strong ( $r = .67$ ). Confidence in leadership ability, however, is not the same as leadership effectiveness. A meta-analysis on the relationship between gender and perceptions of leadership effectiveness further found that, although men are significantly more confident in their leadership ability compared to women, other-ratings find women to more effective leaders on average (Paustian-Underdahl, Walker, & Woehr, 2014). Moreover, an analysis of global assessment center data of over 10,000 executive leaders found women to be significantly less confident, even though they were rated *no less competent* than the men (Sinar et al., 2015). In other words, even though women are just as—if not more (e.g., Paustian-Underdahl et al., 2014)—capable to lead, they continue to lack confidence in their ability.

Research has found a negative correlation between the extent that a woman lacks confidence in her leadership ability and the likelihood that she is selected for a leadership role (Reuben, Rey-Biel, Sapienza, & Zingales, 2012). Therefore, effective male allies could enhance women’s promotability by building their confidence. Male managers can increase confidence

among female direct reports by providing positive feedback to counteract feelings of self-doubt (Valerio, 2011). Additionally, men who do not serve in a leadership or advisory role can also help build confidence in a female colleague by recognizing and communicating her strengths – both individually and publicly – and amplifying her voice (Valerio & Sawyer, 2016).

Amplification refers to explicitly repeating and giving credit to women's ideas, so others cannot later claim the contribution as their own (Eilperin, 2016). By implementing strategies to increase women's confidence in their leadership ability and/or taking on the more formal roles of mentor or sponsor, men can help to counteract the barriers women face to developing as leaders.

### **Men as Allies to Ignite Cultural Change**

Despite the positive effect that mentoring, sponsoring, and building confidence can have on the professional development of individual women, gender diversity efforts are still likely to fail if an organization's non-inclusive cultural norms remain intact (Wittenberg-Cox, 2015).

Common workplace D&I interventions, such as unconscious bias training programs or employee resources groups, are often criticized because they fail to address broken organizational structures and cultures that do not support workplace diversity (Benschop et al., 2016). After reviewing the diversity training literature, Benschop et al. concluded that most D&I interventions fail at transforming culture because they often neglect to address issues of power between minority and majority groups. When power differentials between majority (male) and minority (female) groups are ignored, it is unlikely that the necessary redistribution of power will occur to allow for true parity between groups. By acknowledging and leveraging their position of power as the dominant group, men can play an important role in dismantling non-inclusive working environments and cultural norms – the infamous glass ceiling – that prevent women from advancing their careers.

Therefore, in addition to partnering with women individually, Valerio and Sawyer (2016) recommend that the most effective male allies are also change agents who use their authority to create a more gender inclusive culture where both men and women can thrive. Such change agents implement formal or informal inclusive leadership behaviors to courageously disrupt the status quo by challenging gender-biased norms, inciting and inspiring others to follow their example. I have organized the change agent behaviors male allies can enact to effectively shatter the glass ceiling into three primary categories – includer, disruptor, and catalyst – which I explain in greater detail below.

**Includer.** Valerio and Sawyer (2016) found that male allies who effectively support women’s career advancement enact behaviors that create and foster a more inclusive working environment. I will refer to those who enact inclusive behaviors as includers. An includer commits to their genuine belief that gender equality is beneficial to everyone and behaves accordingly by consistently enacting inclusive leadership behaviors (Valerio & Sawyer, 2016). Includers strive to build inclusive workplace cultures, characterized by *all* employees feeling as though their unique contributions as diverse individuals are valued and that they belong (Shore et al., 2011). Therefore, inclusive leadership behaviors involve encouraging others to bring their authentic selves to the workplace, fostering a sense of belonging by sincerely inquiring about and learning from others’ unique perspectives, and amplifying the thoughts and ideas of minority group members (Lirio, Lee, Williams, Haugen, & Kossek, 2008). Includers also demonstrate the humility and courage needed to practice other-focused (as opposed to self-focused) leadership and advocate on behalf of others (Valerio & Sawyer, 2016).

Women can especially benefit from inclusive leadership, as it fosters more psychological safety—or willingness to speak freely without fear of disapproval from others (Edmonson,

2003)—among members from disadvantaged groups (Nembhard & Edmonson, 2006). For example, women tend to feel uncomfortable requesting resources or authority in male-dominated working environments (Lyness & Thompson, 2000), placing them at a disadvantage. Such instances would be less likely to occur within inclusive cultures where women feel just as valued and appreciated as their male counterparts, and thus, justified to speak up and make bold requests to advance their careers.

The resulting success women leaders can achieve by working in a more gender-inclusive environment could have a multiplicative effect on recruiting, retaining, and promoting even more women across all leader levels. First, when women believe that their unique contributions are valued and that they belong within their organization, they are less likely to experience turnover (Gonzalez & DiNisi, 2009). Hoobler, Lemmon, and Wayne (2011) assert that retaining a gender diverse workforce signals to outsiders that women within that organization can thrive. Thus, inclusive working environments can enhance recruitment and self-selection of more women leaders from outside the organization. Moreover, Cook and Glass (2014) analyzed a dataset of all CEO transitions within Fortune 500 companies between the years 1990 to 2011 and found that women were more likely to be promoted to CEO when the selection committee was gender-diverse. In other words, gender-diverse leadership begets more gender-diverse leaders. If more women assume upper-level leadership roles, lower-level women within organization can receive the added benefit of enhanced confidence in their own leadership abilities and career ambitions that occur when women have access to successful female role models (Asgari, Dasgupta, & Stout, 2012). Male allies should therefore enact behaviors that foster an inclusive working environment to increase the number of women leaders from both outside and within their organization.

**Disruptor.** Effective change agents expose and challenge current systems and cultural norms that systematically disadvantage minorities (Thomas, 2001). Male allies can champion more gender-inclusive workplaces by questioning and disrupting the status quo. I therefore classify male allies who create cultural change by challenging pre-existing—yet detrimental—beliefs and structures as disruptors. Benschop et al. (2016) stressed the importance of addressing power relations in diversity interventions to help transform the structure and the culture of the organization. Meyerson and Kolb (2000) argued that, as majority members, men are in an advantageous position to fundamentally alter power relations in organizations. Research has found that while women are often penalized for advocating for workplace gender equality, men are not (Hekman et al., 2017). Specifically, 350 executives were rated by their direct supervisor and an average of three peers on their perceived leader performance and the degree to which they engaged in diversity-valuing behaviors. The authors found an interaction of gender and the extent to which the leaders engaged in diversity-valuing behaviors. The women leaders received lower performance ratings for exhibiting a high degree of such behaviors whereas the opposite held true for male leaders (i.e., high diversity-valuing behaviors were associated with higher performance ratings; Hekman et al., 2017). Women and minorities who advocate for workplace diversity and inclusion initiatives risk being perceived as nepotistic or socially competitive (Wenneras & Wold, 2001). Because of their majority status, men are likely to be perceived as more credible, objective and less self-interested in advancing gender equality compared to their female counterparts (Eagly & Chaiken, 1978). Men are already considered to be of higher status (Ridgeway & Bourg, 2004) and therefore are not likely to be perceived as seeking personal gain by championing gender-based initiatives. Therefore, not only do male allies have increased

credibility because of their gender, they are not at risk for being penalized like their female counterparts who engage in diversity-valuing behaviors.

Disruptors explicitly address both their own and others' gender biases (Prime & Moss-Racusin, 2009). For example, imagine that a male ally overheard a colleague express disdain toward a woman because of her differing views about some work-related issue. Research has found that women in this situation who disagree are less likeable than men who disagree (Carli & Eagly, 1999). Therefore, the male ally in this example could provocatively ask if his colleague would feel the same way toward this woman if she was instead a man. I believe that due to their majority group status, men are afforded idiosyncratic credits –status and credibility earned by conforming to social expectations over time (Hollander, 1958) – which allows them to deviate from the status quo with little negative ramifications (Hackman, 1992).

Firmly rooted in the assumption that gender equality is a business-critical endeavor, disruptors explicitly acknowledge, promote, and adopt gender inclusive workplace practices (Woetzel et al., 2015). They practice talent management strategies that promote workplace gender equality, such as demanding more gender diversity within external applicant pools, high potential cohorts, and those nominated for leadership development programs (Bohnet, 2016). Effective male allies also disrupt the status quo by not only supporting the flexible work practices empirically proven to attract and retain more women leaders, but also by adopting such practices themselves and encouraging other men to do the same (Wright & Yaeger, 2016). For example, when men willingly take advantage of their company's parental leave policy, they signal to their female colleagues that they should not fear being penalized for similarly taking off time from work after having a child (Gheaus & Robeyns, 2011). Male allies should intentionally disrupt organizational systems and practices that reinforce gender biases and hold others

accountable to do the same (Allen, French, & Poteet, 2012). The most effective male allies not only dislodge their organization's culture and norm from a state of inertia, but they also build momentum among others to catalyze that change toward a more gender inclusive working environment, which leads to the third and final change agent behavior.

**Catalyst.** Specific to disrupting the status quo as a means to promote workplace gender equality, Allen, French, and Poteet (2012) elicited a call to action for men to serve as role models by consistently exhibiting gender inclusive behaviors (e.g., refraining from using gender-laden words or tolerating others' sexist comments) and holding others accountable to do the same. Therefore, the most effective change agents incite change in others by serving as role models of the change they desire to create. Sealy and Singh (2010) define a role model as "an inspirational or motivational individual, someone from whom one can learn and model desired behaviors." Role models can have a powerful effect on promoting behavior change in others. Social learning theory posits that people learn how to act by observing the behaviors of others, especially those in high status roles (Bandura, 1986). Social learning among adults is especially powerful amid new or uncertain situations. The paradigm shift launched by the #metoo movement in which previously unchallenged instances of gender discrimination are no longer acceptable presents such an ambiguous situation in which individuals are looking to others for cues on how to behave. Therefore, social learning is especially important and relevant as men seek out examples about to how appropriately interact with women in a more progressive, gender-inclusive working environment.

It is important to note that catalyst leaders do not force others to change by means of threat or intimidation, but rather mobilize change by building trust and gaining commitment among their constituents (Byham & Wellins, 2015). Catalyst leaders also serve as a coach to

others trying to learn and implement more gender-inclusive behaviors. Indeed, Sabat et al. (2013) purported that the best allies support others as they transition through the various stages of becoming allies themselves (e.g., increasing self-awareness of gender bias and effectively adopting Ally Accelerator and Change Agent Tactic behaviors).

## **Summary**

As explained above, men are in an optimal position to help counteract the two primary barriers stalling the advancement of women in leadership. First, male allies offer and provide women access to crucial career-building resources and developmental opportunities. Second, male allies also serve as change agents, actively working towards building a more gender-inclusive working environment. To unleash the relatively untapped potential men could have on eradicating workplace gender inequality, I am proposing a novel approach to accelerating women in leadership initiatives: Formally training men to be better allies to women in the workplace so they can explicitly and intentionally remove barriers that prevent women from attaining leadership positions.

## **A New Approach to Diversity Training**

Before describing my training program, I will first describe traditional approaches to increasing diversity and inclusiveness via training. Organizations often attempt to increase diversity numbers and create more inclusive cultures by implementing diversity training programs (Bezrukova, Jehn, & Spell, 2012). Typical intended goals of such training include facilitating positive interactions between diverse groups, reducing prejudice and discrimination, improving productivity and engagement of diverse employees, and retaining minority group members in the workplace (Bezrukova, 2016). It is believed that these intended outcomes can be accomplished by enhancing participants' knowledge, skills, and motivations to effectively



interact with diverse group members (Pendry, Driscoll, & Field, 2007). Therefore, diversity training programs should be an effective method for equipping men with the competencies needed to effectively partner with women and help them grow their career.

Unfortunately, workplace diversity training too often fails at achieving long-term diversity outcomes. For example, Dobbin and Kalev (2016) suggested that “Despite a few new bells and whistles, courtesy of big data, companies are basically doubling down on the same approaches (to diversity training) they’ve used since the 1960s—which often make things worse, not better” (pg. 4). I attribute the ineffectiveness of diversity training to two primary shortcomings. First, diversity training programs are not typically designed in the most optimal way to enhance transfer of training, especially in regard to behavior change. Specifically, a recent meta-analysis found that although diversity training programs lead to favorable reactions and positive attitudes about workplace diversity immediately following the training, even initial behavior changes do not result in transfer of training back in the workplace, as they quickly decay over time (Bezrukova et al., 2016). The purpose of the meta-analysis was to determine the effect of diversity training on outcomes including participant reactions as well as affective, cognitive, and behavioral learning across 260 independent samples. The authors assessed the long-term durability of diversity training by regressing effect sizes on the time when the posttest was administered. Overall results indicated that the effect of training was negatively related to the amount of time that had passed since training for all outcomes ( $b = -.02$ ; Bezrukova et al., 2016). Another reason most diversity training programs fail to promote transfer is that they tend to focus on compliance (Benschop & Verloo, 2006). To prevent or reduce instances of workplace discrimination, compliance training emphasizes behaviors to *avoid*, rather than teaching participants about diversity-valuing behaviors they can and should enact on the job. Accordingly,

diversity interventions do not create the necessary, sustained behavior change among participants, thus resulting in little to no effect on changing demographic compositions within leadership pools (Leslie et al., 2014).

The second major shortcoming of diversity training is its susceptibility to backlash, or resistance, from white males to participate in workplace D&I initiatives (Burke & Black, 1997). Diversity scholars theorize that attitudes about diversity-related issues tend to be resistant to long-term, meaningful change because of their strength, embeddedness in one's self-identity, and highly emotional nature (Eagly & Chaiken, 2007; Kulik & Roberson, 2008). Typically expressed as strong negative reactions against organizational efforts that aim to address systematic inequalities, feelings of backlash can be especially detrimental to diversity training outcomes, reinforcing and exacerbating the prejudice and discrimination the training is intended to eradicate. Backlash is more likely to occur when members of majority groups feel excluded from diversity efforts (Kaiser et al., 2013). Indeed, research had found that a major deficiency of many diversity training programs is that they do not target dominant groups (Benschop et al., 2016). Moreover, Holladay, Knight, Paige, and, Quiñones (2003) found that men tend to respond more negatively to diversity training compared to women, thus further supporting the importance of building programs to intentionally elicit more favorable reactions from men.

To overcome the aforementioned shortcomings of typical diversity training, my program utilizes a relatively novel approach by intentionally empowering male allies to actively work towards increasing gender equality in the workplace. First, rather than focusing on what *not* to do, my training increases the likelihood of participants engaging in diversity-valuing behaviors back on the job by emphasizing what they *should do* as male allies. I also attempt to increase transfer of training by implementing the following instructional design strategies. First, the

training uses active training methods (e.g., discussion, behavioral modeling) to increase likelihood of transfer (Burke & Hutchins, 2007). Next, I emphasize utility of the training outcomes by making the training content relevant to their organization (e.g., making the business case for how greater gender diversity can lead to financial gain), thus increasing the likelihood of adopting the learned outcomes back in the workplace (Ruona, Leimbach, Holton, & Bates, 2002). Moreover, the training utilizes goal-setting and perspective-taking strategies that have found to be most effective in diversity training programs (Lindsey, King, Hebl, & Levine, 2014) and promote transfer (Blume, Ford, Baldwin, & Huang, 2010). Finally, I use a variety of strategies to increase trainee self-efficacy about being an ally to women in leadership, as self-efficacy also has been found to enhance transfer of training (Blume et al., 2010; Morin & Latham, 2000).

Second, my training is intentionally designed in such a way to mitigate the backlash diversity training programs typically elicit from majority groups (Miller, 2017a). Most diversity training programs focus on empowering minority groups while overlooking the specific role that majority members can play and thus miss the mark “in helping today’s dominant group embrace tomorrow’s reality” (Wittenberg-Cox, 2016). Therefore, this training explicitly targets men and the important role they play in accelerating women in leadership. Explicitly empowering men to join women in leading efforts as an important part of the solution—and not the problem—could counteract the reactance majority members typically experience in response to feeling excluded from D&I initiatives (Kaiser et al., 2013). Moreover, the training content and its intended tone was meticulously designed to avoid the use of any accusatory language that could result in feelings of defensiveness and guilt.

Additionally, the training is intended to provide a safe space for men to honestly explore their role in advancing gender parity in the workplace by not including any women in the room. Participation in this training program may very well be the first-time men have been provided the forum to have a candid and honest conversation about gender diversity and women in leadership. Research shows that providing a safe space increases the likelihood of participants sharing their honest concerns, insights, and realizations with one another without fear of retaliation (Edmondson, 1999). Therefore, I expect participants to be less likely to exhibit backlash by being afforded the space to genuinely explore workplace gender inequality without concerns of being judged or villainized as a result.

Organizations implementing this training should expect to see the following broad outcomes. First, participants will have favorable attitudes toward women in leadership and their role in advancing gender equality throughout their company's leadership pipeline. Second, participants will enact behaviors specific to developing female leaders individually as well as creating a more inclusive working environment in which both men and women can thrive. Third, perceptions of inclusivity, leadership effectiveness, and confidence in one's leadership ability will increase among the direct reports of training participants as a result of this training program. Whether my program *does* achieve these outcomes is an empirical question. In the next section, I outline specific learning outcomes that I measured and examined as evidence of positive change in participants and as support for the proposed training program.

