

What it Means to Be a Female Leader in STEM: Mastering the Art of Having It All

By Amy Neale

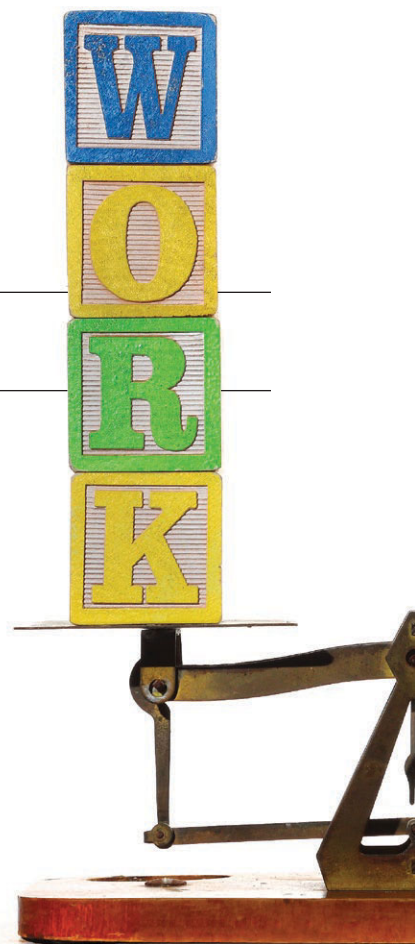
Director of Communications, AWIS

“I define leadership as someone with the ability to spark change, a change agent. To not stand for the status quo. That’s innovation at its finest – motivating people to do things they never thought they could do,” explains Tawni Koutchesfahani, director of manufacturing strategy at Relypsa.

While your definition of leadership may vary, the overarching concept should be the same – to bring out the best in your team. Bringing out the best in your team not only aids employee retention, it also adds to an organization’s bottom line. According to a recent study from Quantopian, no one adds to an organization’s bottom line

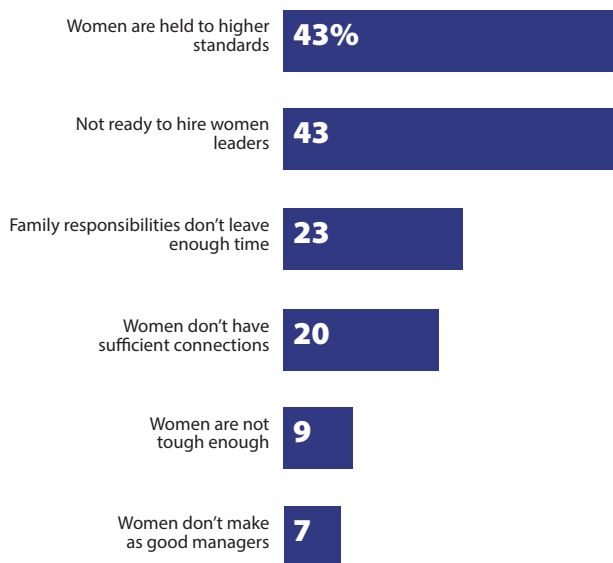
more than a female CEO. The study opposed the performance of Fortune 1000 companies with female CEOs (from 2002 to 2014) against the Standard & Poor (S&P) 500’s performance. During those 12 years, the 80 female CEOs produced equity returns a whopping 226% better than the S&P 500.

Study after study illustrates how women leaders have a greater impact on a company’s bottom line. However, only an estimated 15% of C-suite executives and 51% of managers are women. Also, women make up only 30% of full professors and 26% of college deans.



What’s Holding Women Back from Top Executive Business Positions?

