Insights on engineering as a non-traditional career field for women

ABSTRACT

Purpose: This study examines insights about engineering as a non-traditional career field for women. Design/methodology/approach: This conceptual paper adopted in-depth literature review approach from past studies conducted worldwide. A total of 75 sources of literature based on international contexts are used in the analysis that include journal articles, books, book chapters, and website documents. The analysis is based on the social role theory. To conduct the literature reviews, we used keywords such as women engineers, engineering as a non-traditional career, as well as women in science, technology, engineering, and mathematics (STEM). Constant comparative analysis was used to establish some thematic insights about engineering as a non traditional career for women. Findings: The results show that there are strong literature evidences that women are underrepresented in the engineering profession despite the fact that women are making inroads in it. The thematic insights derived from this analysis are: women can build a successful career in engineering, engineering field provides good salary for women, women engineers face tough competition with men engineers, consistent gender bias and stereotype threats faced by women engineers, women over forty years old are not appropriate to work in engineering as men in the same age, women engineers are bound with family commitment, and women engineers subjected to harassment as well as glass ceiling effect at workplace. Practical implications: Further research is suggested to test and validate quantitatively and qualitatively the themes generated from this analysis based on specific sample of women engineers such as mechanical engineers or computer engineers. Upon validation, it is recommended that organisations to adopt various gender-friendly initiatives for women to unleash their talents and potentials as engineers. Originality/value: The paper contributes to literature on the significant insights about engineering as a non-traditional career field for women, which is rarely discussed in business and management literature. The insights are valuable for other inspiring women to know and organizations to appreciate what takes to be a successful woman professional in the non-traditional career of engineering.

Keyword: Engineering; Non-traditional career; Women engineers; Women in science technology.