### **Evidence of Training Effectiveness**

Any effective training should result in some measurable change in participants' behaviors, cognition, and/or affect (Kraiger, 2002; Kraiger, Ford, & Salas, 1993). Diversity programs specifically tend to be most effective when they incorporate both awareness building

and behavior change outcomes in addition to taking an interactive approach to learning (Benschop et al., 2016; Bezrukova et al., 2016). Therefore, my training program focuses on changing participants' behaviors, cognition, and attitudes relevant to improving outcomes important to accelerating women in leadership initiatives. Below, I will draw from the Kraiger et al. (1993) taxonomy to organize and discuss the expected learning outcomes, as well as explain how the training program targets these anticipated changes in learners. Across all targeted learning outcomes, I expect that comparisons between training and control group participants will favor training group participants for each corresponding variable.

**Skill-Based Outcomes.** Skill-based outcomes encompass the acquisition, development, and maintenance of learned behaviors (Kraiger et al., 1993). As stated previously, most diversity training programs focus on attitude change and awareness-building rather than on teaching participants about pro-diversity behaviors. In contrast, my training teaches participants about the specific behaviors effective male allies use to accelerate gender parity in the workplace as the first important step to enacting those behaviors back on the job. Learning outcomes related to these behaviors are described below.

***Participation in eradicating workplace gender inequality.*** Defined as making decisions and solving problems related to promote organizational change, participation plays an important role in increasing support for and reducing resistance toward gender parity initiatives (Hideg, Michela, & Ferris, 2011; Lines & Selart, 2013). Men's participation in workplace gender equality is instrumental to the success of such initiatives, especially given that men are assumed to be more credible advocates because their pro-diversity efforts are not seen as self-serving (Hekman et al., 2017). To increase participatory behaviors specific to eradicating workplace gender inequality, my training utilizes the evidence-based approach of having a senior male

leader from the organization kick off the session by explicitly inviting men to contribute to discourse and actions specific to advancing women in leadership (Sherf, Tangirala, & Weber, 2017). Moreover, the training itself is intended to build participants' confidence in engaging in pro-gender equality behaviors, which should in turn increase the likelihood of leaders engaging in such behaviors.

***Hypothesis 1:** Participants who complete the training will self-report higher levels of participatory behaviors specific to eradicating workplace gender inequality compared to participants in the control group.*

Whereas participation in gender diversity initiatives can encompass a wide variety of problem solving and decision-making behaviors, skill-based outcomes can be further broken down into: 1) Specific behaviors men can enact to partner with women individually, and 2) how they can change the organizational culture. In my training program, the former are referred to as Ally Accelerators and the latter as Change Agent Tactics. Learning is evident when male participants regularly perform these Ally Accelerator and Change Agent Tactic behaviors back on the job.

***Ally accelerators.*** The participants are introduced to the Ally Accelerators as follows. Using their course handout,<sup>1</sup> participants read the definition of each Ally Accelerator, along with the key behaviors aligned to each. As a full group discussion, participants are then asked to clarify the distinction between mentor and sponsor, emphasizing the importance of the sponsor to the career success of women, as they are less likely to have access to influential male sponsors and the resources they provide (Wellington et al., 2003). One or two participants are then asked

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<sup>1</sup> The course handout cannot be shared as it is intellectual property of the consulting firm that owns the Men as Allies training program.

to share a time when they effectively utilized an Ally Accelerator to help a female colleague advance her career, thus providing the group with applicable examples of men effectively mentoring, sponsoring and/or building confidence with female colleagues. The examples shared serve as a positive model for others, which is expected to increase participants' self-efficacy in enacting Ally Accelerators (Bandura, 1986; Taylor, Russ-Eft, & Chan, 2005). Diversity self-efficacy, or confidence in one's ability to successfully mobilize the goals of workplace D&I initiatives, plays a key role in facilitating diversity skill acquisition and implementation (Combs & Luthans, 2007). Therefore, compared to leaders who have not yet attended the training, I expect treatment group leaders to enact more Ally Accelerator behaviors when they return to the job.

***Hypotheses 2a-2c:** Participants in the treatment group will engage in more mentoring (H2a), sponsoring (H2b), and confidence building (H2c) behaviors compared to the control group participants, as measured by both self- and other-report frequency data.*

**Change agent tactics.** Participants are then introduced to the categories of includer, disruptor, and catalyst behaviors they can use to create a workplace culture in which both men and women can thrive. These behaviors are hereby called change agent tactics (CATs). As opposed to reading the CATs from a list as they did with the Ally Accelerators, participants learn about the CATs by completing a self-assessment referred to as the Change Agent Profile. Participants indicate where they tend to fall on a spectrum between effective and ineffective leadership behaviors that support inclusive cultures or maintain non-inclusive cultures. Each item represents a specific behavior, grouped by the broader CATs. The items were specifically crafted for this study based on the themes identified by the aforementioned Valerio and Sawyer (2016) qualitative study identifying behaviors of male allies. The self-assessment allows participants to

identify their strengths and opportunities for improvement as change agents, which personalizes the content and thus increases the likelihood for transfer (Blume, Ford, Surface, & Olenick, 2017). Participants then discuss the CATs as a group, sharing what it means to be an includer, a disruptor, and a catalyst in their organization. Connecting the CATs to their specific organizational context should increase their relevancy and applicability to the job which, in turn, should increase transfer. Therefore, I anticipated that those in the treatment group will engage in more CATs compared to those in the control group.

*Hypotheses 3a-3c: Compared to control group participants, participants in the treatment group will engage in more includer (H3a), disruptor (H3b), and catalyst (H3c) behaviors according to both self- and other-report frequency data.*

After learning about the Ally Accelerators and the CATs, participants create specific, personalized actions plans that integrate the newly-learned Ally Accelerator and Change Agent Tactic behaviors into applicable next steps. Participants are first instructed to determine which of the Ally Accelerators they can effectively utilize in partnering with an aspiring female leader. They then record on their handout how they explicitly intend to implement that behavior on the job. Such goal-setting behavior has been proven to be an effective strategy to increase the efficacy of training programs in general and those specific to diversity (Blume et al., 2010; Lindsey et al., 2014; Machin & Fogarty, 1997).

In small groups, participants then share at least one behavior with one another that they plan to implement. According to the theory of planned behavior, intention to perform a behavior predicts enacting that behavior (Ajzen, 1985). Moreover, hearing others' intended Ally Accelerator and Change Agent Tactic behaviors is expected to provide additional positive



models, further enhancing participants' self-efficacy in serving as a male ally (Morin & Latham, 2000).

The training program's focus on promoting self-efficacy and behavioral intentions for engaging in Ally Accelerator and Change Agent Tactic behaviors thus elevates its learning objectives beyond the more typical awareness-building and attitude-changing outcomes that are common in many diversity interventions (Vinkenburg, 2017). This does not mean that attitudes and knowledge are not important, however, as one's beliefs and attitudes are the basis of behavioral intentions and subsequent behavior change (Ajzen, 1985). Therefore, the training also targets cognitive and affective outcomes, as explained below.

**Cognitive Outcomes.** Cognitive outcomes generally refer to the quantity and type of knowledge a participant possesses, as well as relationships among knowledge elements (Kraiger et al., 1993). In diversity training programs, cognitive learning is less susceptible to decay compared attitudinal and affective learning, and can even increase over time (Bezrukova et al., 2016). Kraiger et al. (1993) noted that cognitive learning outcomes can, and often do, involve more than amassing declarative knowledge about the training focus. For example, research has found that diversity interventions that utilize a perspective-taking approach (i.e., intentionally building participants' knowledge about the experiences of others) often have a positive effect on attitudinal and behavioral outcomes as a result (Lindsey et al., 2014). Therefore, this training targets cognitive outcomes that should enable trainees to mitigate their gender bias, enhance their positive attitudes toward being an ally for women in leadership, and increase the likelihood they engage in Ally Accelerator and Change Agent Tactic behaviors back on the job.

***Knowledge of gender inequality.*** Before becoming an effective ally to women in the workplace, men need to believe that gender inequality is indeed a problem in the first place

(Sabat et al., 2013). Unfortunately, research suggests this often not the case. For example, Thomas et al. (2017) reported that 50% of men surveyed believe that having one female member on a board of ten represents a “gender diverse board.” Moreover, 56% of men believe that obstacles women have faced in the past (e.g., unfair workplace treatment) have been largely eliminated (Pew Research Center, 2016).

I built my training to increase participants’ knowledge of gender inequality by presenting data that support differential treatment between men and women still exists in the workplace. As participants enter the training room, they are instructed to read compelling facts about gender inequality on large sheets of paper posted on the walls. Participants then discuss their reactions to the fact sheets after learning about the business case for women in leadership later in the session.

Additionally, my training replicates a strategy used by Bleijenbergh and Van Engen (2015) to obtain agreement about the prevalence of gender inequality among university faculty by visually presenting the percentage of women at various stages of the academic career ladder to stakeholders. Through this exercise, the participants identified the relative overrepresentation of men throughout the leadership pipeline and even generated possible interventions in response to the data presented (Bleijenbergh & Van Engen, 2015). Similarly, participants in my training are presented with a visual representation of the gender ratio across all levels of leadership using both Fortune 500 data and metrics specific to their organization. The latter further personalizes the training content, thus increasing the likelihood of transfer (Blume et al., 2017). Participants then engage in a discussion about why disparities exist between men and women the further one goes up the leadership ladder. This, in turn, is used to foster a solution-taking approach among participants effectively used in previous research (Bleijenbergh & Van Engen, 2015).  
Additionally, I expect participants to better understand gaps between their knowledge coming

into training and actual levels of gender inequality. I therefore expect that—compared to the control group—leaders who complete the training should have more accurate knowledge about the existence and prevalence of gender inequality in the workplace.

***Hypothesis 4:** Participants in the treatment group will indicate higher rates of self-knowledge about the prevalence of workplace gender inequality compared to the control group participants.*

***Self-awareness of gender biases.*** It is not only important for male allies to understand the prevalence of gender inequality, but also how they themselves are susceptible to holding and further perpetuating gender biases. Gender bias – or judging others based on their gender (Garb, 1997) – is often difficult to recognize due to its implicit and subtle nature. Block (2016) asserts that limited awareness of one’s biases often cause and maintain systemic discrimination against minority groups. For example, people in organizations that implement a hierarchical power structure tend to believe that those who successfully advance through the leadership pipeline have more merit (i.e., are more deserving) than those who are not promoted (Vinkenburg, 2017). Therefore, recognizing that hiring and promotion decisions are influenced by one’s biases is an important first step toward eradicating talent management practices that systematically disadvantage women (Ellemers, 2014). One’s awareness of biases can be unveiled by articulating cognitive prejudices or weaknesses (Zawadzki, Danube, & Shields, 2012). Therefore, this training implements a variety of approaches to have participants unearth and identify their own gender biases.

First, participants engage in a quick, yet powerful activity, during which they compare their experiences in the workplace to that of women. Participants are instructed to stand while the facilitator reads off a list of workplace situations. If the situation has happened to the participant,

he takes his seat and remains sitting. Scenarios include “You are routinely asked to arrange refreshments for work events” and “You’ve been told that you come off as ‘too bossy/assertive’ in your leadership style.” By the end of the activity, most of the men are still standing. The facilitator points out that if women were present, most – if not all – would be sitting. I expect this activity to increase participants’ awareness about how gender biases can result in behaviors that unintentionally discriminate against women, as well as their overall empathy for their female colleagues.

The facilitator then shares a story about a time when his biases prevented him from being a better ally to a female colleague, modeling self-disclosure and the vulnerability participants are asked to share moments later. Participants then engage in a pair-and-share activity in which they disclose a personal story about a time when bias got in the way of them being an effective male ally, replicating the behavior just modeled by the facilitator. By sharing personal examples of how their biases have negatively affected the advancement of women in the workplace, they are made more aware of their gender biases as well as the effect biases have on behaviors related to workplace gender inequality. Therefore, I expect leaders from the control group to be more aware of their gender biases compared to the control group.

***Hypothesis 5:** Compared to control group participants, participants in the treatment group will indicate higher rates of self-reported gender bias.*

**Affective Outcomes.** Affective outcomes encompass the attitudes, motivations, and goals relevant to the training program’s objectives (Kraiger et al., 1993). Most diversity training programs tend to focus on affective outcomes specific to attitude change. The direction of the attitude change is important to specify, however, as diversity trainings can unintentionally elicit stronger negative attitudes toward diversity, especially among men. For example, Holladay et al.

(2008) measured reactions toward diversity training among undergraduate psychology students (n = 191) and found a significant effect of gender on attitudes. Compared to females, men perceived greater backlash, evaluated the diversity training less favorably, and believed that the training content was less likely to transfer back to the organization. In accordance with Kraiger et al. (1993), affective learning therefore occurs when a training program can effectively alter one's attitudes and motivations to enhance – and not hinder – the overall training objectives. To enhance the likelihood that participants will positively perceive their role as allies to women in the workplace, my training targets the following affective outcomes.

***Positive attitudes about women in leadership.*** Members of majority groups tend to have unfavorable views of workplace D&I initiatives (Leslie et al., 2014). One way to overcome these negative views is to understand the positive effect of gender diversity on the bottom line by positioning D&I as a competitive advantage (Kidder, Lankau, Chrobot-Mason, Mollica, & Friedman, 2004). For example, the facilitator for this training shares research which found that companies with greater gender diversity are 1.4 times more likely to demonstrate sustained, profitable growth (Sinar et al., 2018). Similarly, Pendry et al. (2007) recommended connecting diversity training to organizational goals and strategy to mitigate negative perceptions that the training is being implemented to correct or prevent bad behavior. Therefore, participants in my training learn about and discuss the business case for women in leadership, emphasizing how more gender diversity could specifically benefit their organization. As a result, I expect men who attend this training to have more favorable attitudes about the benefits of having more women in leadership compared to men who were not exposed to the training.

***Hypothesis 6:*** *Compared to the control group, participants in the treatment group will more strongly believe that increasing the number of women in leadership is beneficial.*

*Motivation to be a male ally.* Even though more men have favorable attitudes toward gender equality now than ever before (Donnelly et al., 2015), even those who support gender parity are still reluctant to participate in workplace D&I initiatives (Graves, 2014). Men's hesitation to work actively toward advancing gender equality despite holding pro-gender diversity beliefs may be due to not feeling included or welcome by the female-dominant groups leading these efforts (Cassino, 2017). Sherf et al. (2017) conducted an experiment on an M-Turk sample of 208 working adults to investigate whether men's voluntary participation in a gender-parity initiative could be increased by bolstering their psychological standing toward promoting workplace gender equality. Psychological standing is one's judgment about the legitimacy of performing a specific action (Miller, Effron, & Zak, 2009).

Participants were instructed to read a hypothetical scenario in which they were asked whether they would participate in a workplace gender equality initiative. Those in the treatment group were provided with an additional excerpt which stated that "the CEO believes that all employees, men and women alike, should be involved in the formulation of this plan and have a right and a duty to influence the future of [the company]." Compared to the control group, men who read the manipulation were more likely to volunteer for the gender parity initiative (Sherf et al., 2017). This research supports the notion that by making it clear that men play an important role in helping to achieve gender parity, they are more likely to participate in such efforts. My training attempts to replicate the Sherf et al. (2017) findings by having a senior executive from the participants' organization explicitly invite these men to join the company's gender diversity efforts. Being called to serve as active participants in accelerating workplace gender diversity by a senior-level executive should legitimize each participant's right and responsibility to participate, thus increasing their motivation to engage in pro-gender diversity behaviors.

Finally, the training attempts to bolster further trainee motivation to be a male ally by leveraging cognitive dissonance – the unsettling feeling that results from a misalignment between thoughts and behaviors (Festinger, 1962) – during the final activity of the session. The purpose of the closing activity is to elevate participants’ commitment to be an ally. Participants are instructed to write down how they would finish the phrase, “I choose to be an ally for women in the workplace because I believe....” and then verbally share their response with the full group. By publicly committing to be an ally, participants are likely to experience later cognitive dissonance if they do not follow through on enacting their intended Ally Accelerator and Change Agent Tactic behaviors. Moreover, publicly labeling oneself as a male ally for women leadership may increase one’s intrinsic motivation to engage in Ally Accelerator and Change Agent Tactic behaviors (Merritt, Effron, & Monin, 2010) potentially capitalizing on the finding that trainee motivation is a strong predictor of transfer (Burke & Hutchins, 2007; Chiaburu & Lindsay, 2008). I predict that leaders in the treatment group will have greater motivation to be an ally for women in leadership compared to leaders who did not complete the training.

***Hypothesis 7:** Participants in the treatment group will self-report higher rates of motivation to be a male ally compared to control group participants.*

Collectively, the expected behavioral, cognitive, and affective outcomes from this training should lead to improvements in job attitudes of direct reports that are predictive of increased job performance.

**Organizational Outcomes.** Training effectiveness is not only measured by assessing changes in the learner, but also by measuring the intended organizational benefits of the training (Kraiger, 2002). When learned behaviors are implemented back on the job, they should impact organizational effectiveness, such as via the indirect effect of improved job attitudes among

direct reports when leaders improve their performance through formal leadership development programs. It is important to be able to demonstrate organizational payoffs of a training program to garner support for ongoing and future training efforts (Kraiger, 2002).

