Gender Enrollment Gap in Aerospace Engineering Problem-Solution Analysis for ERAU Lauren Augusto : Embry-Riddle Aeronautical University

Background

- The STEM workforce has stereotypically been a male dominated field.
- Embry- Riddle reflects this in their demographics as only 29.3% of Daytona Beach students were women as of Fall of 2023. (Figure 1)

Demographic	Daytona Beach
Average Age	27
Female Students	29.3%
International Students	38.2%

Figure 1. Institutional Research (2022). *Student* Demographics. Embry-Riddle News Student Demographics Embry - Riddle Aeronautical University - Newsroom (erau.edu)

Problem Statement

- The gender gap at ERAU will not repair itself without school sanctioned intervention. A career in STEM will continue to pose a barrier for women if no change is made.
- Societal gender roles suggests the idea that they are confined to a certain career path.

Objective

- To analyze current data and observe how to increase female engagement in engineering.
- Increase female applications to ERAU
- A solution will be proposed to Embry-Riddle's Undergraduate Admissions to mitigate the problem.

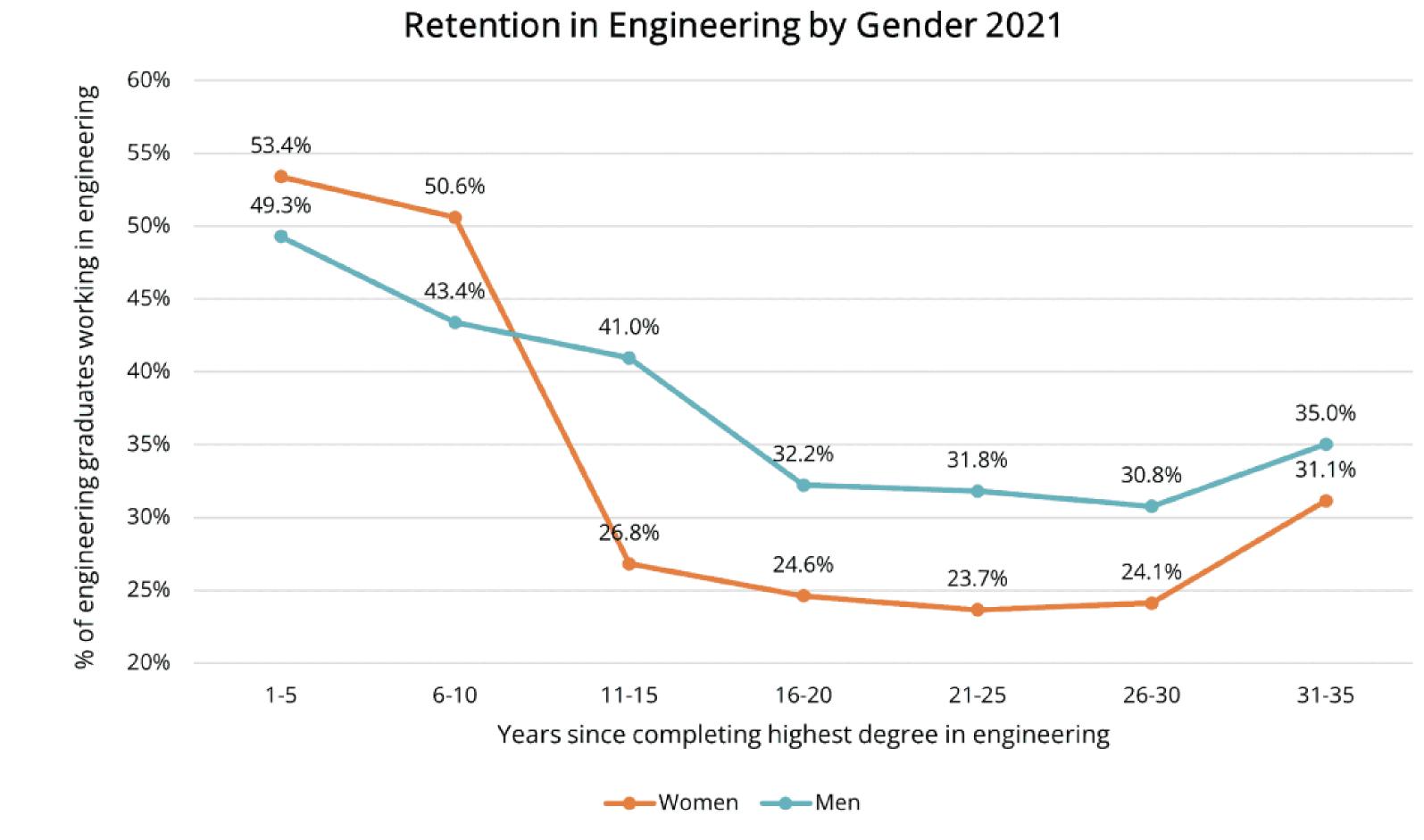


Figure 2. Corbet, C., & Hill, C. (2016). *Retention in Engineering by Gender*. Society of Women Engineers.

