

Women's Leadership Development: A Social Cognitive Approach

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Abstract

Despite the preponderance of evidence that achieving gender balance in corporate leadership ranks is a value proposition which results in higher profits and better overall corporate performance, little research has been done to question the efficacy of existing leadership development constructs for women. This study used a multiphase, mixed-methods approach to explore which factors influence women's leadership development in male dominated organizational setting. The study included seven interview participants and 38 survey respondents. All participants were female supervisors aged 26-72 working in a male dominated and technical organization. Results from the semi-structured interviews were used to shape the survey content which included open ended, scaled, and multiple choice questions. Results from both the interviews and the surveys revealed that women predominately learn leadership through social cognitive interactions, followed by experiential learning. Work sponsored courses were the primary source of leadership doctrine.

Introduction

In the United States women have held the right to vote for over 95 years and are now earning more than half of all college degrees. Women are culturally and legally accepted as equal to men. Yet, despite these facts women are still making 77% of what men in similar positions make, and still only encompass four percent of Fortune 500 CEO positions; and these statistics have held fast for nearly a decade (Sandberg, 2013). Something is still holding women back from obtaining corporate leadership positions. Our gender equality progress has stalled and nobody seems to know why. Diversity is the seed of creativity, and the same holds true for gender diversity, when each gender is sufficiently represented. Research has shown that gender-balanced organizations outperform non-balanced organizations by every measure (Campbell & Miguez-vera, 2008, Goldsmith, Greenberg, Robertson, & Hu-Chan, 2003; Kay & Shipman, 2014; Litz & Folker, 2002; Tarr-Whelan, 2011). Gender balance does not mean having at least one woman on a team. At least 30% representation of each gender must be present to achieve equal representation of ideas and perspectives in the solutions produced by the team (Tarr-Whelan, 2011). Northouse (2010) asserts that overcoming barriers to gender balance is key to remaining competitive in a global economy. Gender balance is equally important in leadership positions. Organizations that understand and embrace gender differences in leadership are more likely to realize the unique contributions from each sex (Gurian & Annis, 2008) and to be overall better social performers (Boulouta, 2013). Despite these findings, women are still wildly under-represented in corporate leadership ranks. It appears that something is happening early in women's careers, between college graduations and pursuing senior leadership positions, which may be inhibiting them from achieving equal representation in senior organizational positions.

There is a vacuum in the current literature examining how women specifically, learn how to be leaders. No gender-specific leadership development research has been done, and as of the publishing of this paper, and gender tailoring rarely exists in leadership development programs or courses. Women and men are generally taught leadership together, side by side in the classroom and in the work place, using identical approaches. While the proposition that women learn leadership in the same ways as men, and therefore today's leadership development programs are equally effective for both genders is an ideal reality, research in adjacent fields has revealed findings that question this assumption. Existing research exploring the differences between men and women supports both physical and mental differences between genders that translate to behavioral differences (Gurian & Annis, 2008; Sax, 2005). Abundant research has been conducted on how women lead, characterizing their dominant leadership styles. This research has largely found that women tend to lead differently than men (Eagly & Johnson, 1990). Finally, in exploring how women learn in general, research suggests that women learn differently than men (Belenky, Clinchy, Golderberger, & Tarule, 1997). Realizing

that women and men behave differently, learn differently, and lead differently, organizations can no longer ignore the possibility that one-size-fits-all leadership development programs may not be optimal for both genders. In 2013, Arnold & Loughlin performed a study comparing leadership styles between genders across three organizational settings: corporate, public, and military.

While previous research exhaustively supported that women generally tend to be more participative leaders than men (i.e. Eagly & Johnson, 1990), Arnold & Loughlin found that women in military organizations were twice as likely to utilize a directive style than their male coworkers. Another study performed by Gardiner and Tiggeman (1999) found that women were more directive leaders in male dominated and technical environments than women in other contexts. This unique finding suggests that women in male dominated, technical, and/or military organizations are either different (naturally more directive) before joining the organization, learn to lead differently while in the organization, or adapt the way they express their leadership style to conform to organizational pressure. When reflecting on their results, Arnold & Loughlin conceded, "it would appear that despite the abundance of research done on leadership to date we still have much to learn about how women and men enact leadership across different contexts" (p. 80). They suggested that future research examine women in different generations to determine if the atypically directive leadership behaviors of women in military environments were developed over time or a relatively new adapted behavior driven by environmental factors such as organizational context.

Interestingly, little research has been done to explore what factors may influence leadership development. One study performed by Towler (2005) specifically examined if any life or work experiences linked to charismatic leadership trait development. This research found that attachment styles of parenting, as well as the father's level of psychological control did predict the emergence of charismatic leadership traits in early adulthood. Apart from Towler's research, the academic body of knowledge surrounding how leaders are developed is largely barren. Until now, no studies have been performed specifically examining how women learn to lead, nor to try to understand why observations vary based on organizational context. Thus, this paper will examine which factors influence women's leadership style development in a male dominated and military organization.

Learning theory suggests that humans process information into knowledge through social interaction (social-cognitive learning), social observation (modelling), emotional and experiential learning (adult learning) (Illeris, 2002; Schneider et al., 1999). We expect leadership learning, as a subset of general learning to adhere to these principles. However, if women in male dominated and military organizations were invoking directive styles, not due to ingrained learning over a lifetime of experiences and relationships, but due to contextual stimuli, motivation driven behavior had to be considered. According to motivation theory, human behavior may be influenced by need and desire (Deutsch, Coleman, & Marcus, 2006). It is possible that the women in these contexts adapted to a more directive leadership style out of a need or desire to belong, to reduce discrimination, or to succeed. Gender theory was selected as a final lens through which to explore this research question in order to capture the value of how women and men observe and experience life differently, are treated in different ways as a result of their gender, and how these differences might influence their leadership learning and style expression (Belenky, Clinchy Goldberger, & Tarule, 1997; Eagly & Wood, 2011; C. Gibson, 1995).

The leadership education body of knowledge has been based largely on non-gender specific and delivered using generalized approaches developed from the experiences of leaders in a male dominated corporate America. Belenky, et. al (1997) commented that these approaches are "rarely examined by faculty to see if they are compatible with women's preferred styles of learning. Usually faculty assume that pedagogical techniques appropriate for men are suitable for women" (p. 5). This paper will shed light on how women specifically learn to lead by examining what learning, motivational, and gender-specific factors influence women's leadership style development and expression. By starting this conversation, this paper will reframe pedagogical leadership teaching strategies in ways that empower women. Understanding women's leadership development may be the key to reigniting our journey to equality.

The Female Experience

Gender theory establishes gender as a primary analytical category for the development of identity and behavior. Under this theoretical framework men and women are expected to endure unique experiences according to which sex organ they possess (Gurian & Annis, 2008). Consequently, prolific scientific evidence from gendered research has demonstrated that men and women are mentally and biologically different, resulting in behavioral differences starting as early as the first day of birth (Gurian & Annis, 2008; Hotz, 2005; Sax, 2005). For example, one study described by Sax (2005) identified that newborn male babies tended to focus more on mobiles suspended above their cribs while newborn females tended to focus more on the faces of their caregivers. These behaviors reflect stereotypical gender behaviors where, in general, women tend to be more relationship oriented while men tend to be more task oriented. Sax also asserted that male and female development does not finalize until they are 30 years old.

