CGO Insights
Linking gender and organizational effectiveness

Briefing Note Number 35 *October 2012*

Dreaming Big: What's Gender Got to Do with It?
The Impact of Gender Stereotypes on Career Aspirations of Middle Schoolers

Knowing that the career pipeline is equally full of girls and boys at the tender age of middle school, that the majority of college graduates (55%) are women,[1] and that half of the labor force (49%) is women,[2] we still see the inequality of leadership positions in all areas of society. The persistent lack of women attaining leadership roles is often referred to as the "leaky pipeline." Exactly how early and why does the "leak" start in the pipeline to leadership for girls?

The number of women in leadership positions in the United States has remained stagnant in recent years. In the business sector, women CEOs still constitute only 3% of Fortune 500 CEOs. Only 14% of women hold executive officer positions; 17% are represented in all senior and corporate officer positions.[3] In the nonprofit sector, more traditionally seen as a location for women in leadership, a recent report on the largest 400 charities found 19% of CEO positions held by women, a situation described as "troubling" by the author when compared to the proportion of women in the American population (50.7%).[4] These statistics show that leadership occupations continue to be gendered and overwhelmingly dominated by men.

Is a woman pushed off the path to leadership at the point in her career when she aspires to a leadership position, or are there other factors at play earlier, perhaps long before women enter the workforce?

Despite gains in women's education and participation in the work force, why is this leadership gap so persistent? Research points to many factors, both external ones, such as differential pay rates, hiring practices, and a work environment inhospitable to work-life balance,[5] and internal factors, including one's own leadership aspirations, self-efficacy, and career interests.[6] The figurative "glass ceiling" is in reality the accumulation of obstacles along the way, including family demands, gendered perceptions relating to women as leaders, and subsequently the lack of advancement in the workplace, which together push women off the path to leadership. Does this happen at the point in a woman's career when she aspires to a leadership position, or are there other factors at play earlier, perhaps long before women enter the workforce?

When scholars first explored the impact of gendered social roles on the career choices of men and women, they found that gender roles delineate what women and men are expected to do, impact the talents they cultivate and the opportunities and constraints they encounter, and correlate with the occupational paths they pursue.[7] When scholars turned their attention to children and adolescents, they found that children establish gender role stereotypes as early as the age of two and an emerging career identity by middle school.[8] For example, during these formative years, children are likely to see movies where only 19% of characters "on the job" are women; watch television where 27% of the women, compared to 1% of the men, are doing housework; and read books where men are depicted in twice as many careers as women.[9] Inevitably growing up in this gendered media landscape impacts how children think about their career potential. What other factors influence career choices and self-perceptions of leadership potential?

These broad questions led Simmons College to collaborate with the Girl Scouts of Eastern Massachusetts (GSEM) and reach out to middle schoolers within New England, New York, and Pennsylvania in the spring of 2011 to ask about the influences on their career aspirations and plans and to test the impact of participation in an organization dedicated to serving girls with a focus upon leadership development. Using the GSEM membership database and a Zoomerang database of empanelled adolescents, we obtained a final sample of 1188 middle schoolers, with 414 boys, 475 Girl Scouts, and 299 girls who were not Girl Scouts. Respondents were in grades six, seven, or eight; between 10 and 15 years of age; represented urban, suburban, and rural zip codes; and were primarily Caucasian (82%). The remaining 18% reported themselves as 5% African American, 4% Asian, 1% Native American, 2% multiracial, and 2% other. Thirteen and a half percent of all

respondents lived in a single-parent household. In this report, references to girls includes both non-Girl Scouts and Girl Scouts, unless otherwise indicated.

Through a Zoomerang survey entitled, "Where are you headed? Jobs, careers, and your future!," we asked the middle schoolers about their career goals and interests and the messages they have received about careers from multiple sources. Four primary findings emerged from our survey:

- The girls in our sample have set ambitious goals for themselves.
- The primary career advice they hear is to "do what makes you happy."
- Girls hearing this well-intentioned advice do so while being surrounded by a gendered landscape promoting stereotypic messages about what girls can and should do or not do. As a result, they make many career choices that reflect those gendered messages.
- While parents and educators are supportive, girl-serving organizations (GSOs),[10] such as the Girl Scouts, can significantly counter those gendered messages, increase a girl's confidence in her leadership capabilities, and expand her career choices.