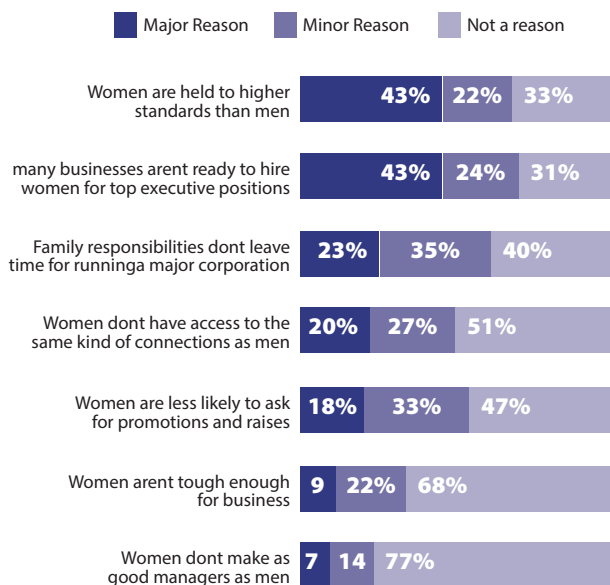
% saying each is a major reason why there aren’t more women in...



Source: Pew Research Center survey, Nov.12-21, 2014

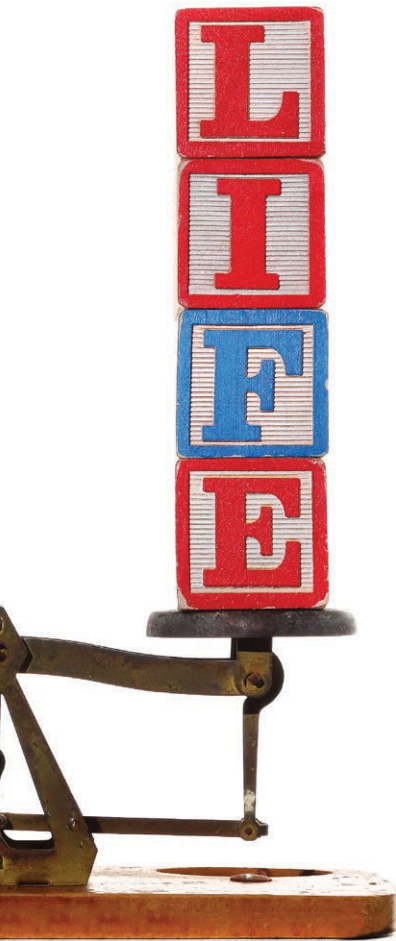
Why Aren’t More Women in Top Executive Business Positions?

% saying women/men in top positions are good at...



Note: “No answer” not shown.

Source: Pew Research Center survey, Nov.12-21, 2014



Powerful Women

Don't let these numbers discourage you. In *Fortune's* recent Most Powerful Women in Business list, almost all of the women at the very top of the list had STEM-related majors:

- GM CEO Mary Barra (#1) got a BS in electrical engineering.
- PepsiCo's CEO and Chairman Indra Nooyi (#2) got her BS in physics, chemistry and math
- IBM CEO, Chairman and President Ginni Rometty (#3) majored in computer science and electrical engineering.
- DuPont CEO and Chairman Ellen Kullman's (#5) degree was in mechanical engineering
- Hewlett-Packard CEO, Chairman and President Meg Whitman (#7) studied math and science then went into economics
- Xerox CEO and Chairman Ursula Burns (#17) has a BS and MS in mechanical engineering.
- Yahoo CEO and President Marissa Mayer (#18) majored in symbolic systems and got her master's in computer science.

Whether you're already a C-level executive in STEM or have aspirations to lead, the tide is slowly turning toward more female leaders – especially in technology-related fields as shown in

Fortune's list. But why is the number still so low? A recent Pew Research survey found that approximately four in ten Americans cite the double standard for women with leadership aspirations; that they're held to higher standards than their male counterparts when making a dent in their fields.

The Pew Research study also found that in comparison to men, women prevail in almost all categories except risk-taking and negotiating. Beyond that, women are found to excel in being honest and ethical, providing fair pay/benefits and mentoring.