Gender specific behavioral differences are linked to biological differences that range from body size, muscular build, body fat percentage, brain size, brain tissue composition, and hormonal make up (Hotz, 2005; Gurian & Annis, 2008). Gurian and Annis (2008) assert that there are over 100 gender differences in brain size, structure, and composition alone which they attribute to hormonally driven developmental stages in the womb. Kay and Shipman (2014) cite these cranial differences as drivers for feminine behavior. Women have been found to have more connective, or white, brain tissue woven throughout both sides of their brains. This suggests that women are biologically pre-dispositioned to be integrated problem solvers, and to transition quickly between ideas. Sandberg (2013) also attributes women's hormonal and physical dispositions as foundations for a more nurturing disposition in women.

Women have also been socially conditioned to be relational from a cultural perspective as well, assigned the role of primary caregivers for family (Karau & Eagly, 1999). As such, women tend to have a sense of self that is contingent upon the success of their relationships with others. Women are more likely to emphasize the value of community over self, and possess a confidence influenced by external relationships (Sandberg, 2013). Because of this, Sandberg (2013) asserts that women are more prone to holding themselves back due to fear and self-doubt, and are more susceptible to self-criticism. These internal barriers may result in women holding themselves back in the corporate environment, not pursuing promotions, and not volunteering for stretch assignments. Women's relational sense of self likely impacts their leadership style and development as well. They may be more receptive to external influences such as organizational pressure, supervisory direction, mentoring, and peer interaction when forming their leadership approaches. Considering the predominately feminine communal disposition, it is not surprising that women have largely been observed as participative leaders.

Women's Leadership Styles

Comprehensive research in the field of women's leadership styles has revealed that women tend to be more democratic or participative leaders when compared to men, who tend to be more directive or autocratic (Kidder, 2008; Sandberg, 2013; Tarr-Whelan, 2011; Nickel & Eikenberry, 2006; Eagly & Johnson, 1990; Gardiner & Tiggemann, 1999). This participative approach lends women in leadership positions to use interpersonal communication strategies. They tend to include employees in the decision making process and utilize very flat leadership hierarchies. Other unique aspects of female leaders are their tendency to focus on employee potential over proven results when determining promotions (Nickel & Eikenberry, 2006), to be future-oriented, and to place priority on relationships vice tasks (Eagly & Johnson, 1990; Northouse, 2010). Women also tend to motivate employees by building up the employee's self-esteem as compared to men who tend to use rewards or discipline (Rosener, 1990).

It bears mentioning that some research exists that has shown a stronger link between gender identity and leadership behavior than physical sex and leadership behavior (Korabik, 1990). While the current research did not specifically test for gender identity, a new and emerging body of knowledge is growing around this topic. For the majority of individuals, physical sex and gender identity align; however, for some individuals they diverge or possess a neutral or androgynous identity. While all men and women possess at least some masculine and feminine traits (just as all men and women have both testosterone and estrogen in their bodies), some people tend toward the opposite end of the behavioral scale than predicted by their gender. For those individuals, gender identity has been shown as a better predictor of leadership behavior in at least one study. Korabik (1982) also found that androgynous leaders had the ability to express both participative and directive leadership traits, and tended to adopt the behavior that was best suited for the situation at hand.

The typical differences in leadership approaches between genders do not make women less effective leaders than men, just different (Watson and Hoffman, 2004). According to Trinidad & Anthony, (2005, p. 575) "recognizing women's styles of leadership represents an important approach to equity as long as they are not stereotyped as "the" ways women lead but as "other" ways of leading. The feminine leadership styles are not better or worse than the traditional male-oriented ones." In fact significant research has been done assessing the value of gender balance in leadership teams. This research has found that organizations with gender parity (also referred to as gender balance) in leadership ranks tend to outperform those without by every measure (Tarr-Whelan, 2011). The proven value of gender balance demonstrates the need for different approaches to leading within the same organization. While no one style is the right style, embracing different styles—specifically gender diverse styles—appears to be the most prosperous approach. Some findings in women's leadership style research stand out as potential indicators that women learn leadership in different ways than men. As mentioned previously, two studies have found that women in technical and male dominated fields lead with more directive styles than female counterparts in other fields, as well as men in the same fields (Arnold and Loughlin, 2013; Gardiner and Tiggemann, 1999). Even the benchmark meta-analysis by Eagly & Johnson (1990) that found overwhelming evidence that women are primarily participative leaders, also discovered evidence that male dominated environments correlated with women adopting more masculine leadership styles. Essentially, women have been observed to lead differently in various contexts.

This may mean that only certain types of women (i.e. more masculine, or those taught to lead more directive throughout their lives) apply for and obtain positions in technical and male dominated organizations. Or, it may also mean that organizational influences are present that have caused the women to develop or express certain styles in that context. Given women's fundamentally relational sense of self and communal dispositions, these observations call into question how women develop their leadership styles in organizational contexts.

Motivation for Women in the Organizational Context

Motivation theory strives to explain how people behave in terms of their needs and desires (Deutsch et al., 2006). According to long standing and well researched motivational frameworks (i.e. Herzberg and Maslow) these needs and desires include both intrinsic and extrinsic motivators such as food, safety, shelter, belonging, self-esteem, and self-actualization. In the organizational context, motivation is likely to manifest in a need to belong or fit in with a team (safety), a desire to feel valued or be recognized (esteem), the need to contribute to something greater than one's self/fulfill a higher purpose (self-actualization), or the desire for success (esteem). Financial compensation may also be a motivating factor in the organizational context, as money is a means to other motivational ends such as shelter, food, and safety and may be equated for success.

While motivation theory is applied generally to both genders, men and women's perceived experiences within the organizational context can be very different, resulting in different behavioral responses in search of the same end-goal. For example, discriminatory practices such as targeted recruiting, preferential hiring, gender discount, and gender bias may disproportionately influence women's behaviors. While both genders experience discrimination to some degree, women in the corporate environment have been proven to face it to a larger degree, and in different ways. A well-known example of this differential experience is the 'glass ceiling' syndrome where women have been blocked from promotion from an invisible, yet perceivable force not experienced by men (Northouse, 2010; Tarr-Whelan, 2011).

Researchers have found evidence that women adopt male behaviors in male dominated contexts to better fit in and be more successful (Cantor and Benay, 1992; Oakley, 2000). Researchers theorize that differences in confidence (Kay & Shipman, 2014), as well as differential treatment may motivate women to adapt their behavior in order to better fit in or succeed in their organizational environment. Evidence of this was found in multiple studies, one by Eagly and Johnson (1990) which found women in second line supervision positions and above tended to be more task oriented than their male counterparts, and another by Dipboye, Smith, and Howell (1994) which found that women adopted more masculine leadership traits as their time increased in a corporate environment. While these studies were not specifically conducted in a military environment, they do suggest adaptive behavior in women as a response to their organizational context.

