



 **WYVERN** Wednesday Webinar

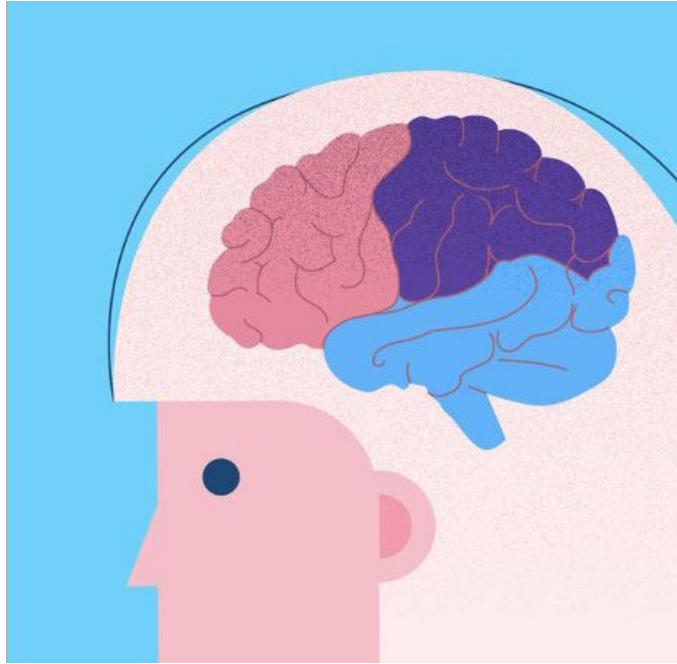
*Captain Kimberly Perkins
Captain Max Grover*

Cognitive Biases & your SMS

 **WYVERN**

ELEVATING SAFETY & SECURITY WORLDWIDE

April 21, 2021



- **Primitive brain** – keeps us alive and triggers the fight, flight or freeze response.
- **Emotional brain** – programmed by our assumptions used for emotion and motivation.
- **Thinking brain** – creativity, logical processing, critical thinking



(11 million bits of data per second)



Unconsciously

classify



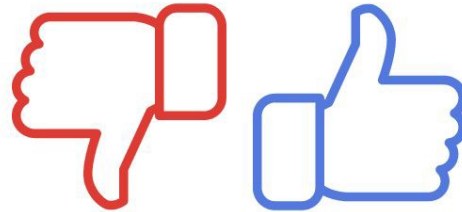


Heidi is competent BUT..
"not the type of person you
would want to hire
or work for"
Not humble
Power-hungry and
self-promoting

Identical case study

different names

different results

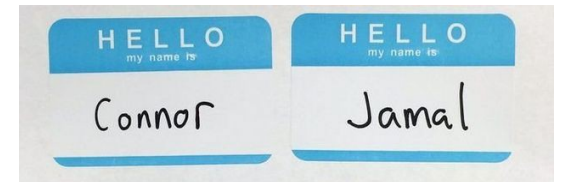


Howard is competent
and...

"a great guy"
"you want to hang out
with Howard"

Status Quo Bias Creates a Default

- When women comprise 17% of the room, people viewed the room to be 50/50 men and women.
- When women spoke 30%, they were viewed as dominating the conversation.
- Blonde women make 7% more salary.
- Having a white sounding name increases your odds for a job call back by 50%
- 58% of Fortune 500 CEOs are 6ft tall