Although the primary objective of the training program is to equip men to be better allies to women in the workplace, the ultimate—yet far more distal—goal is actually increasing the number of women advancing into leadership positions in the organization where it is delivered. Measuring the longitudinal change in gender ratios across all leadership levels, however, is beyond the scope of this research project. Therefore, I measured more proximal outcomes of this training program’s organizational outcomes, which relate to the attitudes and perceptions of participants’ direct reports. Because research has found that gender differences are common when measuring employee perceptions of the workplace (Camgoz, Ekmekci, Karapinar, & Guler, 2016; Konrad, Ritchie, Lieb, & Corrigan, 2000), I conducted an additional analysis to investigate whether male direct reports would rate the following outcomes more favorably compared to women. These analyses were added after I proposed; no a priori hypotheses were formed and thus these analyses are considered exploratory.

***Perceptions of inclusivity.*** Because the training program emphasizes the importance of creating and fostering a gender inclusive working environment, the resulting inclusive behaviors enacted by participants should therefore increase their subordinates’ perceptions of inclusivity. Shore et al. (2011) defines inclusion as “the degree to which individuals experience treatment from the group that satisfies their need for belongingness and uniqueness” (p. 1265). I therefore predict that direct reports of leaders who completed the training will perceive the workplace to be more inclusive compared to direct reports who report to leaders in the control group.



***Hypothesis 8:** Direct reports of leaders from the treatment group will indicate higher rates of self-perceived workplace inclusivity compared to the direct reports of control group participants.*

**Confidence in leadership ability.** If an ally were to regularly enact Ally Accelerators among those they lead, their direct reports should have more confidence in their own leadership ability as a result. The Ally Accelerator specific to building confidence—and its corresponding behaviors—is explicitly intended to build confidence in others. Additionally, engaging in sponsoring and mentoring behaviors can provide an additive effect, as these behaviors have been found to build confidence as well (Heermann, 2017; Valerio, 2011). I therefore expect direct reports of treatment group participants to be more confident in their own leadership ability compared to direct reports of the control group.

***Hypothesis 9:** Direct reports of leaders from the treatment group will indicate higher rates of self-perceived workplace inclusivity compared to the direct reports of control group participants.*

**Job Attitudes.** Meta-analytic evidence supports that job attitudes predict performance ( $\beta = .06$ ; Ricketta, 2008), and leaders' behaviors have been found to influence subordinates' job attitudes (Podsakoff, MacKenzie, Moorman, & Fetter, 1990). For example, when leaders effectively create an inclusive workplace environment, employees experience more positive job attitudes (Gonzalez & DiNisi, 2009). Several behaviors being targeted in the training have been found to result in more favorable job attitudes. For example, Ragins, Cotton, and Miller (2000) found that satisfactory mentoring relationships can increase job satisfaction. As a result, I expect direct reports of leaders who have completed the training to have greater job satisfaction compared to the control group.

***Hypothesis 10:** Compared to control group participants, direct reports of leaders completing training will self-report higher levels of job satisfaction.*

Research has also found that employees with supervisors who support and promote their career growth believe that they have potential for career growth at an organization, they are less likely to leave (Ito & Brotheridge, 2005). Therefore, I predict leaders who complete the training will have lower turnover intentions among their direct reports. Moreover, research has found that employees are more likely to perceive their supervisors to be supportive when they engage in diversity management behaviors (Choi & Rainey, 2010). As a result, I would expect those who report to leaders from the treatment group to indicate higher levels of supervisor support compared to direct reports of control group leaders.

***Hypothesis 11:** Compared to direct reports of control group leaders, direct reports of trained leaders will self-report lower intentions to turnover.*

***Hypothesis 12:** Compared to direct reports of control group leaders, direct reports of trained leaders will self-report higher levels of supervisor support.*

## METHODS

The effectiveness of the proposed training program was tested using a randomized treatment-control group design with self- and other-report measures corresponding to the learning objectives discussed above. Observed differences favoring the treatment group over the control groups would provide support that the training increases the behaviors, knowledge, and attitudes associated with being an effective ally for women in leadership targeted by the training.

### **Participants**

The sample was drawn from a large global manufacturing company comprised of about 5,000 total employees. Data were collected on two groups: leaders and direct reports. The leaders were randomly assigned to either the treatment or control group. All participants' direct reports were surveyed, with the number of direct reports per leader ranging from one to nine.

### **Training Program**

**Design.** The synchronous classroom approach for this training utilizes a number of research-based instructional design techniques: lecture, exploration/active participation, full- and small-group discussion, problem-based collaborative learning, and self-assessment (Callahan, Kiker, & Cross, 2003; Kirschner, Sweller, & Clark, 2006). Content was delivered verbally as well as through a PowerPoint slide deck and a printed course handout<sup>2</sup>. Flip charts were also used by the facilitator and participants throughout the session. A detailed outline of the training program can be viewed in Table 1.

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<sup>2</sup> Materials cannot be shared as they are intellectual property of the consulting firm that owns the Men as Allies training program.

The training content leverages and integrates the four commonalities Sabat et al. (2013) identified among people who have successfully made the transition from “being apathetic, unsupportive, or even hostile toward outgroup members to being fully engaged allies” (p. 481). These commonalities tend to follow a linear progression over time and are: (1) self-awareness, (2) research, (3), ally behavior enactment, and (4) ally self-identification (Sabat et al., 2013).

**Learning objectives.** By the end of the training programs, participants are expected to have increased knowledge and self-awareness about workplace gender equality and more positive attitudes toward women in leadership initiatives. Additional learning objectives are engagement in behaviors that both aid in the development of female leaders as well as contribute to a more inclusive workplace culture, thus leading to increased perceptions of inclusivity, leadership effectiveness and positive attitudes by participants’ direct reports. A detailed list of the learning objectives can be viewed in Table 2.

**Procedure.** The client organization’s Chief Human Resources Officer (CHRO) randomly assigned participants to either the treatment or control group. The CHRO then invited the treatment participants to the training session via email. The treatment group ( $n = 20$ ) completed the training on November 21, 2017 at the company’s corporate headquarters based in the northeastern United States. No pre-work was administered prior to the training. Two male consultants from an external leadership development firm delivered the training session over the course of three hours. No immediate post-session measures were collected.

The follow-up measure was administered via an online survey to all treatment and control participants between February 26 and March 5, 2018. During the same timeframe, all participants’ direct reports also completed an online survey to assess perceptions of their leader and additional attitudinal self-report variables. The CHRO also emailed all direct reports and the

control group prior to data collection to inform them about their requested participation in this research. See Appendix for all recruitment emails. Email addresses were collected to track survey completion; however, the data were not linked to participants' responses to any other measures in an effort to ensure confidentiality of the respondents. As to not be denied the training and the potential benefits they could experience as a result of participating, the control group ( $n = 35$ ) therefore completed the training post-data collection in mid-March 2018.

### **Measures for Participants (Leaders)**

To assess behavior change, leaders first rated themselves on their participation in gender parity before rating how frequently they utilized Ally Accelerator and Change Agent Tactic behaviors addressed in the training using a behavioral checklist approach (Noe, 2009).

Participants indicated the frequency with which they engaged in specified Ally Accelerator and Change Agent Tactic behaviors over the three months between the training and data collection using a Likert-type response scale ( $1 = \textit{Never}$ ,  $2 = \textit{Once}$ ,  $3 = \textit{Two to five times}$ ,  $4 = \textit{Six to nine times}$ ,  $5 = \textit{Ten or more times}$ ,  $0 = \textit{Unable to rate}$ ).

**Participation in gender parity.** Gender-parity participation is the extent to which one speaks up about gender equality in the workplace (Sherf et al., 2017). I measured participation in gender parity (PGP) using the five items ( $\alpha = .86$ ) Sherf et al. (2017) had adapted from the original participation scale developed by Liang, Farh, and Farh (2012). Participants rated the frequency in which they engaged in all behaviors using a five-point scale:  $1 = \textit{never}$ ,  $2 = \textit{rarely (1-2 times)}$ ,  $3 = \textit{sometimes (monthly)}$ ,  $4 = \textit{often (weekly)}$ ,  $5 = \textit{very frequently (2-4 times a week)}$ ,  $6 = \textit{daily}$ ). Sample items include: "Over the past three months, how many times did you... Proactively make suggestions on how to accelerate women in leadership initiatives?" and

“...Speak up honestly about problems that might prevent women from obtaining leadership roles?”

**Ally accelerators.** Participants rated how frequently they engaged in behaviors specific to working individually with a woman to help her advance her career. Termed Ally Accelerators<sup>3</sup>, these behaviors fall within three broad categories: mentor (items = 5,  $\alpha = 0.92$ ) sponsor (items = 5,  $\alpha = 0.93$ ), and build confidence (items = 7,  $\alpha = 0.91$ ). Sample items include, “Over the past three months, how many times did you do the following with female peers or direct reports?... Work together to identify developmental opportunities and encourage her to pursue them” (mentor sub-scale), “...Facilitate her access to senior leaders and decision makers” (sponsor sub-scale), and “...Amplify her voice by verbally acknowledge contributions in meetings (confidence sub-scale). Participants also provided an overall behavior change rating for each of the three broad Ally Accelerator categories specific to whether the leader engaged in more, less, or the same amount of these behaviors over the prior three months.

**Change agent tactics.** Participants rated how frequently they engaged in behaviors specific to actively changing the organizational culture to be more gender inclusive. Referred to as Change Agent Tactics, these behaviors fall within three broad categories: includer (items = 4,  $\alpha = 0.76$ ) catalyst (items = 5,  $\alpha = 0.69$ ), and disruptor (items = 6,  $\alpha = 0.84$ ). All items follow the prompt “Over the past three months, how often have you done the following behaviors?” Sample items include, “Foster belongingness by empowering individuals to develop and thrive” (includer sub-scale), “Be vocal about the importance of gender equality” (catalyst sub-scale), and “Treat gender equality as business-critical” (disruptor sub-scale). Like the Ally Accelerators,

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<sup>3</sup> The full list of Ally Accelerator and Change Agent Profile items cannot be disclosed, as they are intellectual property of the consulting firm that owns the Men as Allies training program.

participants also rated leaders on their overall behavior change for each of the three Change Agent Tactics over the three months since the treatment group had completed the training.

**Knowledge of gender equality questionnaire.** Participants rated their self-knowledge of gender inequality using 11 items from Shields, Zawadzki, and Johnson's (2011) Knowledge of Gender Equality Questionnaire (KGEQ) using a Likert-type response scale (*1 = strongly disagree, 5 = strongly agree*). A sample item is "Men's common interests with their male bosses help to further their careers". A sub-set of three KGEQ items was also used to assess awareness of gender biases (AGB; "Gender inequity is often the result of the accumulation of many small and subtle biases, rather than a large, obvious event;" "Discrepancy in success of men and women in their careers can be explained by the cumulative effect of many small incidents of gender inequity" and; "Behaviors, such as assertiveness, that are perceived to be positive when displayed by men are often perceived as negative when displayed by women."). Both scales demonstrated moderate reliability (KGEQ,  $\alpha = 0.76$ ; AGB,  $\alpha = 0.70$ )

**Benefits of diversity scale.** Participants rated their attitudes about the benefits of gender diversity in the workplace using an adapted version of the Benefits of Diversity scale ( $\alpha = 0.91$ ; Hofhuis, van der Zee, & Otten, 2015). The scale was modified insofar that the root prompt "Cultural diversity..." was changed to "Gender diversity..." Sample items include, "...enables us to come up with more original ideas," and "...is necessary for recruiting enough new personnel" (*1 = not at all, 6 = to a very great extent*).

**Psychological standing.** Participants rated their subjective judgment of legitimately partaking in gender equality initiatives using the four-item Psychological Standing scale (Sherf et al., 2017). Sample items included: "Do you think it is appropriate for you to speak up about your company's gender parity policies?" and "Do you feel that you are the right person to talk about

your company's gender-parity policies?" (*1 = not at all, 6 = to a very great extent*). The coefficient alpha for this study was moderate at best for this study ( $\alpha = 0.68$ ).

### **Measures for Direct Reports**

In addition to the participant self-report measures, other-report data were collected by administering an additional survey to the participants' direct reports, referred to as direct reports from here forward. To validate the self-rated behavioral change of the participants, direct reports rated the frequency in which participants enacted items from the Ally Accelerator (mentor,  $\alpha = .91$ ; sponsor,  $\alpha = 0.94$ , build confidence,  $\alpha = 0.95$ ) and Change Agent Profile (includer,  $\alpha = 0.89$ ; catalyst,  $\alpha = 0.87$ ; disruptor,  $\alpha = 0.92$ ) measures. Direct reports also rated their perceptions of inclusivity, confidence in leadership ability, and job attitudes (i.e., job satisfaction, turnover intentions, and supervisor support) using the measures explained in greater detail below.

**Perceived group inclusion scale.** Direct reports rated the participant's perceived inclusivity by answering a modified version of the Perceived Group Inclusion Scale (Jansen, Otten, van der Zee & Jans, 2014) with the target changed from the group level ("This group...") to the individual level ("This person..."). I used 11 of the 16 items from the full scale, with participants rating each item on a five-point Likert-type response scale (*1 = strongly disagree, 5 = strongly agree*). The measure contained three sub-scales all of which demonstrated high reliability: authenticity ( $n = 6$ ),  $\alpha = .96$ , group membership ( $n = 3$ ),  $\alpha = .92$ , group affection ( $n = 4$ ),  $\alpha = .87$ .

**Confidence in leadership ability.** Direct reports rated their confidence in their leadership ability by using the five-item self-confidence measure developed by adapting two scales that assess leadership ability specifying one's confidence. Both measures used a four-point Likert-type response scale (*1 = not confident at all, 2 = somewhat confident, 3 = confident, 4 =*



*very confident*) in response to the prompt, “How confident are you that you can be successful at the following?” The first four-item measure assessed general leadership ability ( $\alpha = 0.71$ ; Leadership Efficacy Measure; Dugan, Garland, Jacoby, & Gariorski, 2008). A sample item is, “I have confidence in my ability to handle most tasks.” The second seven-item measure assessed transformational leadership using the Global Transformational Leadership Scale (Carless, Wearing, & Mann, 2000;  $\alpha = 0.83$ ). A sample item is, “Treating staff as individuals, supporting and encouraging their development.”

Common job attitudes from the I-O psychology literature were measured as follows.

**Job satisfaction.** I assessed job satisfaction using three items from the Michigan Organizational Assessment (Cammann, Fichman, Jenkins, & Klesh, 1979). Respondents indicated their agreement with the items using a five-point Likert scale ranging from 1 = *strongly disagree* to 5 = *strongly agree* ( $\alpha = 0.77$ ).

**Turnover intentions.** I measured turnover intentions with the three-item measure by Michaels and Spector (1982). Respondents indicated their agreement with the items using a five-point Likert scale ranging from 1 = *strongly disagree* to 5 = *strongly agree* ( $\alpha = 0.91$ ).

**Supervisor support.** Direct reports rated their perceived supervisor support on a five-point scale (1 = *strongly disagree* to 5 = *strongly agree*) using the one-item measure: “I can count on my supervisor for support when I need it” (Fisher, Matthews, & Gibbons, 2016).

## RESULTS

I used SPSS v. 24 to clean and analyze all data. The mean, standard deviation, and correlations for all measured variables are presented in Table 3 for the leader sample and Table 4 for the direct report sample. Thirty-seven male executive-level leaders from a global manufacturing company participated in the study. Fourteen of the 20 leaders who completed the training also responded to the survey, as did 23 of the 29-person control group, for response rates of 70% for the treatment group and 79% for the control. Based on a two-group, between-subjects test, given an alpha level of .05 and power of .80, the smallest effect size one could reliably detect with the design was 0.86. The leaders had an average age of 52.05 ( $SD = 7.38$ ), 92% were Caucasian, and 92% were married. The average length of tenure for working at the organization was 19.58 years ( $SD = 12.86$ ) and 5.75 years ( $SD = 5.81$ ) for working in their current role.

In addition to collecting data on the treatment and control groups of leaders, their direct reports also were assessed ( $n = 296$ ). The total number of direct reports per leader ranged from two to fourteen. Of the direct reports who completed the survey ( $n = 172$ , direct report response rate = 58%), 71 reported up to treatment participants and 101 were managed by control group leaders (treatment group response rate = 63%, control group response rate = 55%). Females comprised of 29% of the direct report sample ( $n_{treatment} = 24$ ;  $n_{control} = 26$ ), 80% were married, and the average age was 44.5 ( $SD = 9.78$ ). Males comprised the majority of the direct report sample ( $n_{treatment} = 47$ ;  $n_{control} = 75$ ), 77.8% were married, and the average age was 44.2 ( $SD = 9.75$ ). More direct reports held a mid-level manager role (46%) compared to any other role in the organization (see Figure 1). Direct reports worked for an average of 6.43 ( $SD = 6.66$ ) years in

their current role and held an average tenure of 13.5 ( $SD = 9.61$ ) years for working at the organization, regardless of role.