Female leadership style adaptation is theorized to be the result of masculine leader identities being more legitimate, and therefore acceptable, than feminine leadership identities (Walker, Ilardi, McMahon, & Fennell, 1996). Eagly and Johnson (1990) found that women with primarily male subordinates tend to lead with masculine leadership styles more than counterparts supervising women or gender-balanced teams, suggesting that the women are changing to have more influence over their male followers. Research by Petty & Miles (1976) demonstrated the antithesis of this phenomenon by observing subordinates that consistently rated supervisor performance higher if their leadership style aligned with the expected stereotypical gender behaviors (women were participative and men were directive). Considering both of these opposing observations, where women may be simultaneously pressured to act feminine in accordance with their gender role, but also masculine to compete among their male counterparts has been referred to as the double bind faced uniquely by women (Eagly & Karau, 2002). Luthar (1996) summarized this conundrum best, "it remains an unresolved conceptual issue as to why sometimes females, who act out of their gender role, are discriminated against, but other times over valued" (p.13). If the presence of these types of organizational pressures is present, female leaders may be artificially adapting their leadership behaviors to cope. Unfortunately, this not only discounts the unique skills feminine leadership styles bring to the table, it can also cause increased stress and emotional harm to female leaders (Gardiner & Tiggemann, 1999; Kay & Shipman, 2014). Based upon the existing literature, the researchers expected to see a preponderance of directive leadership style utilized by the women leaders in the male dominated, military host organization for this research.

Women's Ways of Learning

Learning theory has established that humans assimilate information into their memory and beliefs (referred to as mental models) through external interaction and internal acquisition (Illeris, 2002). For example, social-cognitive learning theory asserts that learning takes place through watching or interacting with others and modelling their behavior (Akkerman et al., 2007; Bussey & Bandura, 1999), while adult learning theory proposes that adult learners integrate new knowledge into their existing paradigms through practice (Puliyel, Puliyel, & Puliyel, 1999).

In short, social cognitive learning focuses on relationships, adult learning theory focuses on experience. An organizational leader will be exposed to both avenues of learning throughout their lives and careers. From the social-cognitive perspective, organizational and cultural socialization forces will likely try to encourage the leader to assimilate within their social contexts (Taormina, 2008). Some research has linked the strength and characterization of organizational culture with leadership styles, where a more bureaucratic organization correlated with more directive leadership styles and supportive organizations correlated with participative leadership styles (House and Aditya, 1997; Lok & Crawford, 2004).

From the adult learning perspective, the organizational leader will take action and observe results. Based on the outcomes of their actions, they may adjust future action to optimize success (Puliyel, Puliyel, & Puliyel, 1999). Thus, considering both socio-cultural and adult learning theories, leadership behaviors and styles are thought to be learned through interacting with other leaders, observing other leaders, assimilating the outcomes of trial and error practice, or reflection and integration of leadership information (such as literature, stories, or presentations). In addition, some researchers posit that leadership styles are learned even before entering the corporate environment through parental, media and peer-based socialization processes (Boatwright and Forrest, 2000; Bussey & Bandura, 1999; Carless, 1998; Towler, 2005).

Leadership training in organizations and schools is typically administered using adult learning approaches. Students learn through doing, through trial and error, and through observing the outcomes of their actions and integrating the feedback into their framework of understanding. For example, assignments where a student is given a problem to solve and left on their own, or with a team of peers to solve. Adult learning theory is assumed to hold true for both men and women (Puliyel et al., 1999). No gender specific variations have been proposed in adult learning theory; however, when considering learning theory as a whole, Illeris (2002, p. 238) conceded that “there may be a basis and a need for some kind of parallel presentation of the same area or tension field as seen from a feminine point of view.” Some research has been conducted on feminine learning perspectives which suggests that experiential learning is not the primary learning method for women. A comprehensive qualitative study conducted by Belenky, Clinchy, Golderberger, and Tarule, (1997) which interviewed 135 women, found that women primarily learn through social interaction rather than experiential learning. This approach to learning is more consistent with social cognitive learning theory than adult learning theory. According to Belenky et al., For many women, the “real” and valued lessons learned did not necessarily grow out of their academic work but in relationships with friends and teachers, life crises, and community involvements. Indeed we observed that women often feel alienated in academic settings and experience “formal” education as either peripheral or irrelevant to their central interests and development. (p. 4)

While Belenky, et al.’s research did not address leadership specifically, it does suggest differences in the ways that men and women learn. Belenky, et al.’s research also found that women struggle with their own acceptance as subject matter experts. Their observation of a socially-focused learning approach, combined with a struggle for self-acceptance is consistent with fundamental gender research which asserts that women are more relational and tend to base their sense of self on the opinions of others. These findings support that men and women learn in different ways despite current one-size-fits-all teaching strategies in mixed gender classrooms. Leadership development is a subcomponent under the greater learning umbrella. The research completed by Belenky, et al. suggests that women may learn differently than men, and by extension develop as leaders in different ways. If this is true, current corporate and academic approaches to leadership development which were developed by men, for originally male dominated organizations, may be impeding women’s ability to learn leadership by not appealing to their primary learning styles. Some research suggests that social cognitive influences have a primary effect on women’s leadership development as measured by their styles. For example, corporate culture and subordinate gender have been found to influence women’s leadership styles. Bureaucratic organizations with prevailing directive cultures tend to yield directive leaders when compared to less bureaucratic organizations (Lok and Crawford, 1999); and women who supervised mainly men were also found to be more directive (Eagly and Johnson, 1990). While some researchers posit these behavioral anomalies are the result of gender discrimination (Riger & Galligan, 1980; Stelter, 2002), it may be that these women employ more masculine leadership styles in these male dominated environments because they are watching and learning how to lead primarily from men through social cognitive influence. This paper examined female leaders in a military, male dominated, and technical organization to explore reasons why Arnold & Loughlin (2013) and Gardiner & Tiggeman (1999) observed women leading with more directive leadership styles than their male counterparts in these types of environments. Are they leading naturally, or are they adapting their styles to accommodate organizational pressures? What socio-cultural and organizational factors influence how women develop and express their leadership styles? Put simply, how do women learn to lead?

Method

The study utilized a sequential, two-phased mixed methods approach. The first phase consisted of semi-structured one-on-one interviews with female participants selected randomly from the organization's e-mail distribution list. To facilitate this, all women on the electronic distribution list were assigned a number. A random number generator was then used to select women for the interviews. Twenty one women were sent an e-mail invitation requesting volunteers to participate. Seven women responded indicating they would like to participate. The interviews were scheduled and conducted at the women's places of work in their private offices. Using thematic, phenomenological analysis of the interview content, primary outcomes were extracted. These findings were then used to create online survey questions for a larger sample population. The surveys were administered by sending a new e-mail invitation out to the remaining female leaders that did not participate in interviews. The e-mail requested voluntary participation and contained a link to the online survey. The survey results were utilized to perform more detailed quantitative analyses and obtain a deeper understanding of women's leadership development.

Participants

Participants for both phases were selected from a total pool of 85 female supervisors working at one defense organization in the southwestern United States. These women ranged in age from 26-72 and had various ethnic origins. All participants supervised two or more employees, and the study had participation from upper (third line), middle (second line), and lower level (first line) supervisors. Participants included a mix of both military and Civil Service personnel with education levels ranging from some college/trade school up to leaders with post graduate degrees. Tables 1 and 2 below summarize the demographic information for the qualitative phase of the research. In the first phase, seven of 21 randomly selected women volunteered to participate in the interviews.