Key Finding #1: Middle school girls are ambitious and determined.

The girls in our sample have set ambitious goals for themselves and have a pragmatic view of what their future careers will entail. Middle school girls are more likely than boys to do paid work outside of school and home (34% vs. 23%) and are holding more leadership positions than boys (18% vs. 12%). A higher number of girls plan to complete college and, interestingly, girls are more likely to plan to complete graduate school or professional school than boys (31% vs. 21%). Mirroring the shift in sources of income in today's families, girls and boys are equally likely to agree that they will need to make enough money to support themselves and their families. Seventy-eight percent of girls anticipate having to fully support themselves in the future, and they expect to do so by working full time (87%). They select demanding careers, with 27% choosing careers in medicine (vs. 12% of boys) and 24% in professional fields such as law and education (vs. 14% of boys). Both girls and boys plan to continue to work if they have children. More girls (33%), however, will stop work temporarily to care for children than boys (3%), although very few girls expect to stop work permanently.

The girls in our sample are ambitious, but they are surrounded by a gendered landscape promoting stereotypic messages about what girls can and should do or not do. As a result, they make many career choices that reflect those gendered messages.

Key Finding #2: The dominant career message from parents to all middle schoolers is that they should "do whatever makes you happy."

Over 75% of Girl Scouts, 61% of girls who are not Girl Scouts, and 59% of boys either received this advice directly or came to this conclusion by watching their parents or guardians.

At the same time, however, middle school girls and boys perceive different levels of support from their parents or guardians regarding career aspirations. For example, girls are not only less interested in STEM (science, technology, engineering, and math) careers, but they perceive less support than boys for their interest in STEM careers. While 10% of all girls would choose a job in STEM, 32% of boys would. Participating in Girl Scouts broadens girls' career aspirations in STEM careers; twice as many Girl Scouts (14%) would choose a career in STEM than would non-Girl Scout girls (8%). Interestingly, 11% of girls, versus 23% of boys, say their parents would support that choice. Both girls and boys are marginally interested in business careers (3% and 4% respectively), yet again, parents are perceived to be less supportive of their daughter's business aspirations (2%) versus the same choice by their sons (6%).

Key Finding #3: In the face of prevalent gender stereotypes in society, the career choices of middle schoolers tend to be highly gendered.

The evidence supports this finding in three ways: by the careers middle schoolers choose, by their attitudes toward what careers are appropriate by gender, and by their speculation about what the opposite gender prefers. Regarding career choices, 80% of all middle schoolers prefer jobs that are not female-dominated.[11] The researchers defined female-dominated occupations as those where 65% or more of the workers are women. These include careers such as librarian, elementary school teacher, child care worker, and human resource manager. The majority of boys (91%) would only consider male-dominated jobs, while many girls would consider both; only 9% of boys chose female-dominated jobs. Conversely, 74% of girls chose male-dominated jobs as their first choice and 25% chose female-dominated jobs as their first choice. According to a recent report by the AAUW, women are still segregated into these "pink-collar" jobs that affect their

wages.[12] Does the perception of a "pink ghetto" contribute to the pipeline leak as girls look at the reality of where women work and internalize the gendered nature of jobs and organizations? These choices likely reflect two gender dynamics: First, male-dominated jobs usually confer higher pay and status than those dominated by women.[13] Second, the greater reluctance of boys to even consider female-dominated jobs reflects society's lower tolerance for men and boys who take on "feminine" careers than for women and girls taking on "masculine" ones.[14]

Regarding gender attitudes, boys see themselves as having more career options than girls (35% of boys agree with that statement versus 27% of girls). Boys also believe more strongly than girls that "there are some jobs boys are better at than girls" (73% of boys agreeing with that statement versus 55% of girls).

The data also reveal that boys and girls seem to understand the gendered nature of careers and the aspirations of their opposite-gender counterparts. More specifically, when middle-school girls and boys were asked what occupations they would choose if they were the other gender, both the boys and the girls were able to predict with a great degree of accuracy what their counterparts did in fact choose for themselves: If girls were boys, they would choose a career in athletics, STEM, or business, all male-dominated careers. If boys were girls, they would choose careers in the arts and professions.

Key Finding #4: Girl-serving organizations can make a difference in the future career paths of girls.