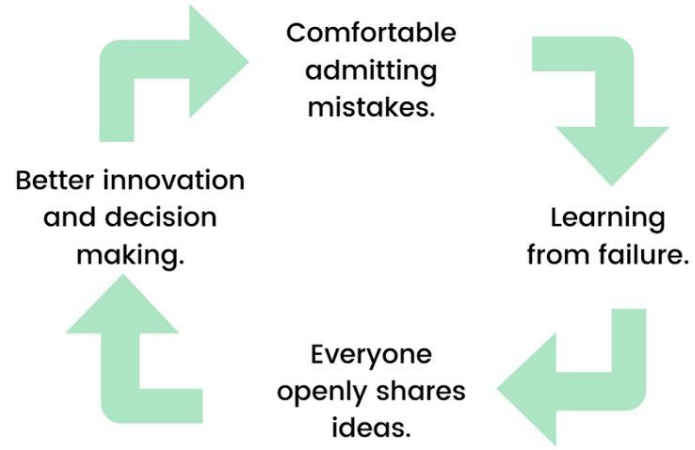
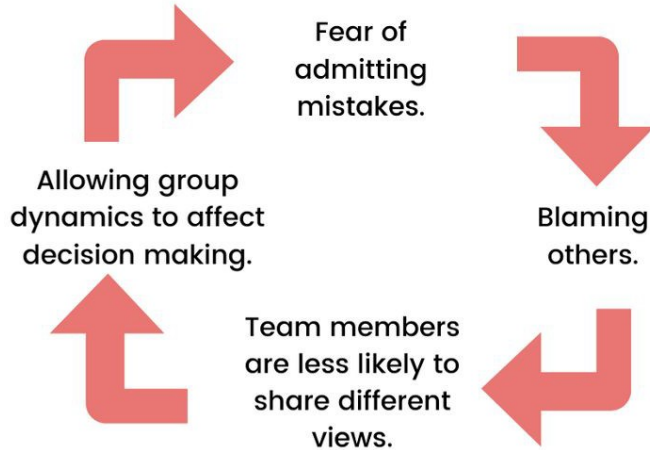


VS



PSYCHOLOGICAL DANGER

PSYCHOLOGICAL SAFETY



What's next for aviation safety?

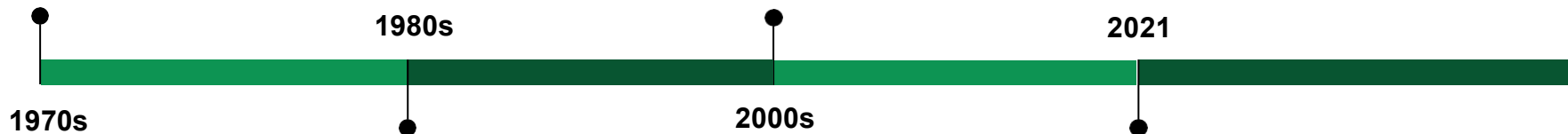
Crew Resource Management

How to gather information and communicate in an emergency or high stress situation.

Safety Management System

Measuring and monitoring culture. Must create a 'just' reporting culture.

Trust is fundamental to a functioning SMS. It's time for a deep dive into human factors training as the next step of aviation safety.



Aeronautical Decision Making

Focused on pilots' hazardous attitudes and ability to analyze risks and hazards

Human Factors Expansion

- Cognitive Bias
- Psychological Safety
- Inclusive Leadership
- Emotional Intelligence

4. SAFETY PROMOTION (Annex 19 component 4)

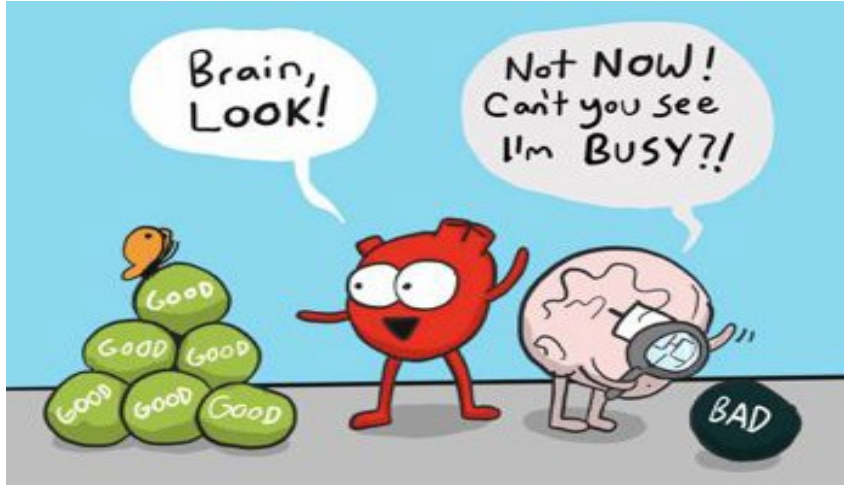
4.1 TRAINING AND EDUCATION (Annex 19 element 4.1)