Table 1 Demographic Information – Interviews

Interview Participant	Age / Generation	Years @ Organization	Years Employed	Years as Supervisor	Supervisory Level	# of Children
IP1	32-52/ Gen X	18	30	14	Third Line	3
IP2	32-52/ Gen X	1.5	17.5	8	Third Line	2
IP3	53-72/ Boomer	9.5	40	28	Second Line	6
IP4	32-52/ Gen X	10.5	23	10	Second Line	0
IP5	53-72/ Boomer	13	28	13	Second Line	0
IP6	32-52/ Gen X	0.75	26	15	Second Line	2
IP7	53-72/ Boomer	30	33	20	Third Line	2

Table 2 Additional Demographic Information – Interviews

Participant #	Education Level	Race	Employee Mix	Sex	Supervisor Sex	Career Goal	Profession	Leadership Style
IP1	Masters	White	Both	Both	Both	GS-15	Engineer	Democratic
IP2	Masters	Asian	Male	Male	Male	None	Engineer	Democratic
IP3	Masters	White	Male	Male	Male	Current level	Business	Democratic
IP4	Masters	White	Both	Both	Both	Right fit	Biologist	Democratic
IP5	Bachelors	White	Male	Male	Male	Current level	Engineer	Democratic
IP6	High School	White	Female	Female	Female	GS-15	Business	Democratic
IP7	Masters	White	Female	Female	Male	Current level	Business	Was Autocratic, now Democratic

For the second phase, all remaining supervisors in the organization were sent links to online surveys. Removing male and non-disclosed genders from the responses resulted in 38 female survey respondents for a response rate of 48.7%. Survey respondents included two from ages 26-32, 19 from ages 33-52, and 17 from ages 53-72. Nineteen of the respondents were first line supervisors, 12 were second line supervisors, and seven were third line or above. Twelve of the respondents did not have any children, while seven had one child, 16 had two children, and three respondents had three or more children. Five of the respondents had some college or trade school, 16 had a Bachelor's degree, 16 had a Master's degree, and one had a Post-graduate degree. There were four Asian/Pacific Islander respondents, six Hispanic, 24 White, two African American, and two preferred not to answer. Twelve of the respondents had participated in a formal leadership development program while 26 had not. Table 3 below shows the ranges for years of experience, years at the organization, and years as a supervisor.

Table 3 Descriptive Statistics of Survey Respondents

	N Stat.	Min. Stat.	Max. Stat.	Mean Stat.	Std. Dev. Stat	Skewness		Kurtosis	
						Stat.	Std. Error	Stat.	Std. Error
Years at Org.	38	1	36	16.00	10.452	.318	.383	-1.073	.750
Total Years Worked	38	7	39	24.84	9.440	-.281	.383	-1.138	.750
Years as Supervisor	38	1	37	9.82	8.847	1.160	.383	.988	.750
Valid N (listwise)	38								

Qualitative Procedure & Measures

Interviews were scheduled with volunteer participants via e-mail during working hours and were performed in the women's private offices. All interviews took place in February or March of 2015. The interviews lasted approximately one hour each. The interview questions were semi-structured, open ended, and created for this study based on predictions from the literature review. Additional questions were asked when needed to clarify a response or gather more information. Demographic information was also collected at the beginning of each interview; however, participant identities were kept anonymous. Each participant was assigned a numerical code (one through seven) for the purpose of analysis and reporting. For reporting purposes Interview Participant One is abbreviated as IP1, and so on. Interviews were digitally recorded and transcribed. Transcripts were then coded using both pre-populated themes predicted by the literature review and new themes that emerged after the first pass at analyzing the transcript content. Frequency counts were used to determine the most predominate themes.

Quantitative Procedure & Measures

Using the most frequently occurring themes from the interviews, a survey consisting of scaled (Likert-type, 5-point), multiple choice, and open ended questions was created to obtain further measured and refined results. The questions were input into an online survey platform and links to the survey were sent to potential respondents via email. The surveys were anonymous; however, demographic information was collected in both phases of the research for the purpose of analysis. At least two different types of questions (scaled, multiple choice, or open ended) were asked for each major theme to enable cross-checking and ensure both questions and responses were valid and reliable. After the data was scrubbed and open ended responses were condensed and coded, the data was examined for normality, and an assumption of normality was made. Quantitative analysis was performed on the survey responses. Various analytical methods were used to answer the research questions, including Analysis of Variance (ANOVA), descriptive statistics, correlations, and t-tests. Finally, the depth of the qualitative analysis was compared to the breadth of the quantitative analysis for congruence. The qualitative findings were also used to add greater meaning to the trends that emerged in the quantitative phase, and the quantitative trends were used to bring context to the comments made in interviews. Results from both phases of the research are presented below.

Results

Qualitative Interviews

All interview participants reported using participative leadership styles at the time of the interviews, despite the technical, male dominated, and military nature of the organization. These findings are inconsistent with Arnold and Loughlin (2013) and Gardiner and Tiggeman (1999) who observed more directive leadership styles among women in these types of environments. The findings are more in alignment with the Eagly and Johnson (1990) meta-analysis which overwhelmingly observed women as primarily participative leaders. One participant acknowledged that she had not always led in participative ways but had recently adopted the style after receiving work sponsored executive leadership training and coaching from her organization. As she put it, "within our group, we have been discussing that perhaps [directive leadership is] not always the best approach because...they keep handing me 'monkeys,' and it's like, no, I need to get folks to think and become problem solvers" (IP7). This demonstrated some organizational and also educational influence on her leadership style development. While all women were utilizing participative styles, an unexpected relationship dimension of leadership emerged in the interviews that falls outside of the traditional definition of participative leadership. Whereas typical participative leadership style is characterized by involving employees in decision making processes (Northouse, 2010), many of the women reported considering their employees as equals, and even considering them as if they are family members. They saw themselves in more of a supporting role congruent with servant leadership principles. Word frequency counts revealed the recurrent use of endearing language, such as *like*, *equal*, *team*, *trust*, *caring*, *family*, and *kids*. For example, one participant stated, I think it's kind of a mutual respect; my people would appreciate me as a "leader" when I honestly see myself more as part of the team, who just plays a certain role to interface with other people that might be able to assist them in what they knew to do for their job.

And I certainly respect the people that I'm leading because they are the ones that are getting the mission completed and delivering the product and talking to the customers most often...I look at the folks in the workplace like my family, and my direct reports and their direct reports are my kids. (IP1)

Another participant had a similar perspective, stating "I more so look at employees as part of the team. I am one of the team members, because we all contribute in our own way, based on our roles" (IP2). Introspectively, one participant stated, "There are times where I think I need to change it up a little bit, where maybe I need to be a little bit more firm, but I always find myself going back to the more nurturing, caring type of leader" (IP6). All participants used participative language in their responses, such as "I don't want to tell people how to do things. I want them to figure it out so I try and work with everyone and say, this is our goal...it's more teaching people. I'm actually trying to grow leaders" (IP3) and "I encourage my employees to make decisions, and hopefully, not come to me with problems, unless they have solutions... I bring them to the table. More than likely they've encountered the problem or know more about it than I do, because they're doing more of the technical work" (IP4). However, very prominently, the women viewed their employees more than just participators, they viewed them as important.

IP1 reflected, It surprised me in the workplace that people valued what I could do at work. And I think that I look for that in my employees. And I want to reassure them that what they bring into the workplace is important and valued. Make sure that my employees/my kids all feel that they are individually valued and that were all working toward a theme together as a team.