The impact of girl-serving organizations (GSOs) on girls, proxied in this study by the Girl Scouts, is definitively revealed in three areas: increased self-confidence in one's leadership capacity, reduced gendered messages, and broadened career options.

The study asked girls and boys to compare their abilities to perform different activities against those of their peers and used these comparisons as indicators of "confidence" or "self-efficacy". Girls who participate in Girl Scouts showed the highest scores in all confidence measures. Being a Girl Scout predicted overall confidence as well as confidence in three types of leadership skills:[15]

- Confidence in being a **Leader Out Front and In Charge** (including speaking in front of others, being in charge of projects, making decisions).
- Confidence in being a **Responsible Leader** (getting good grades, organizing and finishing projects, solving problems).
- Confidence in a being a **Team Building Leader** (including working in teams and resolving conflicts).

Girls who participate in Girl Scouts are least likely of the three groups in this study to believe gendered messages about career options. Agreement with the gendered statement "boys have more career opportunities than girls" decreases by a third for girls who are Girl Scouts, moving from 32% agreement by non-Girl Scout girls to only 23% of Girl Scouts.

Implications of Findings and Recommendations

To meet the needs of the U.S. economy, it is essential to have a workforce composed of talented women as well as men; losing up to half of the workforce's talent pool due to the influence of outdated stereotypes cannot continue to be acceptable. Yet our research shows that while middle school girls show solid career ambition and determination, social norms and messages persist in enforcing gender stereotypes. While parents and educators have sought to intentionally build the confidence and skills of young girls, our research substantiates that girl-serving organizations have particularly significant and effective roles as important partners in these efforts. Based on the findings of this study, we offer recommendations to both girl-serving organizations and girls' families to help stop the leakage of the talent of future generations of girls from the career pipeline.

Being a Girl Scout predicted overall confidence as well as confidence in three types of leadership skills:

- ***Confidence in being a* Leader Out Front and In Charge**
- ***Confidence in being a* Responsible Leader**
- ***Confidence in a being a* Team Building Leader**

In addition, girls who participate in Girl Scouts are least likely of the three groups in this study to believe gendered messages about career options.

Girl-Serving Organizations. With purposeful leadership programs and intentional programming to build girls' confidence, these organizations have the ability to empower middle school girls to resist gendered messages and limitations and to connect their current actions and educational

choices to high-status careers and leadership. We propose two recommendations:

First, early intervention is necessary. By middle school, girls' career aspirations are becoming fixed.[16] GSOs, whether single-sex educational institutions or nonprofits such as the Girl Scouts, can provide programming that expands girls' experiences to reveal latent interests and passions and break down gendered career messages.

Given the importance STEM careers will have in our future economy, a crucial area of intervention needs to be science. Because girls' interest in science is more often sparked by in-school experiences, a greater exposure to "hands on" science needs to occur prior to and during middle school.[17]

There seems to be no doubt that girl-serving organizations are effective in many ways in counterbalancing gendered career messages from media and other sources.

Second, seeing role models is not enough. Women role models also need to talk about the gendered barriers they had to overcome so that their success is not discounted by girls as "luck", but instead due to perseverance and hard, but do-able, work.[18]

Families. Given the career messages children report hearing from their parents, parents clearly want their children to be happy and successful. But due to the gendered landscape surrounding children, parents have cause to partner with girl-serving organizations to counter the gendered messages their daughters hear and to create opportunities to increase their daughters' confidence and broaden their career aspirations. Additionally, parents can seek to expose their daughters to female role models, suggest career options that use their daughters' strengths and interests, and stimulate their thinking regarding classes and experiences that either allow them to explore or prepare for all career options.

Despite the many legal, economic, and professional gains of women's activism and theory over the last fifty years, we know that women continue to be underrepresented in upper levels of leadership and in many career fields, including STEM. While a number of scholars and organizations have attempted to explain the career pipeline leak for women, our research suggests that the leak begins much earlier than previously thought, and therefore efforts to stem the leak must begin early as well. Our research may offer at least a partial explanation. It reveals that middle-school girls and boys still hear and act on gendered messages, despite other countervailing factors, including parents' messages about the importance of happiness in one's chosen profession and even data that reveal increased confidence levels of girls today compared to prior generations. We also know that girls are ambitious and expect to work most of their lives, yet they, like boys, discount many professions, including female-dominated fields but also others where they perceive that "boys are better." While this study makes an important contribution to our understanding of the pipeline leak for women and ways to ameliorate it, we want to recognize that our sample is not representative of all middle school girls, particularly concerning girls of color. Future research should examine the career aspirations of and messages heard by middle school girls of color, as the pipeline leak applies to the future career and leadership prospects of all women.

