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## Adversity: Its Affect on the Resilience of Female Pilots

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# Adversity: Its Influence on the Resilience of Female Pilots



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# Testing our perceptions....

What % of women work in male dominated career sectors?



# Females in Male Dominated Roles

11%

# The Pilot Shortage

As of August 2019<sup>(1)</sup>

What % of licensed pilots are women?

**(5.07%) n=9,389**

What % of commercial pilots are female captains?

**(1.33%) n=2,503**

How many African American female commercial pilots are there?

**150**



# What is happening?

In a 2018 study of 692 female aviators<sup>(2)</sup>

- ✓ 53.2% claimed to have suffered gender discrimination
- ✓ 18.8% maintained that they suffered sexual harassment on the job

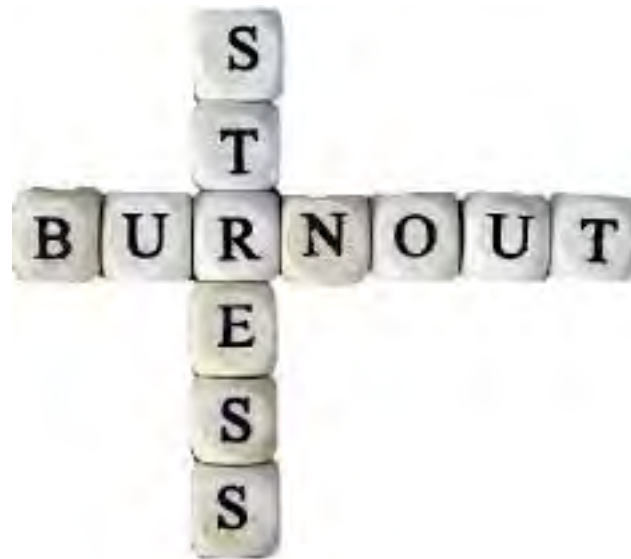


# What can we do about it?



# Cause and Effect?

- Female pilots experience adversity
- Adversity in the workplace causes occupational stress
- Occupational stress reduces job performance and wellness, leading to burnout and attrition
- **Resilience** may mitigate the harmful effects of adversity in the workplace
- **Resilience** supports employees' adaptation to and coping with occupational stress





# Why Resilience???

## Influences if women pursue/abandon careers in male-dominated roles

- Is the capacity to rebound from adversity and promotes adaptation, wellness, greater performance and organizational growth
- is an acquired skill supported by initiatives embedded in organizations to improve the performance of individuals
- can be developed and a key factor in positively responding to adverse challenges in the workplace
- is positively associated with organizational performance outcomes, work engagement, job satisfaction, organizational commitment, and negatively associated emotional exhaustion and burnout

## Determines who succeeds or fails

# Research Study Objective

Explore the experience of female pilots and the influence adversity may or may not have on resiliency



# Hypotheses

H1: Would female pilots have a higher resilience than the sample U.S. Population?

H2: Would intra-group differences exist?

- a. Age
- b. Years of experience
- c. Type of pilot



## Sample

1,499 licensed female pilot members of Female Aviators Sticking Together (F.A.S.T.) participated. 1,309 surveys used in analysis

## Construct

Connor-Davidson Resiliency Scale (CD-RISC): a self-report measure developed to provide a valid and reliable measure of resilience

## Factor analysis

Randomly split into two subsamples

- Sample 1: to conduct an EFA of the 25-item CD-RISC
- Sample 2: to verify the factor structure obtained from the EFA using the CFA to examine internal consistency reliability and discriminant construct validity

# Study Findings

- H1. An abridged version of the CD-RISC was found applicable to measuring resilience in female pilots
- H2. A significantly lower resilience score was found in the sample in comparison to a national sample average resilience score
  - H2a: Age of the female pilots was positively correlated with higher resilience scores
  - H2b: Work experience of the female pilots was positively correlated with higher resilience scores
  - H2c: Type of pilot findings were not valid due to low samples of specific pilot types



# Limitations

- ✓ This measure of resilience is cross-sectional and is limited by how a participant felt at the time the measure was completed
- ✓ The unidirectional relationship of age and years of experience are a limitation
- ✓ Due to the variations in sample sizes for the type of pilot, no findings resulted
- ✓ Each pilot may have a different workplace culture, modifying the influence on resilience

Are you listening?



# Future Study

- ✓ Further explore the effect of occupational stressors in aviation on resilience
- ✓ Generalizable claims cannot be made until information such as education level, cultural settings, and workplace settings are collected
- ✓ Establish a cause and effect relationship of the workplace on resilience, specifically in aviation and for female pilots
- ✓ Like sized samples are needed to analyze the influence of type of pilot on resilience



# Significance of Findings

- ✓ The resilience of female pilots is likely influenced by workplace adversity
- ✓ The lower resilience of female pilots indicates a need to address latent issues that provide disincentives to women becoming and remaining pilots
- ✓ Interventions aimed at increasing resiliency is critical to solving the pilot shortage
- ✓ Insight for the recruitment, retention, and development of women in male-dominated occupations
- ✓ Augments scholarly literature and provides implications for theory and practice highlighting variables to lessen adversity and potentially improve resilience





# References

1. The International Society of Women Airline Pilots (August 2019) 4.
2. Pittenger, L. (2017) Annual Study of F.A.S.T. (Female Aviators Sticking Together), Smyrna, GA.

A black and white photograph of a piece of lined paper. The word "Questions?" is written in a large, cursive, handwritten font. A black marker is visible in the bottom right corner, with a curved line drawn underneath the word. The paper has horizontal lines, and the background is a solid blue color at the top and bottom of the slide.

Questions?