IP4 also expressed value of her employees with her comments, "In general I find that [laughs] they're such amazing people here that you just need to give them the tools." When questioning whether the women's leadership styles had evolved over time or remained consistent, (aside from the one noted above) the women felt they had evolved, but it was along the same axis of participative leadership. Their responses revealed they had increased in confidence and ability to manage difficult situations and employees. So while their skills had increased, for the majority of the participants, their predominant style had not changed. IP3 described her growth as follows, I think probably in the '80s, I was not where I am today. So it's definitely changed and finessed it to be where I'm more comfortable, more assure of myself and confident and, you know, just with experience and me receiving mentoring over the years since the '80s. I see definite growth and being a better leader. Many of the women also reported that they were still learning how to be leaders, despite having over 30 years of working experience. For example, "I know I still have a long way to go" (IP5), "I think I'm still learning" (IP7), and "you're always learning. Over time you realize there's more and more. There's so much to learn" (IP4). The interviews revealed little evidence of motivational drivers for leadership behaviors. Some of the women did acknowledge being treated differently due to their gender, but none of them felt that impacted their leadership style. Only two women mentioned money. Instead, they appeared to be motivated by having influence in the development of their people. IP3 stated, "I'm not a leader looking to shine above me. That's the least of my priorities. My priorities are to back up my people. To be there for them, to be available, and to support the field." IP4 had similar beliefs, "I don't necessarily do whatever I do to get patted on the head or to get the award myself or whatever. I want my people to get rewarded because I mean really that it's a good program and so it doesn't matter." Learning factors emerged as significant influences in the interviews; all seven participants described both social-cognitive and adult learning factors. Experiential (adult learning) examples include this exchange: Researcher: "How did you learn how to become a leader?" IP1 replied, "School of hard knocks." IP2 gave a more elaborate response, I've learned in the Navy, things don't fail. Some of them are learning experiences in retrospect you probably never should have done that, but we're going to succeed, and we should just have a good time with it...I think over the years, how to become a leader, I would say things I experienced...inside of work, it would be all of the things I have gone through.

IP3's response had both learning elements, So it's combination of things I learned through these development programs, what I observed in the workplace, and through, you know, I was just blessed throughout my career of ongoing exposure to conferences and being able to try different things on my own to see what's working for me.

As did IP4, I think it's a lot of that, watching people learning, learning from mistakes... I think it's a hard, it's a hard thing to teach. It's something I think people just have to learn also on their own and make mistakes and learn and, just experiencing feeling more comfortable with yourself, and being OK with them.

Many of the women told stories of good and bad leaders they had observed in their lives and how that taught them what to do or what not to do. For example, IP6 talked about a teacher she had in high school that would paddle students in the hallway, stating, "and I just, I think about that and I thought, I never want to be that way." IP2 and IP3 also indicated how good and bad people had influenced them, When I first joined the Navy, they always said, you know, leaders are born. I don't believe that. I don't think, I don't believe I was a true leader when I first joined the Navy.

I think over the years people in my life influenced me...Granted it's at home and at work, both sides, good or bad, you know, people influencing our life, that get us to the person we are today...I think through who I am, what I believe in, it is truly coming from all those people that I am angry at (IP2).

Early in my career I've watched women. So in the '80s watching a woman manage, I would say, "OK that's not the style I want." Because what she's doing is replicating the hard core man being abrupt and cussing and that...I knew that's not me, so as, and that was in the '80s. Also in the '80s I worked with a GS15 direct, and a Commander, and the Commanders of course every two years would be rotating. And I watched styles around me and I would pick and choose, you know, "OK, that. I like that," so that's something I would want to emulate. I think I did that throughout my career. So there are certain leaders and supervisors I have had that helped me shape how I'm going to interact (IP3). As mentioned, every interview participant recounted examples of how they had learned through experience and also through social cognitive interaction and modelling. These findings suggest that the primary source of leadership education is taking place within the organization and on the job. Three significant and unexpected findings emerged in the interviews regarding how the women learned their leadership styles: overcoming adversity, work sponsored leadership training, and mentoring. First, many of the responses included a theme of overcoming some type of adversity as a significant source of learning. Some examples included difficult employees or situations, while others were difficult work assignments. IP6 admitted to "loving that challenge."

Second, work sponsored leadership training emerged in six of the seven participants as a primary source of structured leadership curriculum. Only two had actually taken leadership courses in college despite six of them having college degrees. The women had retained the information from the classes and used the language they had learned to describe how they had handled situations (for example, emotional intelligence and situational leadership quadrants). It appeared that the coursework provided the women with tools, but was not a replacement for the education they received on the job through experience and social interaction. According to IP4, "I think you go to all these leadership trainings and you may pick up a piece or two. But there's nowhere that's going to go, like, this is how you be a leader. OK, you know. I'm ready."

When describing their college experiences, the women alluded to gaining peripheral skillsets (i.e. perseverance and problem solving), and to personal relationships as the major influences. For example, IP4 described her thoughts whether college had influenced her leadership style. It teaches you how to stick with something...I just think going to school makes you think. You know, there are so many classes that you'd never use again. But it, it just teaches you to think and think through. I mean big part of my job is, by the time things get to me, it's, resolving problems and conflict. And so, sometimes I think about it and come up with a solution and then it doesn't work, and then come back the next day with another one. And so, it's a lot of coming back with, with new ideas. And also just doing like a graduate program teaches you...forces you to be in front of people and present in that type of thing. And that's important. IP2, IP3, and IP5's responses illustrate how important the relationships with their professors were to their learning. The program management class training I had; I still keep in touch with that professor. I actually use her as a consultant every once in a while, to have team building...her entire class, a semester of her class really opened my eyes in seeing different things, in talking about how you work with people coming from different culture and different age groups. What's the true meaning of diversity? It's not what we look like; it's what's inside of us. Each one of us is different. What we bring to the table, that's diversity (IP2).

In my Master's degree I had leadership courses...In my master's program, I had taken like at least five courses from one professor and he also was the graduate adviser. He said, "You need to go somewhere else and take some courses with somebody else." But he was previous army, Special Forces, and he was a good teacher. And he, he had a lot to offer because he had outside experience that he could bring into the classroom (IP3).

I still looked back at how they, you know, just how they would smile at me, or just how they approached how they taught their classes. There was one nun in particular, I mean the other girls thought she was picking on me but I could tell that she saw something and she was just trying to get it out of me...And so, she would lecture, and then she, you know, start to dialogue with the class and the first question was always directed at me. And, I would just curse her for that but yet, I just think back and I just, she got me. You know? And I didn't even get me. And so that, you know just that attention that I got even though it was indirect, it was just very, um, it impacted me that I really was an individual and just not some, you know, wallflower, I guess for a lack of better word (IP5).

Finally, mentoring emerged as a significant influence on the women's leadership development. Mentoring falls under social cognitive learning theory, composed of a relationship between two people of differing experience levels whom generally exchange teaching for edification. There was little mention of mentoring as a leadership development tool found in the literature review, however six of the seven women told stories of how mentors had positively influenced their lives and leadership abilities.