To assess evidence of training effectiveness, I evaluated the mean score differences between treatment and control groups on the outcome variables organized by Kraiger et al.'s (1993) taxonomy of changes in learners. I will be presenting my results in two ways. I will first present traditional significance tests (e.g., t-tests). Significant test results represent the probability that a difference so extreme would result if the null hypothesis was true. If the test is not significant, I cannot reject the null hypothesis. One explanation for null effects is that the treatment did not produce the desired effect. However, a second explanation could be that I had insufficient power to produce a significant test result, given the magnitude of the effect. Power refers to the probability of the null hypothesis being rejected when it is false (Cohen, 1988). Low power significantly reduces the ability to achieve the  $p < .05$  standard for determining statistical significance. Using the statistical program G\*Power (Faul, Erdfelder, Lang, & Buchner, 2007) I conducted a sensitivity analysis and determined the smallest effect size likely to be detected given 95% power and the sizes of the leader ( $n = 34$ ) and direct report ( $n = 172$ ) samples. Assuming no missing data, results of the sensitivity analysis found that the smallest possible effect size that would have allowed me to detect a statistically significant difference between the treatment and control groups was  $d = 1.14$  for the leader sample and  $d = .51$  for the direct report sample. For variables with missing data, I report the updated critical value generated by the sensitivity analysis based on the correct sample size.

While it is impossible to know in a single study whether the null effects are due to the absence of a treatment effect or low power, investigating effect sizes inform this question. Effect sizes are simply the difference between cell means divided by a measure of dispersion. Thus,

they are independent of sample size, and there are benchmarks for interpreting their magnitude (Bosco, Aguinis, Singh, Field, & Pierce, 2014). Thus, inspecting the effect sizes – in addition to the significance tests – gives insights into how meaningful an effect might be. Research scientists have advocated for the presentation of effect sizes (rather than significance tests) as a primary way of describing research outcomes (e.g., Cumming, 2014; Ioannidis, 2005). General guidelines for interpreting the effect of an intervention include  $d \approx 0.2$  as small,  $d \approx .05$  as medium and  $d \geq 0.8$  as a large effect (Cohen, 1988). Assuming a normal distribution, effect sizes can be translated in terms of the amount of overlap between the two groups. This common language interpretation explains findings in terms of the percentage of the treatment group that would be above the mean of the control group. For example, an effect size of 0.9 means that the score of the average participant in the treatment group would exceed the scores of 82% of control group participants.

First, I will share the results of the skill-based outcomes according to both self- and other-report data. I then report evidence of cognitive outcomes followed by affective outcomes, both derived from self-report leader data. Third, I assess evidence of organizational payoff by presenting the results of the other-report provided by direct reports. Due to the low sample size, I assumed lower scale reliabilities and corrected for attenuation across for the correlations between treatment (which is assumed to have no measurement error) and outcome variables by dividing the non-corrected correlation coefficient by the square root of the reliability coefficient of all dependent variables (Schmidt & Hunter, 2015).

### **Skill-Based Outcomes**

I hypothesized that, compared to control group participants, leaders who participated in the training would engage in more participation in gender parity (H1); mentoring (H2a),

sponsoring (H2b), and confidence building (H2c) behaviors; and (H3a), disruptor (H3b), and catalyst (H3c) behaviors. To assess the effect of training on skill-based outcomes, I first calculated independent t-tests for each outcome variable<sup>4</sup>. As discussed above, I also calculated Cohen's (1988) *d*-statistic to generate an effect size for all behavioral outcome variables for both the leader and direct report sample (see Tables 5 and 6).

To evaluate the effectiveness of training on skill-based outcomes, I measured leaders' self-reported participation in gender parity and the frequency in which leaders enacted Ally Accelerators and Change Agent Tactics using both self-report (leaders) and other-report (leaders' direct reports) data.

***Participation in gender parity.*** For the participation in gender parity measure, the treatment group ( $M_T = 3.17$ ,  $SD_T = 0.44$ ) scored significantly higher than control group leaders ( $M_C = 2.33$ ,  $SD_C = 0.78$ ),  $t(35) = 3.67$ ,  $p = .001$ , 95% CI [0.38, 1.31],  $d = 1.25$ . The corrected effect size for the analysis ( $d_c = 1.39$ ) exceeded Cohen's (1988) convention for a large effect ( $d = .80$ ), indicating a strong effect of training on participation in gender parity. In other words, the score of the average participant in the treatment group would exceed the scores of 92% of control group participants. Hypothesis 1 was therefore supported.

***Ally accelerators.*** For the Ally Accelerators, I measured how frequently leaders enacted each specific behavior in each three broad categories (i.e., mentoring, sponsoring, and building confidence) according to the leaders themselves as well as their direct reports. I also included an overall behavioral-change variable in which leaders and direct reports indicated if there was more, less, or no change in the frequency in which leaders enacted the three broad categories of

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<sup>4</sup> Conducting subsequent t-tests inflates the experiment-wise error rate, or the probability of committing at least one Type I error when multiple tests are conducted and all null hypotheses are true.

Ally Accelerators between the time of data collection and three months prior (i.e., before to the treatment group's exposure to the training).

*Mentoring.* For mentoring, the leaders who completed the training ( $M_T = 21.79$ ,  $SD_T = 4.25$ ) indicated slightly greater frequency of enacting mentoring behaviors compared to control group leaders ( $M_C = 20.45$ ,  $SD_C = 4.55$ ). However, the obtained  $d_c$ , 0.04, is much less than 1.15, the critical value for  $d$  obtained from the sensitivity analysis. The other-report data replicated the self-report findings insofar that direct reports rated treatment group leaders as enacting slightly more mentoring behaviors ( $M_T = 21.79$ ,  $SD_T = 4.25$ ) than the control group leaders ( $M_C = 20.45$ ,  $SD_C = 4.55$ ). Yet the corrected effect size ( $d_c = 0.04$ ) also did not meet the critical value generated by the sensitivity analysis,  $d = 0.81$ .

For the behavior change item assessing whether each leader engaged in more, less, or the same amount of mentoring over the past three months, I found a significant effect of training between the treatment and control groups for both self-report ( $M_T = 0.79$ ,  $SD_T = 0.43$ ;  $M_C = 0.26$ ,  $SD_C = 0.45$ ;  $d = 1.19$ , 95%  $CI_d$  [0.46, 1.90]) and other-report data ( $M_T = 0.25$ ,  $SD_T = 0.44$ ;  $M_C = 0.09$ ,  $SD_C = 0.32$ ;  $d = 0.44$ , 95%  $CI_d$  [0.13, 0.74]). I could not correct for attenuation on any of the behavior change variables because they were derived from one-item measures and therefore had a reliability of 1.0. Nonetheless, the uncorrected effect size for both leader and direct report samples indicated a large effect of training on change in frequency of mentoring behaviors in the three months since the treatment group had completed the program (see Tables 7 & 8). These findings provide moderate support for Hypothesis 2a.

*Sponsoring.* Although leaders who completed the training reported engaging in more sponsoring behaviors compared to the control group ( $M_T = 19.07$ ,  $SD_T = 3.60$ ;  $M_C = 17.86$ ,  $SD_C = 5.09$ ). The obtained corrected effect size ( $d_c = 0.27$ ) was less than the critical value

obtained from the sensitivity analysis ( $d = 1.15$ ), and indicated a small effect of training on sponsoring behaviors. When I assessed the difference between treatment and control groups on the self-report three-month behavior change item ( $M_T = 0.57$ ,  $SD_T = 0.51$ ;  $M_C = 0.26$ ,  $SD_C = 0.45$ ), the effect of training on increasing sponsoring behaviors ( $d = 0.66$ ) indicated a medium effect.

Opposite to what was predicted, direct reports rated leaders from the control group as engaging in *more* sponsoring behaviors compared to treatment group leaders ( $M_T = 18.35$ ,  $SD_T = 3.84$ ;  $M_C = 20.25$ ,  $SD_C = 5.76$ ). The corrected effect size ( $d_c = -0.40$ ) did not meet the threshold determined by the sensitivity analysis ( $d = 0.91$ ). Direct reports did, however, indicate a statistically significant effect of training on sponsoring behaviors insofar that leaders from the treatment group engaged in more sponsoring behaviors in the three months since completing the training compared to the control group ( $M_T = 0.25$ ,  $SD_T = 0.44$ ;  $M_C = 0.11$ ,  $SD_C = 0.35$ ;  $d = 0.37$ , 95%  $CI_d [0.06, 0.68]$ ). Taking all of the above findings into account, the evidence provides mixed support for Hypothesis 2b.

*Building confidence.* Leaders who completed the training reported engaging in more confidence building behaviors ( $M_T = 29.62$ ,  $SD_T = 5.24$ ) compared to the control group ( $M_C = 26.94$ ,  $SD_C = 5.86$ ). The moderate effect of training on self-report confidence building behaviors ( $d_c = 0.47$ ) was less than the critical value generated by the sensitivity analysis ( $d = 1.23$ ).

According to the other-report data, direct reports rated leaders who completed the training as engaging in *fewer* confidence building behaviors compared to the control group ( $M_T = 27.41$ ,  $SD_T = 6.61$ ;  $M_C = 29.61$ ,  $SD_C = 7.86$ ). The corrected effect size ( $d_c = -0.31$ ) was less than the critical threshold to detect a significant difference between groups ( $d = 1.00$ ). As for the

three-month behavioral change variable, I found a positive effect of training for both self-report ( $M_T = 0.71$ ,  $SD_T = 0.47$ ;  $M_C = 0.22$ ,  $SD_C = 0.42$ ;  $d = 1.13$ , 95%  $CI_d$  [0.41, 1.84]) and other-report data ( $M_T = 0.30$ ,  $SD_T = 0.46$ ;  $M_C = 0.08$ ,  $SD_C = 0.31$ ;  $d = 0.57$ , 95%  $CI_d$  [0.26, 0.88]) insofar that leaders in the treatment group engaged in more confidence building behaviors overall since completing the training compared to the control group. Due to the inconsistency across the various measures of confidence building behaviors, evidence for Hypothesis 2c is inconclusive.

***Change agent tactics.*** To assess the effect of training on the three Change Agent Tactics (includer, catalyst, and disruptor), I replicated the methodology I used to assess differences between the treatment and control group for the Ally Accelerators.

*Includer.* According to the self-report data, leaders who participated in the training engaged in slightly more includer behaviors compared to the control group, albeit these findings were not statistically significant ( $M_T = 19.71$ ,  $SD_T = 2.70$ ;  $M_C = 18.86$ ,  $SD_C = 2.87$ ;  $d_c = 0.35 < d_{critical} = 1.15$ ). The same pattern held true for the other-report data insofar that the effect of training on the frequency of leader includer behaviors ( $d_c = -0.13$ ) was less than the critical effect size generated by the sensitivity analysis ( $d = 0.59$ ) needed to detect a significant difference between treatment and control group leaders ( $M_T = 17.26$ ,  $SD_T = 4.33$ ;  $M_C = 16.75$ ,  $SD_C = 3.71$ ).

After assessing whether leaders engaged in more, fewer, or the same amount of includer behaviors over the past three months, I found that the training had a positive effect on overall behavior change. However, the strength of the effect of training on the treatment group was notably greater for the self-report data ( $M_T = 0.86$ ,  $SD_T = 0.36$ ;  $M_C = 0.22$ ,  $SD_C = 0.42$ ;  $d = 1.60$ , 95%  $CI_d$  [0.76, 2.27]) compared to the other-report data ( $M_T = 0.38$ ,  $SD_T = 0.49$ ;  $M_C = 0.23$ ,  $SD_C = 0.44$ ;  $d = 0.33$ , 95%  $CI_d$  [0.02, 0.63]). These findings provide partial support for Hypothesis 3a.



*Catalyst.* For the frequency of which leaders self-reported enacting inclusion behaviors, the difference between the treatment and control groups was negligible ( $M_T = 21.93$ ,  $SD_T = 2.67$ ;  $M_C = 21.35$ ,  $SD_C = 3.81$ ). Moreover the effect of training on increasing catalyst behaviors ( $d = 0.16$ ) did not reach the critical value generated by the sensitivity analysis ( $d = 1.22$ ). Similarly, the other-report data indicated that the training had a trivial effect on the frequency in which leaders enact catalyst behaviors ( $M_T = 21.67$ ,  $SD_T = 4.47$ ;  $M_C = 20.95$ ,  $SD_C = 4.92$ ;  $d_c = 0.17 < d_{critical} = 0.73$ ). For the three-month behavior change variable, I found a large, positive effect of training on enacting more catalyst behaviors for the self-report data ( $M_T = 0.79$ ,  $SD_T = 0.43$ ;  $M_C = 0.17$ ,  $SD_C = 0.39$ ;  $d = 1.52$ , 95% CI<sub>d</sub> [0.76, 2.27]) and a positive, moderate effect of training on enacting more catalyst behaviors according to the leaders' direct reports ( $M_T = 0.27$ ,  $SD_T = 0.45$ ;  $M_C = 0.13$ ,  $SD_C = 0.37$ ;  $d = 0.34$ , 95% CI<sub>d</sub> [0.04, 0.65]). The overall findings provide partial support for Hypothesis 3b.

*Disruptor.* Leaders who completed the training indicated enacting slightly higher rates of disruptor behaviors compared to the control group ( $M_T = 23.64$ ,  $SD_T = 4.25$ ;  $M_C = 22.73$ ,  $SD_C = 5.31$ ). The effect of training on increasing catalyst behaviors ( $d_c = 0.19$ ) did not reach the critical threshold generated by the sensitivity analysis ( $d = 1.25$ ), however. The other-report data replicated the findings from the self-report data insofar as direct reports indicated that leaders from the treatment group engaged in slightly more disruptor behaviors compared to the control group, although the mean difference was not significant ( $M_T = 26.67$ ,  $SD_T = 5.65$ ;  $M_C = 25.47$ ,  $SD_C = 6.31$ ;  $d_c = 0.21 < d_{critical} = 0.91$ ). As for the three-month behavioral change variable, I found a significant and positive effect of training for both self-report ( $M_T = 0.86$ ,  $SD_T = 0.36$ ;  $M_C = 0.17$ ,  $SD_C = 0.39$ ;  $d = 1.80$ , 95% CI<sub>d</sub> [1.01, 2.85]) and other-report data ( $M_T = 0.32$ ,  $SD_T = 0.47$ ;  $M_C = 0.17$ ,  $SD_C = 0.40$ ;  $d = 0.36$ , 95% CI<sub>d</sub> [0.05, 0.67]) insofar that leaders in the

treatment group engaged in more sponsoring behaviors overall since completing the training compared to the control group. Therefore, partial support was found for Hypothesis 3c.

### **Cognitive Outcomes**

To test the effect of training on expected cognitive outcomes, I measured differences between the treatment and control groups' self-report data that measured their knowledge of gender equality and self-awareness of gender biases. Specifically, I hypothesized that, compared to control group participants, leaders who participated in the training would have greater knowledge of workplace gender inequality (H4) and more self-awareness of gender bias (H5). The data showed that leaders who completed the training were more knowledgeable about workplace gender equality ( $M_T = 3.77$ ,  $SD_T = 0.80$ ) compared to the control group ( $M_C = 3.19$ ,  $SD_C = 0.71$ ),  $t(35) = 2.30$ ,  $p = .027$ , 95% CI [0.07, 1.10],  $d = 0.78$ . The corrected effect size ( $d_c = 0.92$ ) indicates a strong effect of training on leaders' knowledge of gender equality. This means that the average leader who was trained would be at the 82<sup>nd</sup> percentile of untrained leaders. Hypothesis 4 was therefore supported.

I used a subset of items from the KGE scale to isolate items that specifically target one's awareness of gender biases to assess whether the training had a positive effect on this cognitive outcome. The treatment group expressed greater awareness of gender biases ( $M_T = 4.17$ ,  $SD_T = 0.94$ ) compared to the control group ( $M_C = 3.78$ ,  $SD_C = 0.88$ ). Although the overall effect of training on this outcome was moderate ( $d_c = 0.51$ ) it was less than the critical value generated by the sensitivity analysis ( $d = 1.14$ ). Therefore, partial support was found for Hypothesis 5.

### **Affective Outcomes**

For affective outcomes, I hypothesized that leaders who participated in the training would have more favorable views about workplace gender equality (H6) and feel more motivated to

contribute to gender parity initiatives (H7) compared to leaders in the control group. The data showed that leaders in the treatment group were more likely to endorse the benefits of gender equality ( $M_T = 5.13$ ,  $SD_T = 0.75$ ) compared to the control group ( $M_C = 4.80$ ,  $SD_C = 0.80$ ). The effect of training on self-reported benefits of gender equality was moderate ( $d_c = 0.44$ ), though not strong enough to reach the critical threshold generated by the sensitivity analysis ( $d = 1.14$ ).

I measured motivation to be an ally by assessing whether men felt they had a rightful place at the table to participate in workplace gender equality initiatives (i.e., psychological standing). I found that training had a significant, strong effect on participants' psychological standing insofar that leaders who completed the training indicated stronger motivation to be a male ally ( $M_T = 4.52$ ,  $SD_T = 0.59$ ;  $M_C = 3.87$ ,  $SD_C = 0.87$ ;  $d = 0.84$ ,  $d_c = 1.06$ , 95%  $CI_d [0.14, 1.52]$ ). The evidence therefore provides partial support for Hypothesis 6 and strong support for Hypothesis 7.

