Females in the Air Transportation Industry: Flying in a masculine world

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Background

- Demand for new commercial pilots will exceed 450,000 and may reach as high as 790,000 by 2037
- Deficit could reduce the availability of air transportation for business and pleasure
- Currently only about 3% of the commercial pilots worldwide are female
  - Female boat captains and operators (8.2%)
  - Female police officers (15%)
  - Female medical doctors (31.8%)
More Background

- The recruiting of more female pilots could help to elevate the shortage
  - However flying has been historically a male centric profession in which the culture has not been encouraging for females
  - With masculine beliefs, values, and biases
  - Sexism, high visibility and scrutiny, isolation and ostracism, less favorable advancement opportunities, and harassment of female pilots (Mitchell, et al., 2005)

- Stereotypic bias against female pilots even extends to passengers on commercial flights

- Research has not supported any real differences between male and female piloting skills
Active Airmen ATP (FAA)
Active Women Airmen Certificates (FAA)

Note: 1,100 female pilots supported US in WWII
Women Mechanics/Dispatchers (FAA)
Gender bias among pilots

- **Flying Proficiency** - males rated females as less qualified, $t(59)=4.09$, $p<.001$

- **Safety Orientation** - male pilots rated female pilots as less safe, $t(65)=3.40$, $p=.001$

- **Flight Confidence** - males significantly rated themselves high and females low, $t(66)=2.35$, $p=.022$

- **Erosion of Flight Standards** - males significantly agreed $t(59)=.38$, $p<.001$, the perception that females are given “breaks” because of their gender

Males seem to have a more negative view of female pilots across the board, suggesting that males see female pilots as not being very good at flying a plane and, in fact, as being pretty bad at flying a plane.

Barriers to Entry

- Sexism among males pilots
  - Women tend to take on male dominated traits to try to fit in
  - When males consistently share the flight deck they are more accepting of female pilots

- Industry not very ‘kid’ friendly

- Industry historically has not attracted females
  - Sourcing from military, largely male
Recommendations

- Work to eliminate sexism among males pilots
  - Education and required cross-gender training
    - i.e. flight simulation with mixed crew
- Provide flexibility to working mothers
  - Part time work/Job share
  - Maternity leave (can ‘ground’ female pilots for 1-2 years)
- Target young girls (Teenager, or before)
  - Alleviate the ‘not a job for me’ syndrome of young women
  - https://www.youtube.com/watch?time_continue=38&v=F0_P2fDNvY4
- Train instructors to understand female pilot trainees
  - Learning style differences
    - Slower to gain confidence
  - Flawed decisions (male) vs mishandling the aircraft (Female)