IP3 attributed much of her success to her mentors, “the mentors in my career have looked out for me, and have guided me. And, at times gotten me my next job...having strong mentors really helped, especially in the men’s world we work in, and they were men. I haven’t had a woman mentor.” The mentors came from inside and outside of the women’s organizations. IP4 received much of her mentoring from her direct supervisors, I would say most of the supervisors that I’ve had have been somewhat of a mentor to me. I mean, I learned from [specific name] constantly. I think I adopted a lot of her styles watching her...I think I’ve just been fortunate my whole life to have various supervisors who are good mentors and good role models.

IP5 described a mentor that was outside of her supervisory chain, “he kind of saw this going on and he just took me under his wing. He wasn’t a person that I needed to tap into get my work done but yet, he just made sure that I was aware that there was somebody on my side.” IP6 reflected on how a mentor in her life helped her learn by presenting her with challenges, He told me before he retired. He goes, “I just really saw something in you that you, if I told you no, that I knew that you would, go above and beyond.” And so he goes, “I always wanted to challenge you.” So, I just, I loved how he challenged, and gave me those challenges. It allowed me to succeed, and he was just there to guide and mentor me the whole way through, and I just thought that was awesome, and the one thing that I always remember.

One interview participant spoke of a mentor she had through a formal workplace leadership development program, ...he had a lot of great insight, and basically what I remember most about him was he said, “You don’t burn yourself out at work, because first of all, that’s not good for anybody. But secondly, you’re not only disappointing yourself, but you have an entire staff you have let down. You need to save your energy, even if they’re burning themselves out, not to jump in and help them, but to make sure you can motivate them and let them see that there’s something good coming. And they’ve gotta believe that. And so if you ever see that there’s not something good coming, you need to somehow readjust your life or your insights or you become an ineffective leader, not an effective leader, because ineffective doesn’t quite sound strong enough.” I’ve always remembered that (IP1).

Many of the women had male mentors throughout their lives. IP3 described why she thought this was a good arrangement, stating “But hell, it’s a men’s world. They know how to navigate it. But there are a lot of good women out there that are, you know, our GS15s and they’ve navigated it.” Considering the robust content and frequency of mentoring antidotes presented in the women’s responses, it appears that mentoring is significant influence on how women learn to lead, and male mentors may play a particularly valuable role in their development.

While childhood socialization and experiences did not appear to directly impact leadership styles, they did influence the women’s work ethics and likelihood of attending college. All six of the seven women whom attended college spoke of how parents had expressed their expectations for attendance as they were growing up. Each parent had different reasons, some wanted the women to get good jobs, others wanted the women to find husbands, but all of the women whose parents encouraged them to attend college did end up doing so. The one participant who did not pursue a college degree had this to say about her decision, “I never went to college because my parents weren’t supportive. They told me, “No, you’re not going to college. All your friends that are older than you dropped out,” which was not a true statement. But they were not supportive of college. So, that’s why I did not pursue it” (IP6).

Corporate context and cultural factors also appeared to have little effect on the women’s leadership styles, despite predictions from the literature. In most cases the women acknowledged the presence of corporate pressure, and either agreed with it, or deliberately chose to disregard it. IP1 felt congruence between her style and organizational expectations, stating “for the most part I think that the organization’s expectations on how I lead do align with mine. Which is why I stay.” IP2 felt opposite, stating “I know there is expectation of me, I know there is, I don’t follow it, I do what’s right for the team, for the people.” She felt like there was an expectation to “tow the line” even if she did not agree with it; an expectation to not speak out, but support the other leaders despite her disagreements. Some evidence existed that the women’s leadership styles were driven by their gender, for example “I think being a woman that, and being people-oriented, I’m definitely, nurturing and I think that’s just a characteristic that comes easily to women” (IP3). Another example by IP4 showed how her etiquette may be influenced by her gender, “you talk about men and women being different and I usually try and say please or thank you. And, it’s funny, you know, I don’t realize I’m doing it but once in a while people will be like “Wow, that’s nice!” and it’s just my style much more.” IP6 also agreed that her gender influenced her leadership style, “I’m sure it has a lot to do with it. I think just being a mother, raising my sister...I think that has a big part of it.” IP3 also added, “Because I’m a woman I had to use humor rather than getting mad and causing a scene.” Her statement indicates a possibility that she has adapted to compensate for sex role bias in her organization. One participant, IP7, did not see a direct correlation between her gender and leadership style, “I don’t...I’m never conscious of it I guess I would say. I’ve never felt like I was held back because of it.” IP6 questioned her approach, stating “There are times where I think I need to change it up a little bit, where maybe I need to be a little bit more firm, but I always find myself going back to the more nurturing, caring type of leader.”

Some of the women were keenly aware of gender discrimination in the workplace and how it has affected them. IP2 discussed her thoughts on a recent leadership presentation, stating “the opportunities are out there, but not all opportunities are open to you, to us you know?” insinuating that women have a harder time competing for opportunities. She went on to say, “Obviously there are a lot of people, even in today’s world, that don’t believe that we should be here, you know especially in a man’s world, engineering, or military, whatever you call it. People still believe that. You know, even to this day.” IP1 also acknowledged a disadvantage, “as a woman I think I need to overcome several things in order to be perceived as effective.” IP2 described her experience as follows, I feel like I am starting a race, every job I go into is a race. For some reason, everybody started at the start line, and I’m 50 yards behind the start line. I gotta race to the start line, and then keep going. That’s how I feel, you know, you’re already behind, you didn’t start at the start line, but you have to reach that finish line at the same time everybody else does. Overall, the qualitative portion of this research revealed that the women were predominately participative leaders and that both experience and relationships had contributed to their learning. Mentoring emerged as a leading social cognitive influence. Gender did appear to play a role in their style expression, while organizational context appeared to have little effect. Childhood socialization did not appear to affect leadership style, so much as it did the women’s values and tendency to attend college.

Quantitative Survey Results

On a scale from 1 to 5, respondents were asked to rate the following questions using this scale: 1 = not at all, 2 = to a little extent, 3 = to a moderate extent, 4 = to a great extent, and 5 = to a very great extent.

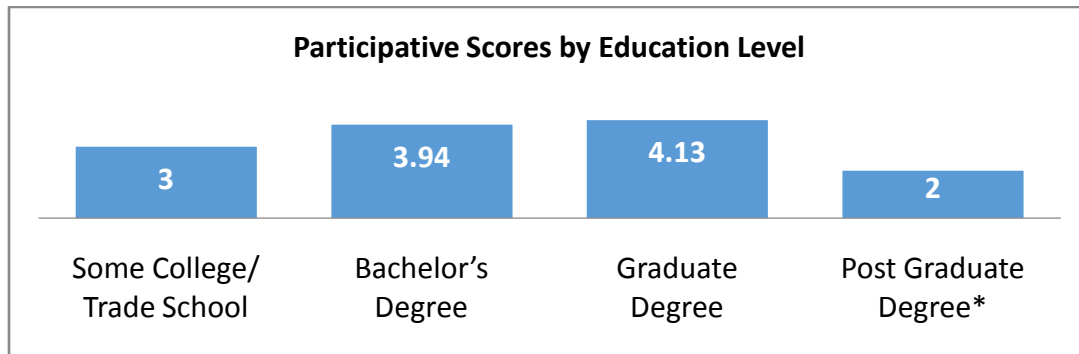
1. (Labeled “Gender Discrimination”). “I have to work harder to stand out as a leader because of my gender.”
2. (Labeled “Participative Leader”). “I tend to involve my employees in the decision making process leader”
3. (Labeled “Directive Leader”). “I tend to give direction with minimal input or participation from employees.”
4. (Labeled “Employees as Family”). “I like to consider my employees as if they are part of my family.”