### **Organizational Outcomes**

To explore the effect of training on predicted organizational outcomes, I analyzed direct reports' perceptions of inclusivity, confidence in leadership ability, and job attitudes (i.e., job satisfaction, turnover intentions, and supervisory support). I hypothesized that direct reports of leaders who completed the training had more favorable perceptions of inclusivity (H8), higher confidence in their leadership ability (H9), more job satisfaction (H10), less turnover intentions (H11), and greater perceived supervisor support (H12) compared to the control group. I also sought to investigate if there were gender differences across any of the outcome variables, although no formal hypotheses were associated with gender differences. This exploratory analysis of the effect of gender on results will also be presented below.

**Perceptions of inclusivity.** Perceptions of inclusivity were measured across three sub-scales: Authenticity (Auth), Membership (Mem), and Affection (Aff). Direct reports of leaders from the treatment group indicated lower levels of inclusivity compared to those who reported to leaders from the control group for all three sub-scales ( $M_T = [4.54_{Auth} 4.58_{Mem} 4.82_{Aff}]$ ,  $SD_T = [0.96_{Auth} 0.98_{Mem} 0.53_{Aff}]$ ;  $M_C = [4.73_{Auth} 4.91_{Mem} 4.92_{Aff}]$ ,  $SD_C = [0.83_{Auth} 0.90_{Mem} 0.61_{Aff}]$ ). Therefore, the data did not provide support for Hypothesis 8.

Moreover, men had slightly higher ratings on all three perceptions of inclusivity sub-scales ( $M_F = [4.56_{Auth} 4.57_{Mem} 4.86_{Aff}]$ ,  $SD_F = [0.98_{Auth} 1.09_{Mem} 0.59_{Aff}]$ ;  $M_M = [4.69_{Auth} 4.86_{Mem} 4.89_{Aff}]$ ,  $SD_M = [0.85_{Auth} 0.87_{Mem} 0.58_{Aff}]$ ) compared to women. Table 9 displays the gender differences across all other-report measures related to direct report perceptions and attitudes.

**Confidence in leadership ability.** I measured confidence in leadership ability by measuring direct reports' self-efficacy on scales for general (Gen) and transformational leadership (Tran). There was no statistically significant effects in confidence in leadership ability ratings between direct reports of treatment ( $M_T = [3.68_{Gen} 3.50_{Tran}]$ ,  $SD_T = [0.37_{Gen} 0.40_{Tran}]$ ) and control group leaders ( $M_C = [3.66_{Gen} 3.43_{Tran}]$ ,  $SD_C = [0.39_{Gen} 0.42_{Tran}]$ ). The corrected effect size of training on general ( $d_c = 0.07$ ) and transformational leadership self-efficacy ( $d_c = 0.18$ ) failed to reach the critical value generated by the sensitivity analysis ( $d = 0.51$ ). Therefore, insufficient support was provided for Hypothesis 9. Neither the effect of gender on general ( $t = 1.35$ ) or transformational leadership ability ( $t = 1.43$ ) reached the critical t-value generated by the sensitivity analyses ( $t = 1.65$ ), although females scored slightly lower than males on both measures ( $M_F = [3.61_{Gen} 3.39_{Tran}]$ ,  $SD_F = [0.43_{Gen} 0.45_{Tran}]$ ;  $M_M = [3.69_{Gen} 3.49_{Tran}]$ ,  $SD_M = [0.36_{Gen} 0.39_{Tran}]$ ).

**Job attitudes.** Respondents who reported to leaders from the treatment group were found to have lower rates of job satisfaction compared to the control group ( $M_T = 4.92$ ,  $SD_T = 0.91$ ;  $M_C = 5.17$ ,  $SD_C = 0.70$ ;  $d_c = -0.35$ ;  $d = -0.31$ , 95%  $CI_d [0.00, 0.61]$ ). Therefore, Hypothesis 10 was not supported. Men did report slightly higher rates of job satisfaction ( $M_M = 5.13$ ,  $SD_M = 0.73$ ) compared to women ( $M_F = 4.91$ ,  $SD_F = 0.93$ ).

Direct reports from the treatment group indicated slightly higher turnover intentions compared to the control group ( $M_T = 2.18$ ,  $SD_T = 1.06$ ;  $M_C = 2.05$ ,  $SD_C = 1.09$ ;  $d_c = -0.13$ ;  $d = 0.12$ , 95%  $CI_d [-0.18, 0.42]$ ); however, the effect of training on turnover intentions was opposite than expected. Hypotheses 11 was therefore not supported. Although not statistically significant, women indicated slightly higher intentions to leave the organization ( $M_F = 2.34$ ,  $SD_F = 1.17$ ;  $M_M = 2.01$ ,  $SD_M = 1.02$ ).

Although the difference between groups was negligible, direct reports rated leaders who completed the training as slightly less supportive than the control group leaders ( $M_T = 4.93$ ,  $SD_T = 1.14$ ;  $M_C = 5.04$ ,  $SD_C = 0.97$ ;  $d = -0.11$ , 95%  $CI_d [0.00, 0.40]$ ). Hypothesis 12 was also rejected. Results also show no statistical difference between males and females in their perceptions of supervisor support, although females scored slightly lower than males on this variable ( $M_F = 4.86$ ,  $SD_F = 1.18$ ;  $M_M = 5.05$ ,  $SD_M = 0.98$ ).

## DISCUSSION

The purpose of this research was to build and evaluate a training program that equips men to serve effectively as allies to women in the workplace, making progress toward the ultimate goal of increasing the number of women in leadership positions. To evaluate its effectiveness, I administered the training program to a randomly assigned group of executive-level leaders within a global manufacturing company. Three months after delivering the training, leaders from both the treatment and control groups and their direct reports were surveyed to assess the training's effect on targeted learning outcomes.

The idea for this study germinated after joining a leadership development consulting firm that had recently built a series of training courses for empowering aspiring women leaders and equipping them with behaviors they could use to propel their careers. I quickly noticed, however, that men were not included as participants within the training curricula. With men holding 76% of senior-level leadership positions worldwide and 94% of all Fortune 500 CEO positions (Pew Research Center, 2017; Miller et al., 2018), organizations would be amiss to not actively enlist them in the fight for gender parity. By dominating the top leadership positions in organizations, men hold the power to make substantial change towards increasing gender parity (Benschop & Van den Brink, 2014; Vinkenburg, 2017). First, men can serve as mentors and sponsors to women, as well as help to close the confidence gap—the research-based phenomenon that finds that women unjustifiably believe they are less qualified for leadership roles compared to men (Kay & Shipman, 2014). Second, as the majority group of most organizations, men are also in a prime position to begin changing the organizational culture to be more gender-inclusive, which has been found to predict greater success with women in leadership initiatives (Ely et al., 2011).

Using best practices from the diversity and inclusion, training and development, and instructional design literatures, I spent nine months building the “Men as Allies” training program in partnership with the aforementioned consulting firm. Once its design and content were finalized, I conducted a randomly assigned, treatment-control, post-only training evaluation to assess the effectiveness of the program on expected changes in learners. I organized my training outcomes by the Kraiger et al. (1993) taxonomy of skill-based, cognitive, and affective outcomes, as well as organizational payoff variables (Kraiger, 2002). I collected and analyzed self- and other-report data to assess the effectiveness of the training by comparing measures between the treatment and control groups. I anticipated finding a greater frequency of trained behaviors, increased knowledge about workplace gender equality, and more favorable attitudes about their role as male allies to women in the workplace.

Regarding changes in skill-based outcomes, my results showed a strong effect of training on leaders’ self-reported participation in gender parity. Partial support was provided for the remaining skill-based outcomes. Both leaders themselves and their direct reports indicated higher engagement in all categories of Ally Actions (mentoring, sponsoring, and building confidence) and Change Agent tactics (includer, disruptor, catalyst) three months after completing the training according to the corresponding single-item retroactive measures. The effect of training on skill-based outcomes was stronger for self-report ratings than other-report ratings.

For cognitive outcomes, I found a strong effect of training on leaders’ knowledge of gender inequality, but no differences between treatment and control group on their self-awareness of gender biases. Regarding affective outcomes, leaders who completed the training indicated slightly more favorable attitudes toward the benefits of gender equality compared to the control group. I found a strong effect of training on participants’ willingness to speak up

about workplace gender inequality insofar that scores for treatment group were significantly higher than scores for leaders in the control group.

Finally, the anticipated effect of training on perceptions and attitudes of the leaders' direct reports (organizational outcomes) was contrary to expectations. Although differences in mean scores between direct reports of leaders in the treatment and control groups were slight, those who reported to control group leaders indicated *more* favorable scores on measures of perceived inclusivity, job satisfaction, turnover intentions, and supervisor support. For confidence in leadership ability, those who reported to treatment group leaders indicated marginally higher scores than the control group, yet the effect size was negligible. I further discuss these outcomes below.

### **Overall Assessment of Training Effectiveness**

In summary, my data show that evidence for the effectiveness of the training is mixed. Although I did find some positive effects of training on cognitive and affective outcomes, the data failed to provide support for the effectiveness of the training on skill-based outcomes. One exception was the three-month behavior change items—trained participants reported greater frequencies of all behaviors since the training period than did control group participants. Disconcertingly, the other-report data indicated that leaders in the treatment group engaged in *less* Ally Accelerator and Change Agent Tactic behaviors compared to the control group. Moreover, direct reports of leaders in the treatment group expressed less favorable job attitudes compared to those in the control group.

I have considered three different interpretations as to why the direct reports of control group leaders indicated more favorable scores compared to those in the treatment group. First, it is possible that the training simply does not change participant behavior or that there was



insufficient time after training for leaders to implement and become proficient at the trained behaviors. Worse, it could have even had a backlash effect insofar that leaders who participated in the training were then less likely to engage in ally behaviors. I am reluctant to believe the training solicited this backlash for two reasons. Foremost, it was built explicitly to mitigate backlash, using best practices from the literature (see Kaiser et al., 2013). Secondly, leaders in the treatment group had more knowledge about and favorable attitudes toward workplace gender equality compared to the control group, as evidenced by the support provided for Hypotheses 6 and 7. It is unlikely that participants in the treatment group would behave discordantly from their favorable views toward workplace gender equality, as this would result in cognitive dissonance—something most people tend to avoid (Festinger, 1962). Perhaps leaders in the treatment simply did not have enough time nor opportunity to put their learned behaviors into action compared to those in the control group, factors that fall beyond the control of this study. Another possibility is that they struggled to put their learned principles into practice. For example, what if the leader had no female direct reports or other contact with aspiring female leaders within the organization? As it is also possible that the training had no effect on participant behavior, more research by the sponsor organization is necessary to link training to on-the-job behavior or to isolate factors in training that can be modified to improve impact.

Another possible explanation is that cognitive and affective outcomes are easier to change via training compared to more difficult outcomes like behaviors and the organizational payoff variables. Whereas participants' knowledge about and attitudes toward being a male ally could have changed during the training itself, behavioral outcomes are more distal insofar that it would take time for leaders to find opportunities to enact their ally behaviors. Said more simply, cognition and attitudes can change during the training, but what one *does* can only change after

training and in a setting where there are competing demands for the leaders time and energy (Blume et al., 2010). This explanation is supported by meta-analytic evidence for diversity training which shows that it generally has stronger effects on cognitive outcomes ( $g = .57$ ) than behavioral ( $g = .48$ ) or attitudinal outcomes ( $g = .30$ ; Bezrukova et al., 2016). The lesser effect of training on behavioral outcomes compared to cognitive or attitudinal outcomes within this study could also be explained by the intention to behavior gap, or when good intentions incited by training fail to translate to action (Gollwitzer, 1999). Treatment leaders' failure to enact all behaviors effectively may also explain findings specific to organizational payoffs. If the effect of training on the organizational payoff variables reported by direct reports is mediated by leader behavior, one should expect no effect on direct reports' job attitudes if their leaders' behaviors did not substantially change. Additionally, job attitudes are the result of many additional factors out of their leaders' control such as compensation, coworkers, stress, and personality (e.g., Griffeth, Hom, & Gaertner, 2000; Judge, Heller & Mount, 2002).

The aforementioned interpretations explain why the treatment group didn't score better on certain outcome measures compared to the control group, but not why the control group scored higher than the treatment group. One possible explanation for these findings is that the resulting change in behavior among the leaders may have been negatively perceived by their direct reports. Another explanation is that direct reports of the treatment group leaders may have known that their leaders participated in the training and thus had higher expectations for their behavior. Turnley and Feldman (2000) analyzed cross-sectional survey data from 800 working adults to investigate the effect of breaking a psychological contract on workplace perceptions. The researchers found a correlation of  $r = -0.56$  between unmet expectations and job satisfaction, providing evidence that violating workplace expectations can result in pervasive negative impact

on employee attitudes (Turnley & Feldman, 2000). In the present study, lower post-test scores could have been due to unmet expectations rather than an actual decline in the effectiveness of leader behaviors. Although the pre-survey email was intentionally vague as to whether leaders participated in the training, there was nothing preventing the direct reports from directly asking whether their leader had already completed the training.

Regardless, the study's findings are mixed and therefore I cannot definitively conclude that the training effectively produced its intended outcomes. Before interpreting findings for each of the broad learning outcomes, though, I would like to briefly explain the difference between practical and statistical significance and the implication this distinction has on this study's findings. Statistical significance is the probability that differences in group means are not due to error which can result in rejecting the null hypothesis when it is in fact true. Practical significance assesses whether the magnitude of the observed effect is large enough to have a meaningful application of findings. I argue that although I was unable to determine a statistically significant effect of training on many of the study's outcomes, the mean differences between groups and positive effect of training on the treatment group on many variables shows there is value to organizations training men to think and feel differently about their role in helping to correct for workplace gender inequality. I will now present more in-depth interpretation of findings, organized by the four broad categories of outcomes.

### **Interpretation of Findings**

**Skill-based outcomes.** The results indicated a strong effect of training on leader's participation in gender parity. Those in the treatment group were significantly more likely to speak up about workplace gender inequality compared to the control group. When men are motivated to champion workplace gender equality, they are more likely to use their power and

status to advance women in leadership initiatives (Sherf et al., 2017). As men are seen as more credible sources when speaking up about workplace gender inequality, they can use their perceived credibility to influence others toward making meaningful change toward a more gender-inclusive workplace (Chattopadhyay et al., 2004; Meyerson & Kolb, 2000).

Unlike participation in gender parity, there was no significant effect of training on any of the Ally Accelerators nor Change Agent Tactics for either the leader self-report data or the direct report data. In other words, I did not find significant differences between treatment and control regarding how frequently they exhibited Ally Accelerators and Change Agent Tactics. One possible explanation for this finding is that the participation in gender parity scale includes items that are more aspirational or hypothetical whereas the ally behavior scales require actual enactment of each action to “count” toward the overall score per category. Research on the theory of planned behavior has found that people are more likely to endorse intentions over actual behaviors because the former is easier to commit to compared to the latter (Armitage & Conner, 2001). Moreover, behavioral change is the most robust—yet most challenging—type of transfer outcome to capture after training (Baldwin, Ford, & Blume, 2009; Blume et al., 2010). This may explain the why the training did not appear to affect the frequency in which participants enacted the six broad categories of Ally Accelerator and Change Agent Tactic behaviors.

Unlike the aforementioned Ally Accelerator and Change Agent Tactic measures (which were calculated as summed scores in frequency items per scale), the one-item behavioral change item yielded a strong effect of training for each of the six behavioral categories. Recall that I included one additional measure of behavioral change by asking both participants and their direct reports to specify whether leaders engaged in more, less, or the same amount of the broad

categories of Ally Accelerator and Change Agent Tactic behaviors over the three-month period since the treatment group completed the training. According to my results, I found significant differences between treatment and control groups and large effect sizes for all behavior change variables *except* for sponsoring as self-reported by the leader sample. For example, compared to control group participants, trained leaders were more likely to mentor, build confidence, and serve as includers, catalysts and disruptor according to all self- and other-report data. I suspect that the non-significant effect of training on leaders' self-reported sponsoring behaviors could be due to the degree of risk leaders take when deciding to sponsor a junior employee. As opposed to mentoring, sponsoring requires putting one's reputation on the line by vouching for a junior-level person, which is deemed to be especially risky if that junior-level person is a woman (Ibarra et al., 2010). Because leaders must take this calculated risk when deciding to sponsor others, it makes sense for them to be more selective with whom they choose to sponsor. The conservative nature of sponsorship logically leads to sponsoring fewer people in general, and thus may explain lower rates of enacting this type of ally behavior compared to the other five categories. Based on this finding, I would caution practitioners not to implement the Men as Allies program as a standalone training, but rather supplement content specific to sponsoring with an additional training module on the nuanced implications of engaging in sponsoring behaviors as to better equip leaders with the skills needed to effectively and confidently sponsor junior employees.

Another interesting finding was that across all Ally Accelerator and Change Agent Tactic items, leaders self-reported exceptionally higher rates of positive behavior change over the three-month time span compared to observations of their direct reports. The effect sizes for the leader sample ranged from 1.13 to 1.80 ( $d_{self-report}$ ) whereas the direct report sample only generated effect sizes from 0.33 to 0.57 ( $d_{self-report}$ ). For example, both leaders and direct reports

respectively indicated that 79%<sub>self-report</sub> and 25%<sub>other-report</sub> of treatment group leaders increased their mentoring behaviors over the past three months, compared to only 26%<sub>self-report</sub> and 10%<sub>other-report</sub> of leaders in the control group (see Figures 2 & 3). The observed values for  $d$  indicate that there was generally a strong effect sizes of training on leaders' self-report behavior change data, whereas the effect of training on direct report perceptions of leaders' behavior change is moderate at best, yet nonetheless significant.