Yet at the same time, our research gives reason for optimism, for we see differences between girls who are Girl Scouts and non-Girl Scout girls and boys. As noted in this report, Girl Scouts score higher on many important indicators of career success including confidence and leadership. Though intuitively it seems clear that girl-serving organizations have made a difference in girls' lives, we now know from our data not only that those differences exist but also where the differences emerge. Though a number of provocative insights need to be researched more fully, there seems to be no doubt that girl-serving organizations are effective in many ways in counterbalancing gendered messages from media and other sources.

Author Mary Shapiro is Professor of Practice and CGO Affiliate at the Simmons School of Management. Author Patricia Deyton is Director of the Center for Gender in Organizations and Professor of Practice at the Simmons School of Management. Author Karyn L. Martin is Director of Council Initiatives and Research at Girl Scouts of Eastern Massachusetts. Author Suzanne Carter, Ph.D., MBA, is a graduate of the Simmons School of Management and CEO of SMC Advisors. Author Diane Grossman is Professor of Philosophy and Women's Studies at Simmons College. Author Diane E. Hammer is Director of the Simmons Institute for Leadership and Change at Simmons College.

Endnotes

[1]Wang, W., & Parker, K. 2011, Aug. 17. Women see value and benefits of college; men lag on both fronts, survey finds. Pew Research Center. Retrieved from http://www.pewsocialtrends.org/2011/08/17/women-see-value-and-benefits-of-college-men-lag-on-both-fronts-survey-finds/

[2]For statistics on women's education and wages, see Pew Research Center. 2011. Pew social and demographic trends. Retrieved from http://www.pewsocialtrends.org

[3]Catalyst. 2012. *Statistical Overview of Women in the Workplace.* New York, NY: Author. Retrieved from http://www.catalyst.org/file/672/qt%20statistical%20overview%20of%20women%20in%20the%20workplace

[4]Joslyn, H. 2009, Sept. 17. A man's world. *The Chronicle of Philanthropy.* Retrieved from http://philanthropy.com/article/A-Mans-World/57099/

[5]For a review of the literature exploring obstacles to women's progression into leadership, see Eagly, A.H., & Carli, L.L. 2007. Women and the labyrinth of leadership. *Harvard Business Review, 85*(9), 63-71; Trefalt, S., Merrill-Sands, D., & Kolb, D. 2011. *CGO Insights* No. 32: Closing the women's leadership gap: Who can help? Boston, MA: Center for Gender in Organizations, Simmons School of Management; Yeagley, E.E., Subich, L.M., & Tokar, D.M. 2010. Modeling college women's perceptions of elite leadership positions with Social Cognitive Career Theory. *Journal of Vocational Behavior, 77*(1), 30-38.

[6]For research on factors impacting adult career choices, see Lent, R.W., Brown, S.D., & Hackett, G. 2000. Contextual supports and barriers to career choice: A social cognitive analysis. *Journal of Counseling Psychology, 47*(1), 36-49.

[7]For an overview on social role theory and sex-typed division of labor, see Bussey, K., & Bandura, A. 1999. Social cognitive theory of gender development and differentiation. *Psychological Review, 106*(4), 676-713; Prentice, D.A., & Carranza, E. 2002. What women and men should be, shouldn't be, are allowed to be and don't have to be: The contents of prescriptive gender stereotypes. *Psychology of Women Quarterly, 26*(4), 269-281; Wood, A.H., & Eagly, A.H. 2002. A cross-cultural analysis of the behavior of women and men: Implications for the origins of sex differences. *Psychological Bulletin, 128*(5), 699-727.

[8]For an overview on factors impacting children's career formulations, see Jantzer, A.M., Stalides, D.J., & Rottinghaus, P.J. 2009. An exploration of social cognitive mechanisms, gender, and vocational identity among eighth graders. *Journal of Career Development, 36*(2), 114-138; Jodl, K.M., Michael, A., Malanchuk, O., Eccles, J.S., & Sameroff, A. 2001. Parents' roles in shaping early adolescents' occupational aspirations. *Child Development, 72*(4), 1247-1266; Rogers, M.E., & Creed, P.A. 2011. A longitudinal examination of adolescent career planning and exploration using a social cognitive career theory framework. *Journal of Adolescence, 34*(1), 163-172; Wilbourn, M.P., & Kee, D.W. 2010. Henry the nurse is a doctor too: Implicitly examining children's gender stereotypes for male and female occupational roles. *Sex Roles, 62*(9-10), 670-683.