Table 4 below summarizes the descriptive statistics for these questions.

Table4 Descriptive Statistics: Gender Theory

	N	Min. Stat.	Max. Stat.	Mean Stat.	Std. Dev. Stat	Skewness Statistic	Std. Error	Kurtosis Statistic	Std. Error
Gender Discrimination	38	1	5	3.11	1.371	-.266	.383	-1.179	.750
Participative Leader	37	2	5	3.84	.834	.017	.388	-.942	.759
Directive Leader	38	1	4	2.24	.714	.085	.383	-.143	.750
Employees as Family	38	1	5	3.13	1.189	-.470	.383	-.747	.750
Valid N (listwise)	37								

As seen in Table 4, the respondents were primarily participative leaders and did see their employees as family members to a moderate extent, which was consistent with the interviews. Comparing these results across generations revealed no statistically significant differences between across the combined dependent variables of participative and directive leadership style. There was also no statistically significant differences between the three generations in discrimination scores. Race also had no significantly significant influence on leadership style, nor did children. Supervisory level and participation in a formal leadership development plan also had no statistically significant impact on leadership style. The one factor that did have a statistically significant influence on leadership style was level of education. Specifically, participative leadership behaviors increased with level of education until the post-graduate level $F(3, 33) = 5.52, p = .004$, partial eta squared = .334. Figure 1 below shows a graph of the mean participative leadership scores by level of education. As shown, participative behaviors increase as education increases, with one exception. The post graduate level of education had less participative behavior over all; however, there was only one respondent in this category so the results may be skewed and should not be included. No factors appeared to predict or correlate with directive leadership style behaviors.

Figure 1: Mean Participative Leadership Score by Level of Education

*Includes only one response

Respondents were asked open ended questions on what has been the greatest impact on their leadership development, and what they think is the primary barrier to their development as a leader. The open ended responses were grouped in like categories for the purpose of analysis. Tables 5 and 6 below display the results.

Table 5 Frequencies: Impacts on Leadership Development

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		3	7.9	7.9	7.9
	Social Cognitive	20	52.6	52.6	60.5
	Experience	12	31.6	31.6	92.1
	School/Work Programs	1	2.6	2.6	94.7
	Detractors	2	5.3	5.3	100.0
	Total	38	100.0	100.0	

Table 6 Frequencies: Barriers to Leadership Development

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		3	7.9	7.9	7.9
	Time	12	31.6	31.6	39.5
	Support	3	7.9	7.9	47.4
	Self	11	28.9	28.9	76.3
	Organization	9	23.7	23.7	100.0
	Total	38	100.0	100.0	

As seen in Table 5, the women reported social-cognitive factors as the greatest contributor to their leadership development. Experience was listed as the second most prevalent factor. Lack of time, their own personal challenges (i.e. prioritization, confidence), and organizational factors such as bureaucracy and hiring practices made up the majority of perceived barriers to leadership development (Table 6). In addition to the open ended questions, the survey also included Likert-scaled questions on factors that may contribute to leadership development. Table 7 summarizes the findings below.

Table 7 Descriptive Statistics: Learning Theory Continuous Variables

	N	Min.	Max.	Mean	Std. Dev.	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Mentors Influence	38	2	5	3.61	1.001	.035	.383	-1.063	.750
People Supported	38	1	5	3.42	1.056	-.217	.383	-.652	.750
Learned by Watching	38	3	5	4.24	.542	.138	.383	-.131	.750
Learned from School	38	1	5	2.68	1.317	.100	.383	-1.198	.750
Learned through Challenge	38	2	5	3.84	.679	-.344	.383	.488	.750
Learned from Work LDP	38	1	5	3.13	1.070	-.275	.383	-.424	.750
Learned by Doing	38	1	5	3.37	.998	-.477	.383	.196	.750
Learned from Sports	38	1	5	2.50	1.371	.399	.383	-1.022	.750
Learned from Books	38	1	5	2.53	1.059	.504	.383	-.021	.750
Adequate Time	38	1	5	2.29	.984	.628	.383	.284	.750
No Style Change	38	1	5	3.26	.921	.093	.383	.195	.750
Style did Change	38	1	5	2.61	1.028	.410	.383	.052	.750
Organizational Influence	38	1	5	3.21	.963	-.065	.383	-.432	.750
Organizational Support	38	1	5	2.97	1.197	-.047	.383	-.771	.750
Organizational Feedback	38	1	5	2.87	1.070	.555	.383	-.271	.750
Valid N (listwise)	38								

Regarding motivational factors, the tables below summarizes the open ended responses provided by the women when asked what they enjoy most about leading (Table 8) and why they chose to become leaders (Table 9).

Table 8: What You Enjoy Most about Leading

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3	7.9	7.9	7.9
Ability to Influence	11	28.9	28.9	36.8
Helping Others	14	36.8	36.8	73.7
Accomplishment	9	23.7	23.7	97.4
Pay	1	2.6	2.6	100.0
Total	38	100.0	100.0	

Table 9: Why Choose Leading

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3	7.9	7.9	7.9
Make Difference	19	50.0	50.0	57.9
Ability	8	21.1	21.1	78.9
Forced	7	18.4	18.4	97.4

Challenge	1	2.6	2.6	100.0
Total	38	100.0	100.0	

Table 9 shows that seven of the 38 respondents indicated that they were forced to become leaders, as opposed to seeking it out on their own. Examining this further, we found that there was a statistically significant difference at the $p < .01$ level in how much they liked being leaders between reason categories: $F(4, 38) = 4.853, p = .003$. The highest scoring leaders were those who chose to lead because they enjoy the challenge ($M = 5.00$); second were those who liked to make a difference ($M = 4.10$), third were those who felt they possessed leadership ability ($M = 3.88$). The lowest mean score was from respondents who indicated they were forced into positions of leadership ($M = 2.86$). Thus, non-volunteer leaders had the lowest level of leading enjoyment. Finally, confidence factors were assessed as shown in Table 10 below:

Table 10: Motivation and Confidence

	N	Stat.Min.	Stat.Max.	Stat.Mean	Stat.Std. Dev.	Skewness		Kurtosis	
						Stat.	Std. Error	Stat.	Std. Error
Still Learning	38	1	5	3.89	.894	-.982	.383	1.797	.750
Am Effective Leader	38	3	5	3.61	.638	.570	.383	-.545	.750
Comfortable Reprimanding	38	1	5	3.29	.898	-.150	.383	.175	.750
Comfortable Confronting Supervisor	38	2	5	3.79	.963	-.319	.383	-.806	.750
Confident in Ability	38	3	5	3.74	.685	.391	.383	-.773	.750
Confidence has Increased	38	1	5	3.89	1.034	-.708	.383	.124	.750
Like Leading	38	2	5	3.82	.834	-.520	.383	.029	.750
Valid N (listwise)	38								

Discussion

Leadership Style

Both the interviews and surveys revealed that, consistent with existing literature, women predominately utilize participative leadership styles (seven out of seven participants; $M=3.84$, moderate to great on a scale of one to five). Conversely, no interviews revealed directive leadership behavior at the time of the interviews, and the women rated themselves as directive leaders only to a little extent ($M=2.24$ on a scale of one to five). One interview participant reported deliberately shifting to a more participative style in response to recent work sponsored leadership training and organizational coaching she had received. Participative leadership behavior correlated significantly with learning through challenge ($r = .37, n = 37, p < .05$) and leaders who liked leading ($r = .36, n = 37, p < .05$). No statistically significant variance was detected in participative or directive leadership styles across generations, supervisory levels, parental status (number of children) or ethnicities.