Walking a Tightrope

Tawni, who has led organizations with close to 90 employees during her time at Baxter and Baxalta, also finds there's a difference between the sexes when it comes to leadership, "One of the biggest challenges that women face, and that I personally face, is that females and males provide different strengths based on our traits. I have had experiences in my life where I wanted to be assertive, but this approach can be perceived in an opposite way. Some people aren't comfortable dealing with assertive women, you can be viewed as non-team player or aggressive. You can be doing the same thing as your male counterpart, but be seen differently."

A study from the University of California Hastings described this careful navigation as "walking a tightrope between being seen as too feminine to be competent, and too masculine to be likable." Out of the scientists questioned, 34% said they felt pressure to play traditionally female roles at work. On the flipside, 53% experienced backlash for showing stereotypical "masculine" traits such as speaking their minds or being decisive.

When asked for advice for female leaders in STEM in terms of walking this "tightrope," Tawni offers this guidance, "Be comfortable with yourself in the STEM environment and gain confidence. If you are in a challenging moment where you could be seen as being assertive, hold your ground in a diplomatic way. Have your voice heard. Lead and influence diplomatically so the message comes across clearly and people focus on the message, not who the message is coming from."

Being seen as aggressive is just one hurdle with which women need to contend. The motherhood penalty felt by many women – systemic retribution found in pay and benefits as compared to

Women Excel at Compromise, Men at Risk-Taking; But Overall, Majority of Public Sees Little Difference

% saying women/men in top positions are good at...



Note: "No answer" not shown.

Source: Pew Research Center survey, Nov.12-21, 2014

men or childless women – is another. Sometimes just being a woman means you can be pigeon-holed as having the potential for one day wanting a family, even if you know it's not in your cards. However, these perceptions are changing. The Pew Research survey showed that only 23% of those questioned felt that family responsibilities are to blame for there being fewer women leaders, compared to the 40% that don't.

In STEM, it's no secret that many women are being pushed off the C-suite track through discrimination and implicit biases. This can be doubly true if you're a female minority in STEM. The National Science Foundation found that 84% of women from underrepresented minority backgrounds who have their highest degrees in the life sciences are working outside of the life sciences, and 48% are working outside of science and engineering.

