College & Work Experience:

"you’re just a young girl you don’t seem to be worthing"

"you can’t dress up as much and be seen as just as competent"

"it was hard to get people to listen to what we had to say, they were kind of having their own conversation"

• College Experience:
  • Felt a lack of representation—76.8%
  • Had faculty support—89.4%
  • Needed to prove themselves—69.8%
  • Encountered sexist jokes from classmates—54.7%
  • Felt out of place—45%
  • Target of sexist comments—38.8%
  • Encountered sexist jokes from faculty—29%
  • Target of unwelcome sexual advances—21.2%

• Workplace Experience:
  • Satisfied with their job—86.8%
  • Satisfied with treatment from male co-workers—85.3%
  • Received same opportunities for advancement as their co-workers—67.7%
  • Considered leaving engineering—52.6%
  • Overall women are treated worse than their male counterparts—36.3%
  • Excluded from informal work events—38.6%
  • Men talk differently to them—48.3%
  • Men don’t listen to them as much as to other men—33.3%
  • Held to different standards—40.8%
  • Had to prove themselves—60.7%
  • Experienced sexual harassment—39.3%
  • Heard sexist comments—79.6%
  • Target of sexist comments—58.2%
  • Judged on their physical appearance—51.7%
  • Received inappropriate comments about appearance—49.3%
  • Dressed more masculine—34.3%
  • Acted more masculine to fit in at work—28.4%

Factors Contributing to Leaving an Engineering Career

According to the multivariate logistic regression in Table 3, higher self-esteem decreases the likelihood of leaving a career in engineering, whereas, subtle work discrimination, having strong self-strengths, working late, working alone, and being a woman of color increase the likelihood of leaving an engineering career.

Factors Related to Career Satisfaction

According to the multivariate linear regression analysis in Model 1, Table 1, self-esteem is positively related to career satisfaction, and work-related stress and the sense of gender discrimination in college are negatively related to career satisfaction. However, in Table 1, Model 2, not only is the sense of gender discrimination in the workplace negatively related to career satisfaction, adding it to the model explained away the impact of a sense of gender discrimination during college and decreased the impact of self-esteem as well as stress on career satisfaction. Interestingly, adding it to the model resulted in income becoming positively related to career satisfaction.

There were no statistically significant relationships between the level of career satisfaction and organizational factors (i.e., number of hours worked per week, the size of the company, and the percentage of women co-workers in immediate department), structural factors (i.e., race, age, relationship status, and number of children), and work-life balance (i.e., ability to balance work and social/family life, feeling of being able to meet expectations of family and friends, staying at work late, and taking work home).

Family & Career Satisfaction

The multivariate linear regression analysis in Table #2 focused on women engineers who were in a relationship and had children. The sense of discrimination in the workplace, the number of children, working too much missing children’s school functions, and working alone decrease career satisfaction. However, level of self-esteem, income, spending time with children increase career satisfaction. Surprisingly, the more women agree they have very clear boundaries between work life and social life, the level of career satisfaction decreases.

Conclusions

Despite women engineers facing forms of discrimination in the workplace, they are still generally satisfied with their career. Yet, a substantial number of women have considered leaving engineering, primarily resulting from discriminatory treatment. The findings suggest discriminatory experiences might have normalized in women’s experiences, and they find satisfaction elsewhere such as income. Interestingly, other factors commonly associated with career satisfaction (e.g. hours worked, company size, upward mobility) were not significant in women’s experiences. Women engineers still face a number of challenges. Surprisingly, the challenges identified here were largely cultural and relational and not as strongly related with pay gaps and lack of upward mobility.