[9]For research on media impact on children's career formulations, see Hartung, P.J., Porfeli, E.J., & Vondracek, F.W. 2005. Child vocational development: A review and reconsideration. *Journal of Vocational Behavior, 66*(3), 385-419; Herr, N. 2007. Television & health. Retrieved from http://www.csun.edu/science/health/docs/tv&health.html; Signorelli, N. 1997. *A Content Analysis: Reflections of Girls in the Media.* Menlo Park, CA: The Henry J. Kaiser Family Foundation. Retrieved from http://www.kff.org/entmedia/loader.cfm?url=/commonspot/security/getfile.cfm&PageID=14517; Smith, S.L., & Choueiti, M. n.d. *Occupational Aspirations: What are G-Rated Films Teaching Children about the World of Work?* The Geena Davis Institute on Gender in Media. Retrieved from www.thegeenadavisinstitute.org/downloads/KeyFindings_OccupAspirations.pdf; Watson, M., & McMahon, M. 2005. Children's career development: A research review from a learning perspective. *Journal of Vocational Behavior, 67*(2), 119-132.

[10]Girl Serving Organizations (GSOs) could be single-sex academic institutions and organizations such as Girl Scouts, Teen Voices, Big Sister, etc. We are distinguishing GSOs from any organization that serves girls in a co-ed capacity.

[11]We define "female-dominated" jobs as those where women comprise at least 65% of the workforce, as specified by the Bureau of Labor Statistics.

[12]American Association of University Women. 2011, Oct. *Pay Equity and Workplace Opportunity: A Simple Matter of Fairness.* Washington, DC: Author. http://www.aauw.org/act/issue_advocacy/actionpages/upload/PayEquity_112.pdf

[13]Hartung, Porfeli, & Vondracek, 2005; Mendez, L.M.R., & Crawford, K.M. 2002. Gender-role stereotyping and career aspirations: A comparison of gifted early adolescent boys and girls. *Journal of Advanced Academics, 13*(3), 96-107; Wilbourn & Kee, 2010.

[14]Francis, B. 2002. Is the future really female? The impact and implications of gender for 14-16 year olds' career choices. *Journal of Education and Work, 15*(1), 75-88; Hartung, Porfeli, & Vondracek, 2005; Morris, B., Munoz, L., & Neering, P. 2002, Oct. 14. Trophy husbands and arm candy? *Fortune*; Tichenor, V. 2005. Maintaining men's dominance: Negotiating identity and power when she earns more. *Sex Roles, 53*(3-4), 191-205Wilbourn & Kee, 2010.

[15]Our measurement of leadership confidence is composed of three types of leadership skills on which study participants rated themselves:

- Confidence in being a **Leader Out Front and In Charge** (speaking in front of others, performing in front of others, speaking about something they care about, being a leader in charge of projects, getting people to agree with them, being creative, and making decisions).
- Confidence in being a **Responsible Leader** (getting good grades, working with numbers, finishing projects, solving problems, writing reports and papers, organizing projects and activities, and saving money).
- Confidence in a being a **Team Building Leader** (being flexible and adaptable, being sensitive to cultural differences, being a good listener, working in teams, and resolving conflicts).

[16]Francis, 2002.

[17]Maltese, A.V., & Tai, R.H. 2010. Eyeballs in the fridge: Sources of early interest in science. *International Journal of Science Education, 32*(5), 669-685.

[18]Weisgram, E.S., & Bigler, R.S. 2007. Effects of learning about gender discrimination on adolescent girls' attitudes toward and interest in science. *Psychology of Women Quarterly, 31*(3), 262-269.

Center for Gender in Organizations (CGO)
Linking gender and organizational effectiveness

Simmons School of Management
300 The Fenway, Boston, MA 02115 USA
Tel: 617-521-3824 Fax: 617-521-3878 E-mail: cgo@simmons.edu
www.simmons.edu/som/cgo