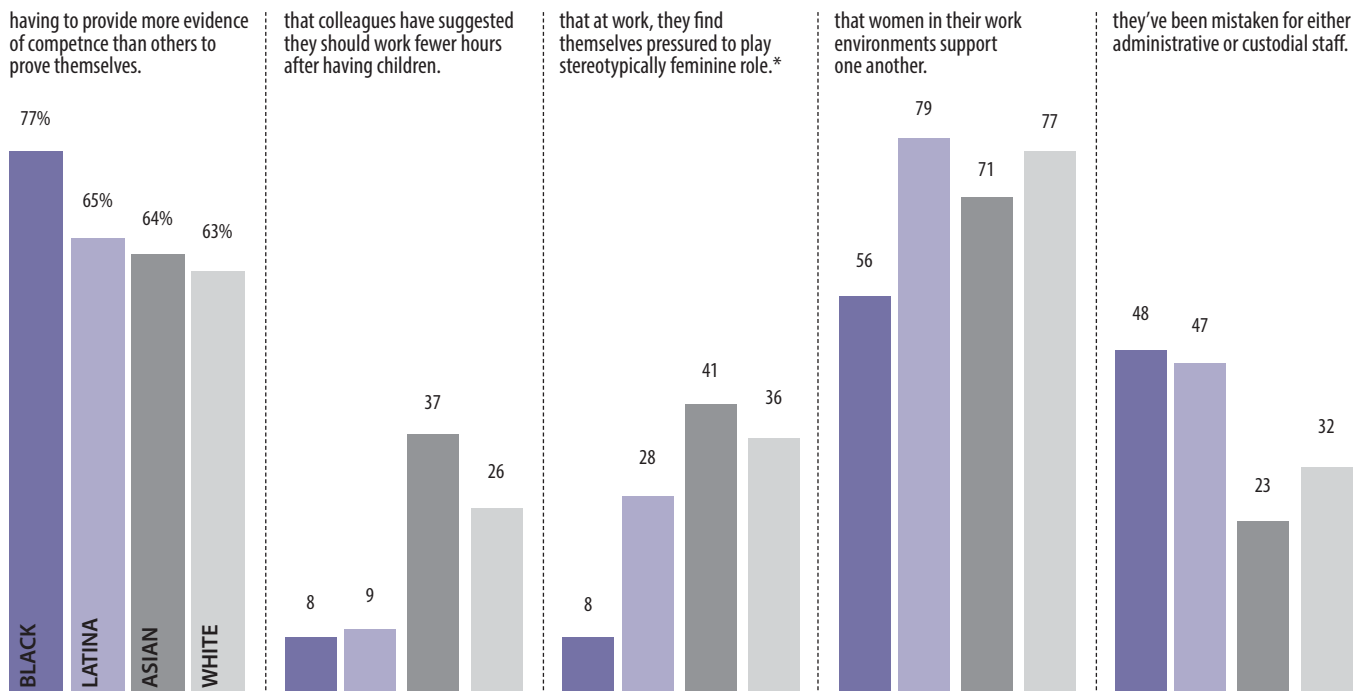
The Ingredients of a Leader

Despite all of the studies and surveys, women continue to climb the ladder to the C-suite. Whatever ladder you're climbing, from dean to CEO, there are certain traits that leaders have in common. Korn/Ferry, the executive recruitment and talent management company, outlines this profile of a suc-

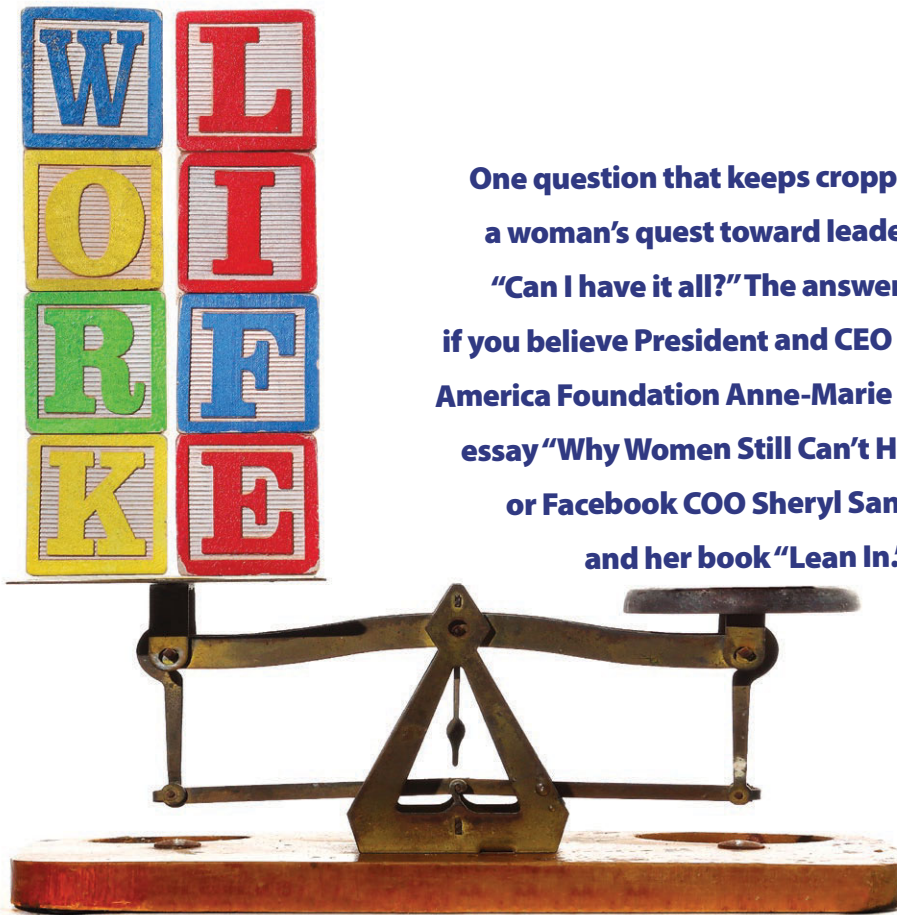
cessful leader's skills and expertise, including how men and women differ:

- **Motivation** – Leaders are motivated by influencing the direction of an organization as well as the organization's mission. They put this ahead of other goals such as having a work-life balance. Men lean toward a broader scope of responsibility while women look for stimulating work in a friendly environment.
- **Style** – Successful leaders are expected to be integrative, socially attuned, comfortable with ambiguity and confident. Not including confidence, women score higher than men in these style attributes.
- **Skill** – Research points to these key areas that make up a high performing leader: strategic skills such as business acumen, operating skills like strategy execution and personal/interpersonal skills including clear communication. Leadership assessments found that female executives outperform male ones in 17 of the 64 skills rated, while male executives outperformed females by one in four. Men ranked higher in strategic skills and financial acumen. Women ranked higher in building talent, collaboration and customer focus.

Percent of U.S. Women in STEM Who Report...



* Such as "Office Mother" or Dutiful Daughter.
Source: Joan C. Williams, Katherine W. Phillips, and Erika V. Hall



One question that keeps cropping up in a woman's quest toward leadership is "Can I have it all?" The answer is "no" if you believe President and CEO of the New America Foundation Anne-Marie Slaughter's essay "Why Women Still Can't Have It All" or Facebook COO Sheryl Sandberg and her book "Lean In."

- **Experience** – By the time you've reached the C-level, you're expected to have mastered your experience in:
 - General, financial and stakeholder management as well as strategy development
 - Risky and critical assignments and crucial negotiations
 - Handling difficult situations such as managing a turn-around and dealing with tough people issues
- Men and women scored equally in self-development and handling difficult situations. However, women had fewer business growth, operational and high-visibility experiences.

The Truth of Having It All

One question that keeps cropping up in a woman's quest toward leadership is "Can I have it all?" The answer is "no" if you believe President and CEO of the New America Foundation Anne-Marie Slaughter's essay "Why Women Still Can't Have It All" or Facebook COO Sheryl Sandberg and her book "Lean In." Does the Holy Grail of having the ideal work-life balance actually exist? Can you reach for the stars in your STEM career while having the home life you desire?

Research from the Association for Women in Science discovered that three-fifths of women surveyed internationally were happy with their work-life balance. Further findings showed that those who were happy were able to successfully separate their work and personal lives, reduce their working hours or adopt flexible working hours.

There's a growing trend of employers trying to facilitate their employees' quest to have it all. Companies like Google,

Johnson & Johnson, GlaxoSmithKline, Pfizer and Intel all made Forbes' recent list of the 25 Best Companies for Work-Life Balance. The National Science Foundation has taken it one step further with its Career-Life Balance Initiative, a set of forward-looking policies and practices to help increase the placement, advancement and retention of women in STEM. Even though companies like these are making the work-life balance easier, there's still a long road ahead for women wanting to reach their leadership goal while maintaining a happy home life.

Maybe answering the "Can I have it all?" question depends on your perspective. "I still don't know the answer to that myself; I realize that defining success is up to each individual person," states Tawni. "Having it all could be having an awesome job, being a great wife and having kids. It could also mean starting a family later, and that's fine. Female leaders can help redefine that meaning – what it truly means to have it all. I would say, personally, that I'm trying to figure out what the definition is. Once I'm happy with my definition, then I'll be happy. That's the key – defining "having it all" for yourself." ✪

Amy Neale is the director of communications for the Association of Women in Science (AWIS). Before coming to AWIS, Amy was content marketing manager for CU Solutions Group in Michigan where she worked with credit unions and credit union leagues nationwide. She consulted on social media, marketing, websites and other content. Amy's career began as a television producer with a focus on health and news programming. She has a BFA in communications from Emerson College in Boston, Massachusetts.