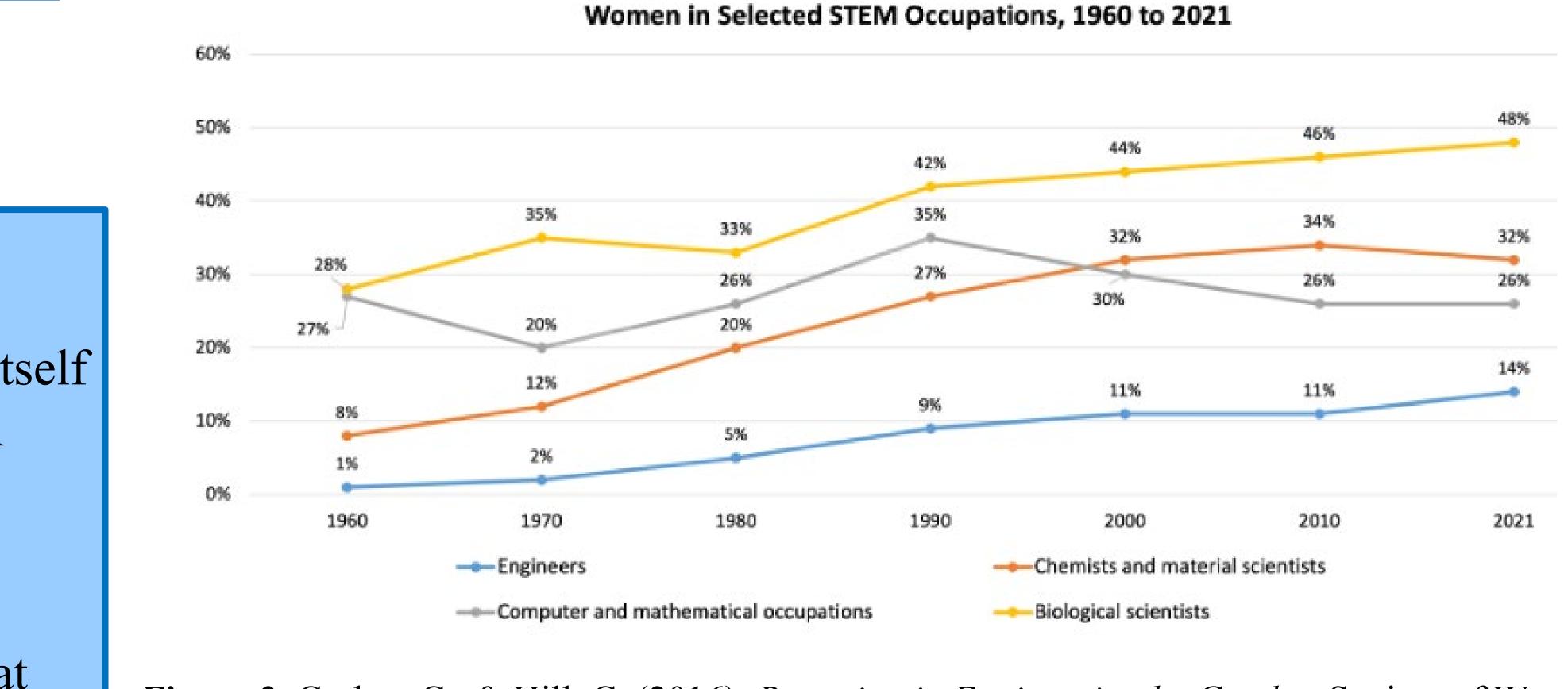


Figure 3. Corbet, C., & Hill, C. (2016). Retention in Engineering by Gender. Society of Women Engineers.

- in STEM.

Results

Systemic Gender Stereotypes

Women raised with gendered cultural

ideologies are less likely to pursue a degree

Number of women in engineering has only increased by 13% in 60 years. (Figure 2) Lack of Female Mentors

Unable to view themselves in the field Women's issues go unnoticed, causing low retention. (Figure 3)

Recommendations

Outreach Groups

Taught by strong female leaders breaking ideas of gender stereotypes. • Young girls grow with the ERAU community and be more likely to enroll in the university.

Increase Hired Women

• A higher number of women in leadership positions makes women more likely to apply for the school and remain there.

Increase Awareness of Women's Issues • Highlighting women's issues creates support between them, increasing female retention and applications. Be forthcoming in plans to increase female enrollment and how women can support each other.