There are two possible explanations for the discrepancy between the self- and other-report data on the three-month behavior change variables. First, these findings are consistent with a general trend in organizational research in which self-evaluations tend to be more positive than ratings provided by others (Conway & Huffcutt, 1997; Harris & Schaubroeck, 1988). Research also finds that it is not uncommon for targets of evaluation measures to over-estimate their scores compared to other-report data (Atwater & Yammarino, 1997). Leaders may have also inflated their ratings due to social desirability effects insofar that they know they should be engaging in various Ally Accelerator and Change Agent Tactic behaviors, as the items largely represent the actions of engaged, empowering, and inclusive leadership. While social desirability effects may have increased the means of scale scores, it is less likely that the effects would differ across conditions. Therefore, social desirability effects would not negatively impact effect size estimates. The second and more interesting possibility is that leaders may have insights into changes in their behavior that direct reports do not. This is consistent with the recommendation of experts to incorporate multi-source feedback into leadership development programs to capture more and less visible leader behavior (Collins & Holton, 2004; Day, Fleornor, Atwater, Sturm & McKee, 2014). I would argue that Ally Accelerators—or the interpersonal actions that occur between male allies and women aspiring to leadership positions—are more likely to happen

behind closed doors. Therefore, direct reports are restricted to how much direct access and interactions they have with their leaders to adequately observe instances of mentoring, sponsoring, and confidence-building behaviors. This rationale does not apply to Change Agent Tactics, however, as those behaviors are intended to be enacted both publicly and consistently—if done effectively.

Based on these findings, I encourage future research evaluating the effectiveness of diversity and inclusion training programs to adopt a hybrid approach to data collection to control for over-estimation of self-report ratings and under-reporting of other-report ratings (see Borman, 1977). Kraiger and Jung (1997) recommend training evaluators choose criteria that are most appropriate to the phenomena that is expected to change. I therefore recommend that training participants should be rated by the source in the best position to rate them (i.e., direct reports for more visible variables, and self-ratings for less observable, more private variables).

**Cognitive outcomes.** Based on the results, the training significantly increased knowledge of gender equality among participants. One possible reason for the positive effect of training could be the use of empirically-supported active learning strategies (e.g., interactive activities, perspective-taking, self-reflection, and meaningful discussion) rather than passive instruction (e.g., lecture or video; Bell & Kozlowski, 2009). More research is necessary, however, to confirm this study's results were due to including more active instructional design methods. For organizations that want to increase gender equality knowledge via diversity training though, I would still endorse the instructional strategies utilized in this study for the goal of achieving similarly positive cognitive outcomes.

Regarding gender biases, although participants from the treatment group indicated higher self-awareness of gender biases compared to the control group, the effect of training on this

outcome was not significant. One reason I did not find an effect could be that the training was not sufficiently designed or delivered to raise awareness of one's gender biases. Although gender biases were discussed generally and demonstrated with data-based examples, the training did not include specific awareness-building strategies, but rather emphasized behavioral change.

Another possible reason for not finding an effect of training on self-awareness of gender biases is that I did not use a validated scale to measure one's awareness of gender biases; at the time of this research, no such scale existed. Thus, one potentially fruitful research opportunity is to develop a measure of gender bias self-awareness, and then validate it in part by measuring the effectiveness of diversity training programs. There is a need for such a measure given the need for research on the which components of diversity training are the most effective in affecting specific outcomes (Bezrukova et al., 2016).

**Affective outcomes.** I attempted to elicit more positive affective outcomes from participants in my training program by emphasizing the positive behaviors men can enact toward women in the workplace. In doing so, I attempted to overcome the criticism that diversity training tends to take a more reactive approach, focusing the behaviors men should *avoid* (see Dobbin & Kalev, 2016). This criticism results from the belief that focusing on avoiding behaviors creates a negative frame for thinking about diversity. Indeed, previous research has found that men have more positive attitudes toward diversity training when it is not framed as remedial (Holladay et al., 2003). My results showed a significant and strong effect for training on participants' motivation to be a male ally (as measured by psychological standing). Compared to the control group, leaders who participated in the training were more motivated to be allies to women in the workplace. By ensuring that the tone and content of the training was as positive



and non-threatening as possible, the training was designed to elicit participants' openness and responsiveness to the training objectives, and thus, more motivated to be an ally as a result.

**Organizational outcomes.** Finally, I explored whether there was a ripple effect of changes in leaders' skill-based, cognitive, and affective learning on the perceptions and attitudes of their direct reports. With the exception of the overall behavioral change variable that measured frequency of skill-based outcomes over the past three months, I did not find any significant effect of training on organizational outcome variables. Surprisingly, direct reports of control group leaders indicated *more* favorable perceptions and job attitudes compared to those who report to leaders from the treatment group (with the exception of confidence in leadership ability). Effect sizes for all the organizational payoff variables were small, however, providing no evidence that training had a positive impact on ratings of direct reports. Perhaps it was unreasonable to believe that three months provided enough time for the treatment group leaders' behaviors to influence perceptions and attitudes of their direct reports.

As I mentioned above, it is possible that not enough time nor available opportunities for leaders to successfully transform the outcomes gained by the training into actual leadership performance, and thus would not yet be experienced or witnessed by direct reports (Baldwin et al., 2009; Blume et al., 2010). Kraiger (2002) also argued that there is often a difference between behavior change and performance, such that immediately after training, behavior changes (for the better) but performance may decline as trainees try to apply what they learned. The time and energy necessary for changing one's behavior may come at the expense of other behaviors necessary for good performance. For leaders completing the training who were rated more poorly on organizational payoff variables compared to the control group, perhaps they were exploring new behavioral patterns; either the changes in their behavior or the perceptions of those

behaviors resulted in more negative evaluations from their direct reports. To investigate this speculation, I recommend future evaluations of this training program wait longer before collecting post-test data to ensure that trainees have sufficient time to master and implement learned outcomes.

### **Methodological Considerations**

The generalizability of the above findings depends on the methodological rigor of the overall evaluation design. Therefore, I will now discuss how this study compares to other diversity training evaluation studies, as well as how well this study meets the criteria for gold standard psychological intervention evaluation research.

**Standards for diversity training evaluation studies.** I used two recent diversity training meta-analyses (Bezrukova et al, 2016; Kalinoski et al., 2013) as guideposts for this study's design. Similar to my study, these meta-analyses aggregated cognitive, affective, and skill-based outcomes to assess the effectiveness of diversity training programs based on the Kraiger et al. (1993) taxonomy of learning outcomes. Most diversity training evaluation studies use self-report data and student samples (Kalinoski et al., 2013; Kulik & Roberson, 2008). In contrast, my study included other-report data and a sample of organizational leaders, thus increasing its relevance and generalizability to workplace populations. Many workplace diversity training programs do not evaluate the effectiveness of their programs beyond reactions (Perry, Kulik, & Field, 2009), nor are they developed using evidence-based best practices (King, Gulick, & Avery, 2010). This study is therefore on par with best practices from the diversity training literature and implements greater scientific rigor compared to typical workplace training evaluations.

**Gold standard for intervention evaluations.** Simons et al. (2016) identified 13 best practices to assess the quality of psychological intervention studies. Omitting criteria

recommended for gold standard training evaluation research could pose potential problems to inferring definitive results of the training's effectiveness. When excluded, some criteria are more problematic than others. Below, I will present these best practices, whether this study met the best practice criteria, and the implications on the scientific rigor of this evaluation study in cases where criteria were not met.

***Preregistration and documentation.*** My study met best practices related to preregistration—the clear expectations which outline the study's design and what is expected to be learned prior to it being conducted. First, the dissertation proposal process helped to ensure that the study design was determined and agreed upon prior to data collection. And second, the study did not deviate from preregistration as I followed all methodological procedures and measured all agreed-upon variables determined upon conclusion of the proposal meeting. Additionally, I fully documented the results of all outcome measure analyses within this paper, thus avoiding the concern of scattershot publishing.

***Analyses and data collection.*** Simon et al. (2016) cautioned against conducting contingent and/or subgroup analyses. First, I only conducted predetermined analyses agreed upon by my committee and the secondary analysis that explored gender differences between direct reports was correctly labeled as exploratory. Moreover, I did not conduct subgroup analyses to bolster positive findings for one subset of participants that did not replicate across other subgroups. Specific to data collection, my small sample size reduced the level of power required to detect treatment effects. Small sample sizes mitigate the power of randomization and are more likely to result in spurious findings. The only “severe problem” of my study was not including a baseline pre-test measure. Neglecting to include this crucial best practice precludes any conclusions about the causal efficacy of the intervention on measured outcomes. I was

therefore unable to determine that differences between the treatment and control groups on the post-training measures resulted from the training itself and not merely from residual differences in pre-training ability. I attempted to account for the exclusions of a pre-training baseline, however, by including retroactive measure to assess pre-post differences by including a three-month behavioral change item. Kraiger (2002) supported the use retroactive measures, especially in cases where pre-test measures could possibly contaminate those in the control group by exposing them to the study's outcome variables prior to training. I also tried to account for the lack of a pre-test baseline measure by randomly assigning participants to treatment groups, which I will explain in further detail below.

*Assignment of conditions.* By adopting a randomized treatment-control study design, I was able to avoid the otherwise “severe problems” posed by excluding a control group and random assignment to conditions (Simons et al., 2016). Moreover, the random assignment of participants reduced the probability that the two groups were unmatched. Because the both groups were drawn from the same sample of senior-level leaders within the same organization, it can be assumed that any systematic differences between the two groups were mitigated. My study did not, however, utilize an active control group. Doing so would have required the control group to have participated in comparable training program (e.g., same length, design, activity-types), albeit without content that would affect the intended outcomes of the Men as Allies program. By only having a passive control group (rather than a true non-treatment control group), I was unable to control for possible placebo effects among participants due to mere exposure to the training itself—regardless of its content. Not including an active control group poses substantial problems insofar that the effectiveness of the training program is based ambiguous or inconclusive evidence (Simons et al., 2016). Finally, blinding was not used for this

experiment, as all participants and researchers were aware of who was in the treatment versus control group. Knowing which participants were in which condition could mitigate accurate interpretation the results, thus undermining the study's findings. To summarize, my study included some but not all of the best practices associated with the assignment of participants to conditions.

**Overall assessment.** When best practices of psychological intervention research are excluded—especially those identified as causing “severe problems” when not included—the study's results should be interpreted as ambiguous or, at best, inconclusive (Simon et al., 2016). My study met eight of the 13 recommended best practices of intervention research. More notably, this research met two of the three criteria that result in “severe problems” when not met; and the unmet criterion of including a pre-test baseline measure was partially mitigated by including both a retroactive pre-test measure and random assignment to treatment groups. Moreover, the strength of my conclusions were mitigated by not using an active control group. Based on this assessment, I recommend the results of this study be interpreted with caution. Even considering its shortcomings, however, this research and its randomly assigned treatment-control design does go above and beyond what is typically done in evaluations of diversity training (see Bezrukova et al, 2016; Kalinoski et al., 2013) and the learning and development industry more generally (see Dobbin & Kalev, 2016). Although the study findings are mixed, its risks and opportunity costs were low, whereas the potential value is high. In other words, organizations who seek to increase workplace gender equality by implementing a similar training program among male leaders should feel generally confident that this strategy would solicit more good than harm among the affected population.

## Practical Applications

I believe this study provides two important practical applications for organizations. The first is already in practice. Specifically, the evidence-based intervention I built to help organizations promote the advancement of women in leadership provides a baseline for implementing an ally training program targeted at men. This research represents a starting point for further implementation, testing, and using subsequent findings to enhance its effectiveness on intended learning outcomes. To date, the training program has been piloted in a number of manufacturing, automotive, and technology companies across the U.S. It has also been delivered in Switzerland, India, Australia, and the U.K. Therefore, the impact of this training has the potential for broad reach across a wide variety of industries and cultures.

Second, while the design and development of the Men as Allies training program was already well underway, its content became more relevant and important than originally conceived when the #metoo movement erupted in late 2017 which brought the prevalence of workplace gender discrimination—and its detrimental effect on the well-being and professional success of women—to the forefront of social dialogue. Although #metoo initially surfaced in response to the prevalence of workplace sexual harassment, it has since encompassed a greater mandate for workplace and social gender equality (Wexler, Robbennolt, & Murphy, 2018). The #metoo movement has not only empowered women to no longer tolerate gender discrimination but has also forced men to confront their role in creating, sustaining, and benefiting from workplace cultures that systematically disadvantage women. Awareness alone is not enough, though, as gender studies professor Alex Miller explains:

“Owning up to #metoo means we must dedicate ourselves to dismantling the culture of masculinity we have inherited. We must stand alongside women as allies, and, together,

author and embody new models of masculinity that reject the sexism our culture continues to celebrate and condone (Miller, 2017b).”

By explicitly inviting men to the table as well as providing the behaviors, knowledge, and motivation needed to be effective allies for women in the workplace, the Men as Allies program provides another tool organizations can use to begin addressing the modern day reckoning that differential treatment of women in the workplace is still prevalent yet no longer acceptable (Wexler et al., 2018).

### **Limitations**

Although the current study had some strengths in its design and applicability to the modern workplace, there are also some limitations that reduce the generalizability of results and pose potential threats to internal validity. Due to this being applied research and having been granted the unique opportunity to collect data on an organizational sample, I did not conduct an a priori power analysis because I had no control over the number of participants assigned to this study. I did, however, conduct a post-hoc sensitivity analysis for all study variables using a publicly available power calculator, G\*Power (Faul et al., 2007). I was therefore able to calculate the smallest effect size I could detect with high probability based on sample size and power.

Because my overall sample size was low (especially for the treatment group,  $n = 14$ ) there are two primary problems. First, low power may lead to a Type II error. For example, the treatment group reported greater awareness of gender biases ( $M_1 = 4.17$ ,  $SD_1 = 0.94$ ) compared to the control group ( $M_2 = 3.78$ ,  $SD_2 = 0.88$ ), yet this finding was not significantly significant. There may be instances in which my treatment was effective, but I was unable to detect it. The second issue is that small sample sizes can result in greater sampling error. Schmidt and Hunter

(2015) identified a number of ways greater sampling error can negatively affect research findings including outliers having a greater impact on *SD* estimates, which are the basis for significance tests. Moreover, increased sampling error can also affect mean values, which can in turn affect significance test results. With only 14 participants in this study's treatment group, one low/high performer could have reduced/increased the mean and standard deviation, substantially altering the study findings. If I had had 140 participants in the treatment group, that same low performer would have a much smaller impact on the results. Fortunately, I tested the data for outliers prior to conducting my analyses. I also tried to correct for small sample size by calculating effect sizes rather than relying on traditional significance testing. I would recommend that as more organizations continue to purchase and complete this training, the consulting firm that owns Men as Allies should continue to collect outcome data. As a result, this initial research can be replicated using a more reasonable sample size, thus allowing for more robust statistical analyses to better assess training effectiveness. Even if the training continues to be offered to small samples, individual study effect sizes can be aggregated using meta-analytic techniques.

The second major limitation of this study is that I did not collect a pre-test measure to establish a baseline for all study variables. Without a pre-test measure, I am unsure exactly how much the training increased the treatment groups' enactment of targeted behavioral outcomes over time. I only collected data at one time point for two reasons. First, because the organizational sample was comprised of executive-level leaders, my key client contact was sensitive to over-sampling this high-status group. We were also concerned about attrition rates between Time 1 and Time 2. In other words, my client contact believed that participants were less likely to complete two surveys than one. As the post-test data were more crucial to my training evaluation, I wanted to maximize my sample for the post-test measure. A second case



for not collecting pre-test data can be made for controlling for possible reactance effects of the measures on treatment participants. Kraiger (2002) recommended asking participants to rate levels of improvement since before completing the training as a proxy for collecting pre-test baseline data. This is essentially what I was trying to accomplish by implementing my committee's sound advice to add in the three-month behavioral change item for the six Ally Accelerator and Change Agent Tactic categories. To create a more powerful design, future research should collect baseline measures to assess a true behavioral change over time—while also being cognizant of any unintended effects the pre-test measure may have on expected learning outcomes

The third limitation I will address has to do with taking a “kitchen sink” approach to my training design. To build a quality training program, I incorporated as many best practices in diversity and inclusion training as possible. To the extent that the training was effective, I can only conclude that all design elements might be necessary in future training. By only evaluating one implementation of the full training (i.e., consisting of all activities and design components), I was unable to isolate what specific features of the training affected the outcomes. If I had an unlimited supply of client organizations willing to pilot the training, I could systematically remove one component/feature of the training for each implementation and then compare effect sizes to assess the impact of not including various components has on the expected changes in learners. Future research should attempt to isolate specific components of the training to investigate which strategies have the greatest effect on the targeted skill-based, cognitive, and affective outcomes.

