A Thematic Analysis of Leadership Qualities of Women Leaders in Technology:
Viewed through Social Media

Laurie O. Campbell
University of Central Florida, USA

Joshua H. Truitt
University of Central Florida, USA

Christine P. Herlihy
University of Central Florida, USA

Jarrad D. Plante
University of Central Florida, USA

WOMEN IN LEADERSHIP

"In the future, there will be no female leaders. There will just be leaders" (Sandberg, 2015). Sheryl Sandberg's, COO of Facebook, words paint a picture of future times where leaders will not be defined by gender, rather their work and contributions as a leader will define them. In current culture, gender disparity in top-level leadership is evident and a continual concern as it has been in the past. Recruiting women to the highest level of leadership challenges organizational search committees trying to employ women as women are currently underrepresented in top positions of leadership.

Reasons for the lack of women in high ranking leadership positions extend beyond recruitment. Societal perceptions have been known to further the inequity. Historically, sociocultural perceptions include gender-based expectations and roles that contradict the idea of women in leadership positions (Eagly, 1987). The social resistances towards women as leaders are attributed to conflicting roles, societal norms, values, and power dynamics unconsciously or consciously by stereotypical reactions of others. Organizations and nations constantly struggle with accepting women as leaders who don't fit traditional mores (Nanton, 2015). Another school of thought attributed the lack of females in fields of science and technology to the lack of role models in leadership positions in these fields.

The following chapter addresses the state of women in technology, the need for diverse female role models, and documents the analysis of evident strategic leadership characteristics of four known female technology leaders evidenced in their social media communications. Finally, while there is a paucity of research documenting the effects of female role models social media contributions influencing young women and girls to consider being a leader in STEM, needs knowing how and what leadership qualities are portrayed through social media add to the literature base. Throughout the chapter references to STEM and technology and STEM leaders and technology leaders are used interchangeably, as STEM is inclusive of technology. The chapter specifically addresses technology role models as there is a greater deficit of females in technology, as compared to other fields of study in STEM.

DOI: 10.4018/978-1-5225-1049-9.ch001

Women in Leadership: STEM

The U.S. Department of Education defines STEM as the fields of science, technology, engineering and math. STEM fields are predominantly employed by males. The U.S. Department of Commerce's Economics and Statistics Administration (U.S. Census Bureau, 2011) states that females make up approximately 50% of the workforce, but less than one-third of those employed in STEM fields are women. Due to the gender inequity in STEM fields, women have difficulties finding female mentorship (Ashcraft & Blythe, 2009; Ashcraft, Eger, & Friend, 2012). A female STEM leader can serve as a role model, supporter, and advisor for other women in the pursuit of their leadership goals in STEM.

Women are clearly underrepresented in STEM and leadership positions in the academy as well as in business. According to National Science Foundation (NSF), only 31% of full-time faculty and 27% of department heads and deans are women meaning role models in higher education that often provide guidance to young people in career choices continue to represent a gender gap (Gorman, Durmowicz, Roskes, & Slattery, 2010). The lack of female mentorship and gender inequity in STEM is observed by all levels of society. Recruitment and mentorship programs among underrepresented populations have become a high grant funding priority to expand leadership opportunities in STEM fields.

President Obama (February 2013) stated, "One of the things that I really strongly believe in is that we need to have more girls interested in math, science, and engineering. We've got half the population that is way underrepresented in those fields and that means that we've got a whole bunch of talent…not being encouraged the way they need to." The need for strategic leadership and role models to balance gender inequity in leadership especially in STEM fields is vital. The development of elite talent in STEM is crucial to the United States' global leadership. The White House Council on Women and Girls in collaboration with The Office of Science and Technology are working to increase the engagement of girls.

SOCIOCULTURAL PERSPECTIVE

The sociocultural perspective supports the belief that social structures change over time. MacCallum and Beltman (2002) stated, "Programs using successful women in nontraditional careers to provide positive role models to adolescent girls are an example of role model programs attempting to break stereotypes and, therefore, change behavior" (p. 20). If research supports the use of female nontraditional role models as an agent of change, then perhaps it is possible that existing female technology leaders who utilize social media as a method for breaking stereotypical beliefs will likely aid in recruiting younger females into STEM fields. The ubiquitous nature of social media postings by female tech leaders may support a belief that success in a traditional or a nontraditional STEM career is achievable.

Role Models and Social Media

Role models (both traditional and nontraditional) are needed to recruit women and girls into STEM. Milgram (2011) suggested that videos, books, and posters highlight women role models so young women hear and see faces that resemble themselves. These explicit messages are tangible examples for girls and women to ponder STEM careers which may be achievable for females. Milgram's suggestion of visual media and books of 2011 would be the equivalent of various social media in 2016. Social media is defined as