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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⁽¹⁾

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⁽²⁾

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

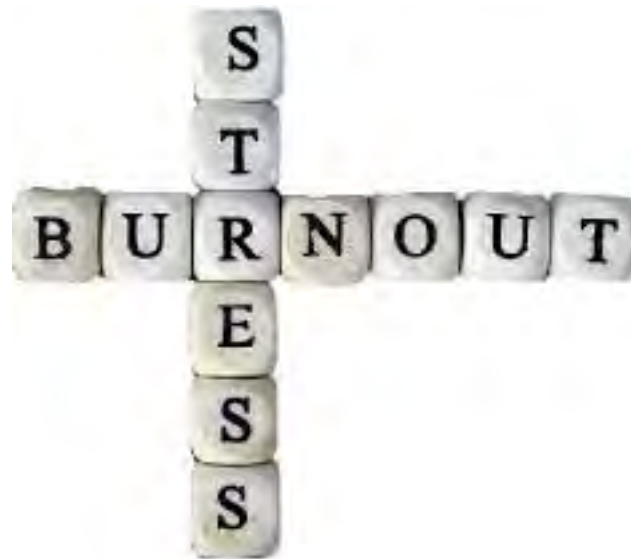


What can we do about it?



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?