In addition to dominate participative style expression among the women, the interviews revealed that a number of women viewed their employees as if they were family members. Survey results supported these findings ($M=3.13$), revealing that the women were largely relational leaders. The women also preferred flat hierarchies and thought of themselves as equal members on a team with their employees, simply fulfilling the role of leader. They didn't see this role any more or less important than the roles held by employees. While the women did not believe discrimination directly influenced their leadership style, they did feel to a moderate extent ($M = 3.11$) that they did have to work harder due to their gender. No statistically significant variation was found across genders for this measure. Level of education was the only factor found to have a statistically significant influence on leadership style. As education level increased, participative leadership style also increased up to the master's degree level ($F(3, 33) = 5.52, p = .004$, partial eta squared = .334). The evolution of leadership style was evident on a micro-level. Both interviews and surveys ($M=3.89$) found that the women felt they grew more confident and able to handle difficult situations as their experience increased, but overall felt like their primary styles (i.e. participative) had not changed.

Leadership Development

The most significant factors found to influence women's leadership development were social cognitive interaction and experience. A resounding 52% of survey respondents, and seven out of seven interview participants reported watching and/or interacting with other good and bad leaders as having the greatest impact on their leadership development. Overall, respondents felt that watching and interacting with others (male and female) impacted their leadership development to a very great extent ($M = 4.24$). In this, mentoring played a major role, specifically from male mentors. Thirty two percent of the women, and all seven interview participants cited learning through experience as a significant

influence on their leadership development. Adversity was a predominate theme when discussing experiential learning with six of seven interview participants providing examples, and survey respondents rating learning through challenge as having a moderate influence ($M = 3.84$).

Secondary learning influences included work sponsored leadership training (six of seven interviews; $M = 3.13$) and formal education ($M = 2.68$). With regard to formal education, no evidence of leadership training was found below the master's degree level. Work sponsored programs were the dominant source of leadership curriculum (six out of seven interviews for work sponsored training versus two for formal education; $M=3.13$ for work sponsored training vice $M=2.68$ for school). For those who had taken formal leadership training in school, they spoke about their learning as a result specific interactions with and attention payed to them by their professors (social-cognitive interactions), not exposure to leadership curriculum.

Parental and cultural socialization had no significant influence on women's leadership style development or expression. However, the interviews suggested that parents had strong influences on the women's values (i.e. commitment, work ethic) and their decision on whether or not to attend college. Confidence and lack of confidence appeared to co-exist simultaneously in the women, and would sometimes appear in the same sentence as they responded to interview questions. The survey questions also demonstrated this phenomenon, with the women reporting they moderately agreed that they were effective leaders ($M = 3.61$) while also moderately agreeing that they were still learning how to be effective leaders ($M = 3.89$). While no statistically significant variance in confidence existed between education levels, high levels of learning leadership from formal education programs did correlate with high levels of confidence. Confidence also emerged when the women were asked what the greatest barriers to their leadership development. While 32% cited lack of time as their greatest barrier, 29% cited their own lack of confidence or lack of making learning a priority, followed by 24% whom cited organizational barriers such as lack of opportunity, training, and role models.

Implications for Women's Leadership Development

The findings of this research indicate that women are primarily social-cognitive learners when it comes to leadership development. They learn how to lead by watching and interacting with other good and bad leaders. Second to social-cognitive learning, the results demonstrated that experiential learning also had a significant influence on women's leadership development, particularly with regard to facing and overcoming adversity. These findings demonstrate the importance of having positive role models in organizations desiring to achieve gender balance among their leadership ranks. Champions for women leaders can be male or female, so long as they satisfy the need for interaction, connectedness, and encouragement in order to help build confidence and encourage the women to pursue leadership training, promotions, and stretch assignments.

Given that women leaders learn through social and cognitive learning process, it is important to note that it takes good leaders to make good leaders. Unfortunately, not all organizations have a robust cadre of effective leaders large enough to provide this exposure to up-and-coming leaders. Many supervisors are promoted due to technical prowess, only to discover after it is too late that they are not effective leaders. There are steps organizations can take to mitigate this effect and infuse their organization with better leaders. First, organizations can hire external talent into key positions. Second, to enable hiring strong leaders, organizations should revise their hiring strategies to enable identification and recruitment of leadership talent. This includes revising position descriptions, resume grading criteria, and interview questions. Third, organizations can test-drive leaders by offering temporary (three to six month) promotions. This also allows employees to assess whether they enjoy leading before making a full commitment to supervision. By offering temporary experiences with firm end dates, both organizations and employees have the opportunity to bow out gracefully if they discover a person is not a good leadership fit. It becomes much harder to remove permanent employees and much more embarrassing for them to voluntarily step down from permanent positions. Finally, sponsoring formal and informal mentoring programs are key tools for growing women leaders. It was also clear from this research that organizations play a critical role in providing women with leadership theory and curriculum. Formal leadership education programs were largely absent in this study, only presenting in some master's programs. Organizations desiring to enrich their female leaders' arsenals of knowledge will need to take it upon themselves to sponsor training—either hosting in house, hiring a consultant, or paying tuition for leadership oriented master's programs. Considering these findings, along with the barriers identified by the women as time, self, and organizational support, leadership development is clearly an organizational responsibility as much, or perhaps even more than it is an individual responsibility.

Women's Leadership Development Strategies

Current leadership development strategies have not evolved to include women's ways of learning. Leadership is rarely taught in a collaborative and connected manner. Work sponsored and consultant provided training experiences typically teach curriculum using a combination of lecturing and adult learning techniques such as group exercises and role playing. Rarely in week-long or quarter-long courses, do professors and instructors take the time to get to know each student personally, establish rapport, and build trusting relationships with them. While experience is an effective method for women's leadership development according to our findings, it is not the primary method by which women learn how to lead. We are missing half of the equation in women's leadership development with these strategies. By only meeting less than half of women's learning needs with our current teaching strategies, organizations and instructors may be inadvertently creating a learning environment that is more conducive to male learning at the sacrifice of female learning styles. Gurian and Annis (2008) made an adept observation that the greatest barrier to gender equality in the 20th century is the belief that sufficient progress is already being made. So long as we keep doing what we are doing, organizations believe gender parity will come naturally.

Unfortunately, one must only look at the stagnant wage gap to know that this level of complacency is resulting in stagnancy. At the current rate, a 2015 Women in the Workplace Report (McKinsey) projected it will take another 100 years to reach gender parity. To break through the gender parity plateau we must tailor corporate leadership development programs to meet the relational needs of women. Perhaps then we will see progress toward equality in corporate gender composition, achieve gender balance, and fully integrate each gender's unique strengths into corporate solutions.

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