## **Ethical Implications**

Although I provided some supporting evidence that this study's intervention could be effective at helping men be better allies to aspiring female leaders, it is far from the silver bullet to end workplace gender inequality. One should be cautious when interpreting my findings and the results should not be used to promote the intervention without clear mention of the study's shortcomings (Simons et al., 2016). It is unlikely, however, that this training would cause more harm than good. Further, if you discount the organizational payoff results in my study as a measurement problem, there is no evidence of detrimental effects to study participants. In terms of affective, cognitive, and behavioral outcomes, trained leaders did no worse and often did better than control group participants. Thus, I would not predict that this training would result in men acting more discriminatory toward women in the workplace, especially because this training was intentionally designed to mitigate such backlash effects.

I recognize that the study falls short of a gold-standard intervention evaluation, yet it exceeds the norms for typical evaluation in this domain. Through this research, I have identified a number of recommendations and insights into ways in which this training and its evaluation can be improved. Rather than being viewed as the final evaluation of a surefire solution to eradicating workplace gender inequality, this research should be considered an important stepping stone in solutions aimed toward intentionally inviting men to the women in leadership table. Although the Men as Allies training will not solve all problems aspiring female leaders face, it could certainly help move the needle toward a more gender-inclusive workplace.

## CONCLUSION

Despite its shortcomings, this study accomplished my goal of building and evaluating a diversity training program that explicitly targets the behaviors, knowledge, and attitudes men need to be better allies to women in the workplace. My research contributes to the research and practice of training interventions designed to increase workplace gender equality in two primary ways. First, my Men as Allies training program meets a timely need expressed by organizations—and accelerated by the impact the #metoo movement has had on workplaces and society at large—to actively involve men in efforts to achieve gender parity. Second, this study evaluated the effectiveness of my training on expected changes in learners, providing some evidence that men can be trained to be better allies toward women in the workplace. Whether motivated by the business case for gender parity or by one’s personal conviction that anyone—regardless of gender—should be afforded the same opportunities to pursue and obtain positions of power, my Men as Allies training program can help organizations get one step closer toward achieving workplace gender parity.

## TABLES

**Table 1. Detailed overview of training program**

<p>1) The Business Case for Women in Leadership (40 minutes)</p>	<ul style="list-style-type: none"> <li>• A senior leader from the organization kicks off the session.</li> <li>• Participants respond to short scenarios that reveal the differences in the way women and men are treated in the workplace. The group addresses why this is a men-only session.</li> <li>• Participants discuss which women in leadership facts are particularly surprising to them. The facilitator highlights data points to build the business case for women in leadership.</li> <li>• The facilitator points to the criticality of unleashing potential across 100 percent of the organization’s workforce by actively advancing women. Participants explore what it means to be a male ally in that effort.</li> </ul>
<p>2) Unconscious Bias (25 minutes)</p>	<ul style="list-style-type: none"> <li>• The facilitator highlights the skill gap fallacy that says that men and women are better or worse at certain leadership skills.</li> <li>• The facilitator discloses a personal story representing a time the facilitator became aware of the importance of supporting women in leadership.</li> <li>• The facilitator explains the concept of unconscious bias and how it can influence behavior about women in the workplace.</li> <li>• In pairs, participants share their own situations in which unconscious bias got in the way of them being in effective male ally.</li> </ul>
<p>3) Ally Actions (20 minutes)</p>	<ul style="list-style-type: none"> <li>• The group explores three Ally Accelerators—mentoring, sponsoring, and building confidence—they can use to best partner with women and help them overcome personal barriers.</li> <li>• Participants think of one woman with whom they can partner and which Ally Accelerator they could use, then formulate it into specific actions they can take as a male ally.</li> </ul>
<p>4) Change Agent (30 minutes)</p>	<ul style="list-style-type: none"> <li>• Participants complete a profile that contains three tactics they can use as a change agent—being inclusive, a catalyst, and a disruptor. They discuss what these tactics mean and what their profile results reveal about their strengths and opportunities as an agent of cultural change within the organization.</li> <li>• The group identifies the top barriers to being a better ally. Participants identify one or two they personally have the ability to impact, and then determine which change agent tactics would be most appropriate to take action on to overcome the barrier(s).</li> </ul>
<p>5) Commitment (5 minutes)</p>	<ul style="list-style-type: none"> <li>• Participants complete the statement “I choose to be an ally for women in the workplace because I believe...,” then share their statement with the large group. The facilitator summarizes key learning points and takeaways and encourages participants to follow through with their ally actions.</li> </ul>

**Table 2. Learning objectives**

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*Cognitive outcomes:*

- 1) Increased knowledge of workplace gender inequality
  - 2) Heightened self-awareness of gender biases
- 

*Affective Outcomes:*

- 3) More positive attitudes about women in leadership
  - 4) Greater motivation to be an ally to women in the workplace
- 

*Behavioral Outcomes:*

Greater frequency in enacting behaviors specific to:

- 5) Effectively partnering with a woman to help advance her career
  - 6) Fostering a gender-inclusive workplace culture
-

**Table 3. Means, standard deviations, and correlations for observed study variables for leader sample**

	$M_T(SD_T)$	$M_C(SD_C)$	$M(SD)$	1	2	3	4	5
1. Condition	1	0	0.38 (0.49)	(1)				
2. Mentor	21.79 (4.25)	20.45 (4.55)	20.97 (4.42)	0.15	(0.92)			
3. Sponsor	19.07 (3.60)	17.86 (5.09)	18.33 (4.55)	0.13	0.78**	(0.93)		
4. Confidence	29.62 (5.24)	26.94 (5.86)	28.06 (5.67)	0.24	0.86**	0.76**	(0.91)	
5. Includer	19.71 (2.70)	18.86 (2.87)	19.19 (2.80)	0.15	0.45**	0.43**	0.39*	(0.76)
6. Catalyst	21.93 (2.67)	21.35 (3.81)	21.61 (3.30)	0.09	0.60**	0.65**	0.48**	0.60**
7. Disruptor	23.64 (4.25)	22.73 (5.31)	23.17 (4.77)	0.10	0.41*	0.68**	0.42*	0.24
8. PGP	3.17 (0.44)	2.33 (0.78)	2.65 (0.78)	0.53**	0.42*	0.47**	0.33	0.26
9. KGE	3.77 (0.80)	3.19 (0.71)	3.41 (0.79)	0.36*	0.05	0.10	0.21	0.04
10. AGB	4.17 (0.94)	3.78 (0.88)	3.93 (0.91)	0.21	0.05	0.07	0.14	0.03
11. BGD	5.13 (0.75)	4.80 (0.80)	4.92 (0.79)	0.20	0.01	0.04	0.07	0.06
12. Standing	4.52 (0.59)	3.87 (0.87)	4.11 (0.83)	0.39*	0.06	0.17	0.30	0.18

	6	7	8	9	10	11	12
6. Catalyst	(0.69)						
7. Disruptor	0.64**	(0.84)					
8. PGP	0.42*	0.34	(0.86)				
9. KGEQ	0.13	0.23	0.33*	(0.76)			
10. AGB	0.23	0.23	0.18	0.90**	(0.70)		
11. BGD	-0.03	0.02	0.28	0.51**	0.57**	(0.91)	
12. Standing	0.19	0.42*	0.53**	0.61**	0.49**	0.57**	(0.68)

**Note.**  $M_T(SD_T)$  = Mean (standard deviation) of the Treatment group ( $n = 14$ );  $M_C(SD_C)$  = Mean (standard deviation) of the Control group ( $n = 23$ );  $M(SD)$  = Mean (standard deviation) of all leaders ( $n = 37$ ); PGP = Participation in gender parity; KGEQ = Knowledge of gender equality; AGB = Awareness of gender biases; BGD = Benefits of gender diversity; Standing = Psychological standing.

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

**Table 4. Means, standard deviations, and correlations for observed study variables for direct report sample**

	$M_T(SD_T)$	$M_C(SD_C)$	$M(SD)$	1	2	3	4	5	6
1. Condition	1	0	0.41 (0.49)	(1)					
2. Gender	1.37	1.24	1.29 (0.46)	0.14	(1)				
3. Mentor	20.09 (4.41)	19.91 (4.92)	20.00 (4.63)	0.02	-0.18	(0.91)			
4. Sponsor	18.35 (3.84)	20.25 (5.76)	19.33 (4.98)	-0.19	-0.13	0.71**	(0.94)		
5. Confidence	27.41 (6.61)	29.61 (7.86)	28.53 (7.28)	-0.15	-0.10	0.85**	0.85**	(0.95)	
6. Includer	17.26 (4.33)	16.75 (3.71)	16.98 (3.99)	0.06	-0.01	0.58**	0.52**	0.66**	(0.89)
7. Catalyst	21.67 (4.47)	20.95 (4.92)	21.29 (4.70)	0.08	0.01	0.70**	0.69**	0.76**	0.80**
8. Disruptor	26.67 (5.65)	25.47 (6.31)	26.00 (6.00)	0.10	0.22	0.69**	0.73**	0.80**	0.49**
9. PGIS-Auth	4.54 (0.96)	4.73 (0.83)	4.65 (0.89)	-0.11	-0.06	0.29*	0.52**	0.51**	0.36**
10. PGIS-Mem	4.58 (0.98)	4.91 (0.90)	4.77 (0.94)	-0.17*	-0.14	0.27*	0.29*	0.21	0.31**
11. PGIS-Aff	4.82 (0.53)	4.92 (0.61)	4.88 (0.58)	0.08	-0.03	0.11	-0.04	0.13	0.02
12. CLA-Gen	3.68 (0.37)	3.66 (0.39)	3.67 (0.38)	0.03	-0.10	0.10	0.16	0.05	-0.07
13. CLA-Tran	3.50 (0.40)	3.43 (0.42)	3.46 (0.41)	0.08	-0.11	-0.11	0.01	-0.14	-0.09
14. JobSat	4.92 (0.91)	5.17 (0.70)	5.07 (0.80)	-0.15*	-0.13	0.37**	0.20	0.43**	0.31**
15. ToInt	2.18 (1.06)	2.05 (1.09)	2.11 (1.07)	0.06	0.14	-0.29*	-0.07	-0.36*	0.25**
16. SuperSup	4.93 (1.14)	5.04 (0.97)	4.99 (1.04)	-0.05	-0.08	-0.17	0.26	0.37*	0.52**

	7	8	9	10	11	12	13	14	15	16
7. Catalyst	(0.87)									
8. Disruptor	0.76**	(0.92)								
9. PGIS-Auth	0.41**	0.42**	(0.96)							
10. PGIS-Mem	0.38**	0.33*	0.81**	(0.92)						
11. PGIS-Aff	0.24*	0.19	0.39**	0.39**	(0.87)					
12. CLA-Gen	0.13	0.20	0.28**	0.26**	0.21**	(0.71)				
13. CLA-Tran	0.03	0.12	0.24**	0.27**	0.31**	0.71**	(0.83)			
14. JobSat	0.35**	0.22	0.60**	0.65**	0.38**	0.12	0.16*	(0.77)		
15. ToInt	-0.17	-0.09	-0.40**	-0.39**	-0.16*	0.01	0.04	-0.66**	(0.91)	
16. SuperSup	0.41**	0.13	0.57**	0.59**	0.25**	0.11	0.14	0.55**	-0.37**	(1)

**Note.**  $M_T(SD_T)$  = Mean (standard deviation) of the Treatment group ( $n = 71$ );  $M_C(SD_C)$  = Mean (standard deviation) of the Control group ( $n = 101$ );  $M(SD)$  = Mean (standard deviation) of all direct reports ( $n = 172$ ); PGIS-Auth, -Mem, -Aff = Perceptions of gender

inclusivity-Authenticity, -Membership, -Affection; CLA-Gen, -Tran = Confidence in leadership ability-General, -Transformational;  
JobSat = Job satisfaction; ToInt = Turnover intentions; SuperSup = Supervisor support (one-item measure)  
*\*p* < .05. *\*\*p* < .01.



**Table 5. Effect sizes of training for leaders**

Outcome	Variable	Corrected		Uncorrected		95% C.I. <i>d</i>	
		<i>d<sub>c</sub></i>	<i>r<sub>c</sub></i>	<i>d</i>	<i>r</i>	LL	UL
Skill-Based	Mentor	0.31	0.15	0.30	0.15	-0.37	0.96
	Sponsor	0.27	0.13	0.26	0.13	-0.41	0.93
	Confidence	0.47	0.23	0.44	0.22	-0.23	1.11
	Includer	0.35	0.17	0.30	0.15	-0.37	0.97
	Catalyst	0.19	0.10	0.16	0.08	-0.51	0.83
	Disruptor	0.19	0.09	0.17	0.09	-0.50	0.84
	PGP	1.39	0.57	1.25	0.53**	0.51	1.96
Cognitive	KGEQ	0.92	0.42	0.78	0.36*	0.09	1.46
	AGB	0.51	0.25	0.43	0.21	-0.25	1.09
Affective	BDS	0.44	0.21	0.42	0.20	-0.26	1.09
	Standing	1.06	0.47	0.84	0.39*	0.14	1.52

**Note.** LL = Lower Limit; UL = Upper Limit.

*n* = 27

\**p* < .05. \*\**p* < .01.

**Table 6. Effect sizes of training for direct reports**

Outcome	Variable	Corrected		Uncorrected		95% C.I. <i>d</i>	
		<i>d<sub>c</sub></i>	<i>r<sub>c</sub></i>	<i>d</i>	<i>r</i>	LL	UL
Skill-Based	Mentor	0.04	0.02	0.02	0.02	-0.28	0.33
	Sponsor	-0.40	-0.20	-0.22	-0.19	0.00	0.52
	Confidence	-0.31	-0.15	-0.16	-0.15	0.00	0.45
	Includer	0.13	0.06	0.11	0.06	-0.19	0.42
	Catalyst	0.17	0.09	0.11	0.08	-0.20	0.41
	Disruptor	0.21	0.10	0.11	0.10	-0.19	0.42
Organizational	PGIS-Auth	-0.23	-0.11	-0.22	-0.11	0.00	0.51
Outcomes	PGIS-Mem	-0.36	-0.18	-0.35	-0.17*	0.06	0.65
	PGIS-Aff	0.17	0.09	-0.17	0.08	0.00	0.47
	CLA-Gen	0.07	0.04	0.06	0.03	-0.24	0.37
	CLA-Tran	0.18	0.09	0.17	0.08	-0.13	0.48
	JobSat	-0.35	-0.17	-0.31	-0.15*	0.00	0.61
	ToInt	0.13	0.06	0.12	0.06	-0.18	0.42
	SuperSup	--	--	-0.11	-0.05	0.00	0.40

**Note.** LL = Lower Limit; UL = Upper Limit; SuperSup was a one-item measure.

*n* = 172

\**p* < .05. \*\**p* < .01.

**Table 7. Effect of training on 3-month frequency change variable for leaders**

Variable	$M_T (SD_T)$	$M_C (SD_C)$	$M (SD)$	$d$	$r$	95% C.I. $d$	
						LL	UL
Mentor	0.79 (0.43)	0.26 (0.45)	0.46 (0.51)	1.19	0.51**	0.46	1.90
Sponsor	0.57 (0.51)	0.26 (0.45)	0.38 (0.49)	0.66	0.31	-0.03	1.33
Confidence	0.71 (0.47)	0.22 (0.42)	0.41 (0.50)	1.13	0.49**	0.41	1.84
Includer	0.86 (0.36)	0.22 (0.42)	0.46 (0.51)	1.60	0.62**	0.83	2.35
Catalyst	0.79 (0.43)	0.17 (0.39)	0.41 (0.50)	1.52	0.60**	0.76	2.27
Disruptor	0.86 (0.36)	0.17 (0.39)	0.43 (0.50)	1.80	0.67**	1.01	2.58

Note.  $M_T (SD_T)$  = Mean (standard deviation) of the Treatment group ( $n = 14$ );  $M_C (SD_C)$  = Mean (standard deviation) of the Control group ( $n = 23$ );  $M (SD)$  = Mean (standard deviation) of all leaders ( $n = 37$ ); LL = Lower Limit; UL = Upper Limit.

**Table 8. Effect of training on 3-month frequency change for direct reports**

Variable	$M_T (SD_T)$	$M_C (SD_C)$	$M (SD)$	$d$	$r$	95% C.I. $d$	
						LL	UL
Mentor	0.25 (0.44)	0.09 (0.32)	0.16 (0.38)	0.44	0.21**	0.13	0.74
Sponsor	0.25 (0.44)	0.11 (0.35)	0.17 (0.39)	0.37	0.18*	0.06	0.68
Confidence	0.30 (0.46)	0.08 (0.31)	0.17 (0.39)	0.57	0.27**	0.26	0.88
Includer	0.38 (0.49)	0.23 (0.44)	0.29 (0.47)	0.33	0.16*	0.02	0.63
Catalyst	0.27 (0.45)	0.13 (0.37)	0.19 (0.41)	0.34	0.17*	0.04	0.65
Disruptor	0.32 (0.47)	0.17 (0.40)	0.23 (0.44)	0.36	0.18*	0.05	0.67

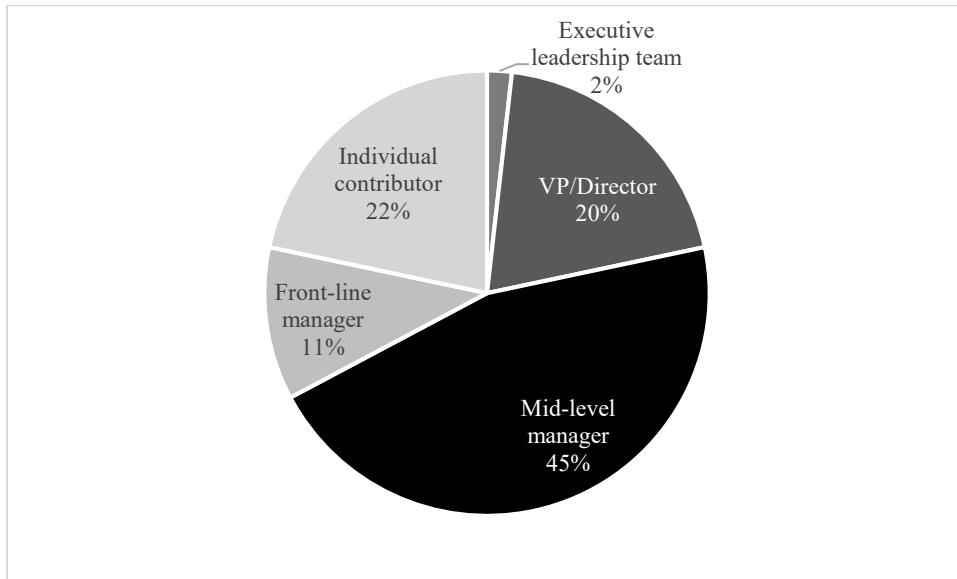
Note.  $M_T (SD_T)$  = Mean (standard deviation) of the Treatment group ( $n = 71$ );  $M_C (SD_C)$  = Mean (standard deviation) of the Control group ( $n = 101$ );  $M (SD)$  = Mean (standard deviation) of all direct reports ( $n = 172$ ); LL = Lower Limit; UL = Upper Limit.

**Table 9. Gender differences across organizational payoff outcome variables**

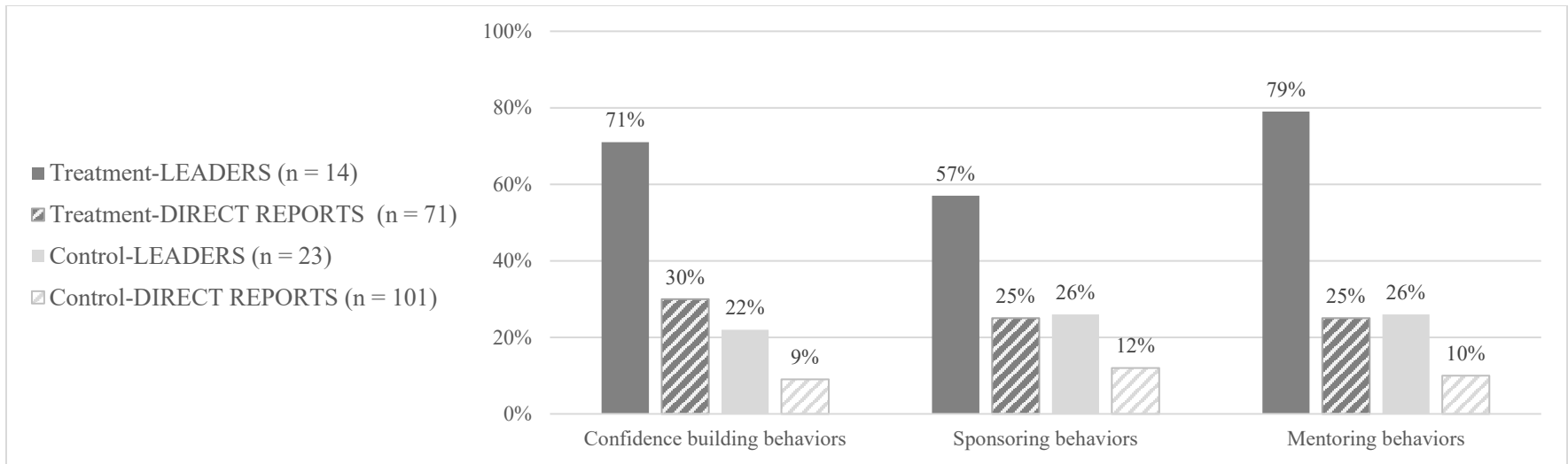
Variable	$M_F (SD_F)$	$M_M (SD_M)$	$M (SD)$	$t$	$df$	95% C.I. $d$	
						LL	UL
PGIS-Auth	4.56 (0.98)	4.69 (0.85)	4.65 (0.89)	0.85	170	-0.17	0.42
PGIS-Mem	4.57 (1.09)	4.86 (0.87)	4.77 (0.94)	1.85	170	-0.02	0.60
PGIS-Aff	4.86 (0.59)	4.89 (0.58)	4.88 (0.58)	0.39	170	-0.15	0.23
CLA-Gen	3.61 (0.43)	3.69 (0.36)	3.67 (0.38)	1.35	170	-0.04	0.21
CLA-Tran	3.39 (0.45)	3.49 (0.39)	3.46 (0.41)	1.43	170	-0.04	0.23
JobSat	4.91 (0.93)	5.13 (0.73)	5.07 (0.80)	1.71	170	-0.03	0.49
ToInt	2.34 (1.17)	2.01 (1.02)	2.11 (1.07)	-1.84	170	-0.68	0.02
SuperSup	4.86 (1.18)	5.05 (0.98)	4.99 (1.04)	1.08	170	-0.16	0.53

**Note.**  $M_F (SD_F)$  = Mean (standard deviation) of the Female direct reports ( $n = 50$ );  $M_M (SD_M)$  = Mean (standard deviation) of the Male direct reports ( $n = 122$ );  $M (SD)$  = Mean (standard deviation) of all direct reports ( $n = 172$ ); PGIS-Auth, -Mem, -Aff = Perceptions of gender inclusivity-Authenticity, -Membership, -Affection; CLA-Gen, -Tran = Confidence in leadership ability-General, -Transformational; JobSat = Job satisfaction; ToInt = Turnover intentions; SuperSup = Supervisor support; LL = Lower Limit; UL = Upper Limit.

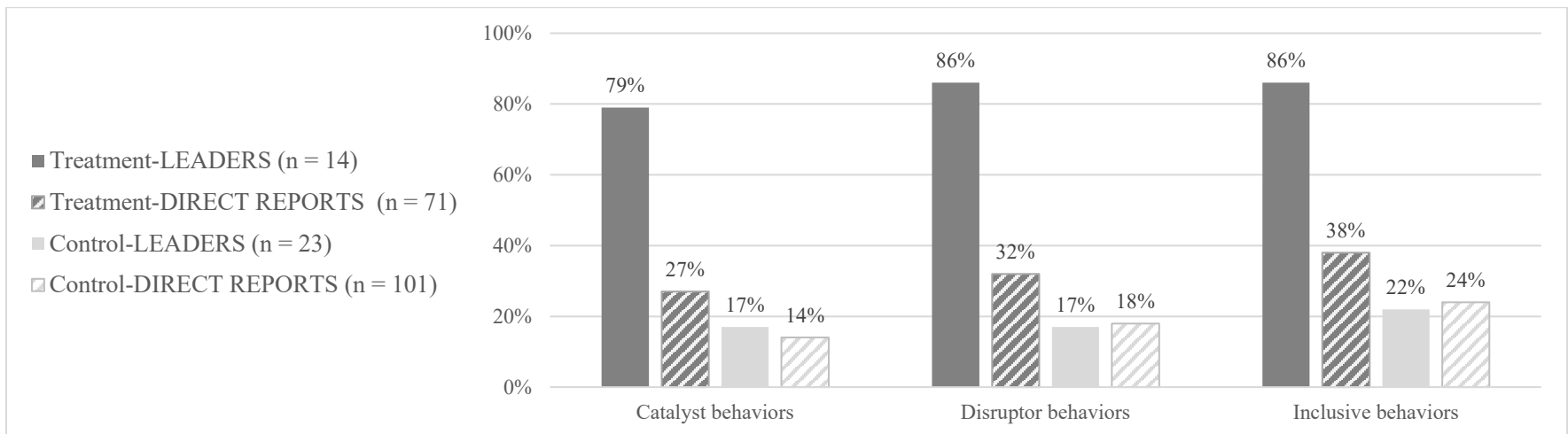
## FIGURES



**Figure 1. Leadership roles of direct reports (n = 172)**



**Figure 2. Differences between self- and other-report for Ally Accelerator change variable**



**Figure 3. Differences between self- and other-report for Change Agent Tactic change variables**

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## APPENDIX

### Recruitment Emails

Email to *Treatment* Participants [SENT BY CEO ON FEBRUARY 26, 2018]  
From: [name of executive sponsor]  
To: [name of participant]  
Subject: Evaluation survey for Men as Allies training course (High Importance)

Hi [participant's first name],

Thank you for serving as an early adopter by attending the Men as Allies training program this past November. Your active participation was most appreciated as was your passion about attacking this issue head on at [Company Name<sup>5</sup>, or CN]!

You'll remember no doubt one key point from the session – that organizations successfully addressing this issue by promoting women to higher level leadership positions perform better on a variety of financial measures. Therefore, both [Consulting Firm, or CF] and CN are committed to having you take a careful look at the extent to which the session served as a catalyst to changing your attitudes and behaviors following the session.

Your crucial input will help us and CF fine tune the program both at CN and prepare it for broader impact on men and women in the workplace. It'll only take about [10-15] minutes to complete and **must be submitted by no later than Monday, March 5<sup>th</sup>**.

Please be assured that your individual responses are highly confidential. Only the third party CF research team, all whom have been trained in the ethical conduct of social science research, will have access to your data. **CN will not have access to your individual responses.**

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<sup>5</sup> For confidentiality purposes, the participating organization's and the affiliate consulting firm's names have been changed.



Results will be aggregated to the group level prior to reporting back to CN. Therefore, you can be assured that your data will be safe, and thus, feel confident in responding as honestly and candidly as possible.

Your direct reports will also be asked to complete a similar survey to assess their perceptions of any behavior changes they have witnessed in your leadership style over the past three months. The confidentiality measures stated above will also be applied to the direct report data to ensure that no individual responses will be shared within CN.

Please access and complete the Men as Allies evaluation survey by clicking the link below:

[insert survey link here]

Thank you for contributing to this very important effort.

Email to *Control* Participants [SENT BY CEO ON FEBRUARY 26, 2018]  
From: [name of executive sponsor]  
To: [name of participant]  
Subject: Required survey for upcoming Men as Allies training course (High Importance)

Hi [participant's first name],

Thank you for agreeing to serve as an early adopter of the upcoming Men as Allies training program to be delivered on March 13, 2018. I appreciate your active participation in attacking this issue head on at (Company Name, or CN)!

As early adopters, we are responsible to provide Consulting Firm (CF) with important evaluation data that requires a baseline assessment of your attitudes and behaviors prior to attending Men as Allies. Both CF and CN are committed to having you take a careful look at the extent to which the session may impact important outcomes.

Your crucial input will help us and CF fine tune the program both at CN and prepare it for broader impact on men and women in the workplace. It'll only take about [10-15] minutes to complete and **must be submitted by no later than Monday, March 5<sup>th</sup>**.

Please be assured that your individual responses are highly confidential. Only the third party CF research team, all whom have been trained in the ethical conduct of social science research, will have access to your data. **CN will not have access to your individual responses.** Results will be aggregated to the group level prior to reporting back to CN. Therefore, you can be assured that your data will be safe, and thus, feel confident in responding as honestly and candidly as possible.

Your direct reports will also be asked to complete a similar survey to assess their perceptions of your behaviors and your leadership style over the past three months. The

confidentiality measures stated above will also be applied to the direct report data to ensure that no individual responses will be shared within CN.

Please access and complete the Men as Allies evaluation survey by clicking the link below:

[insert survey link here]

Thank you for contributing to this very important effort.

Email to *Direct reports* TO BE SENT BY CHRO ON FEBRUARY 26, 2018  
From: [name of executive sponsor]  
To: [name of participant]  
Subject: Required survey for upcoming Men as Allies training course (High Importance)

Hi [participant's first name],

Leaders at [Company Name, or CN] have either attended or will soon attend a critically important training program titled, Men as Allies. The purpose of this training is to accelerate women in leadership initiatives by explicitly bringing males leaders to the table to actively work towards increasing gender equality here at CN.

As early adopters, we are responsible to provide [Consulting Firm, or CF] with important evaluation data that requires your assessment of your immediate supervisor's behaviors and leadership style. Both CF and CN are committed to having you take a careful look at the extent to which the session may impact important outcomes.

Your crucial input will help us and CF fine tune the program both at CN and prepare it for broader impact on men and women in the workplace. It'll only take about [10-15] minutes to complete and **must be submitted by no later than Monday, March 5th.**

Please be assured that your individual responses are highly confidential. Only the third party CF research team, all whom have been trained in the ethical conduct of social science research, will have access to your data. **CN will not have access to your individual responses.** Results will be aggregated to the group level prior to reporting back to CN. Therefore, you can be assured that your data will be safe, and thus, feel confident in responding as honestly and candidly as possible. Please access and complete the Men as Allies evaluation survey by clicking the link below:

[insert survey link here]

If you have any questions or concerns related to this research, feel free to contact our lead researcher of this effort, Victoria Mattingly, [email].

Thank you for contributing to this very important effort.

Email to *Direct reports* SENT BY CHRO ON FEBRUARY 6, 2018

From: [name of executive sponsor]

To: [name of participant]

Subject: Required survey for upcoming Men as Allies training course (High Importance)

Dear Associate,

CN's Core Values are the cornerstone of how we operate and manage our organization and these values have guided CN for over 100 years. One of those values is Diversity and Inclusion, which assures that all types of people, from all types of backgrounds, are embraced and connected to CN's mission to protect worker health and safety.

Most importantly, the work environment and attitudes we express daily at CN are what drive and create the inclusive environment that enables our future success.

To attain the diverse and inclusive work place we desire, change is both an imperative and a constant. For this reason, male leaders at CN have attended or will soon attend a critically important training program called, Men as Allies. The purpose of this training is to help accelerate women in leadership positions by bringing male leaders to the table to actively increase gender equality here at CN. Two of the objectives to this program are to create awareness as to why developing women for leadership roles is a strategic advantage to organizational success; and (2) to build a more inclusive environment where women can thrive and advance.

As early adopters of this program and actual pilot participants CN agreed to provide CF data that requires an assessment of your immediate supervisor's behaviors and leadership style. Additionally, both CF and CN want your input regarding the extent to which the session may impact important outcomes related to women in leadership.

You are receiving this email because your immediate supervisor has been invited to participate in this pilot. As a follow-up to that session, we are conducting a brief survey to help us assess its impact and effectiveness. Your input will help us and CF fine tune the program for both CN and CF as they prepare it for broader impact on men and women in the workplace. The 10-minute survey will be open from February 26 until March 5. We are informing you of this survey now, however, to give you a chance to observe your supervisor's leadership style and specifically how he interacts with you over the next month.

Please be assured that your survey responses will be highly confidential. Only the third party CF research team, all whom have been trained in the ethical conduct of social science research, will have access to your data. CN will not have access to any individual responses. Results will be aggregated into groups prior to reporting back to CN. Therefore, you can be assured that your data will be safe. So please be confident in responding as honestly and candidly as possible.

The survey itself will be sent to you via email on Monday, February 26. The success of this pilot very much depends on the extent to which you and your colleagues successfully complete this survey. We thank you in advance for taking 10 minutes out of your day to share your valuable perspective and insight about the effectiveness of this important training program that your supervisor has or will soon attend.

If you have any questions or concerns related to this research, feel free to contact our lead researcher of this effort, Victoria Mattingly, at [email], or you can always contact me.

Thank you for contributing to this very important effort.

Email to *Direct reports* [SENT BY CHRO ON FEBRUARY 26<sup>th</sup>, 2018]  
From: [name of executive sponsor]  
To: [name of participant]  
Subject: Required survey for upcoming Men as Allies training course (High Importance)

Hi [participant's first name],

Leaders at CN have either attended or will soon attend a critically important training program titled, Men as Allies. The purpose of this training is to accelerate women in leadership initiatives by explicitly bringing males leaders to the table to actively work towards increasing gender equality here at CN.

As early adopters, we are responsible to provide [Consulting Firm, or CF] with important evaluation data that requires your assessment of your immediate supervisor's behaviors and leadership style. Both CF and CN are committed to having you take a careful look at the extent to which the session may impact important outcomes.

Your crucial input will help us and CF fine tune the program both at CN and prepare it for broader impact on men and women in the workplace. It'll only take about [10-15] minutes to complete and **must be submitted by no later than Monday, March 5th.**

Please be assured that your individual responses are highly confidential. Only the third party CF research team, all whom have been trained in the ethical conduct of social science research, will have access to your data. **CN will not have access to your individual responses.** Results will be aggregated to the group level prior to reporting back to CN. Therefore, you can be assured that your data will be safe, and thus, feel confident in responding as honestly and candidly as possible. Please access and complete the Men as Allies evaluation survey by clicking the link below:

[insert survey link here]



If you have any questions or concerns related to this research, feel free to contact our lead researcher of this effort, Victoria Mattingly, at [email].

Thank you for contributing to this very important effort.