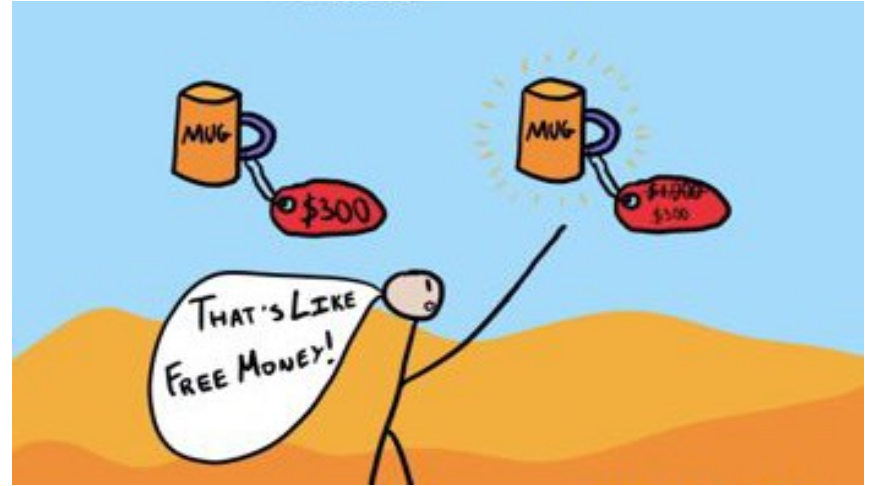
Evaluation	Indicators of compliance and performance	
	4.1.1	There is a training programme for SMS in place that includes initial and recurrent training. The training covers individual safety duties (including roles, responsibilities, and accountabilities) and how the organisation's SMS operates.
	4.1.2	There is a process in place to measure the effectiveness of training and to take appropriate action to improve subsequent training.
	4.1.3	Training includes human and organisational factors including just culture and non-technical skills with the intent of reducing human error.

Time for cognitive bias training and an expansion of human factors training

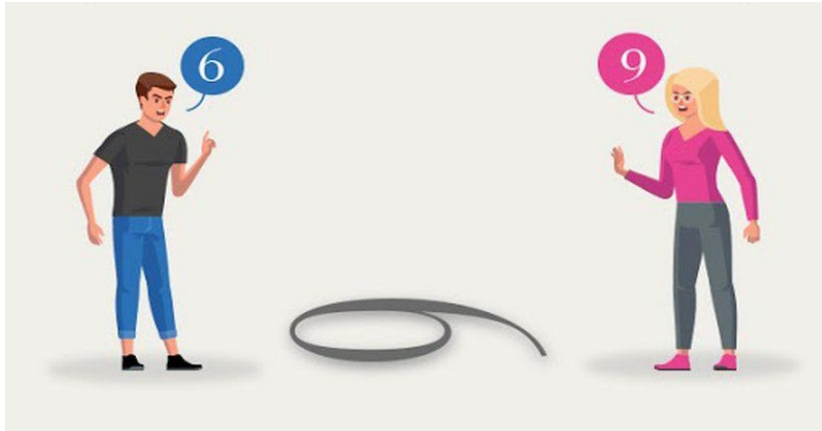
Negativity Bias



Anchoring Bias



Confirmation Bias



In-Group Bias



SMS

Safety
Policies & Objectives

Safety
Risk Management

Safety
Assurance

Safety
Promotion

Self
Awareness

Empathy

Inclusive
Leadership

Emotional
Intelligence

Cognitive
Bias

Psychological
Safety

The pilot shortage
demands the
industry invest in
human capital.

Sustainability

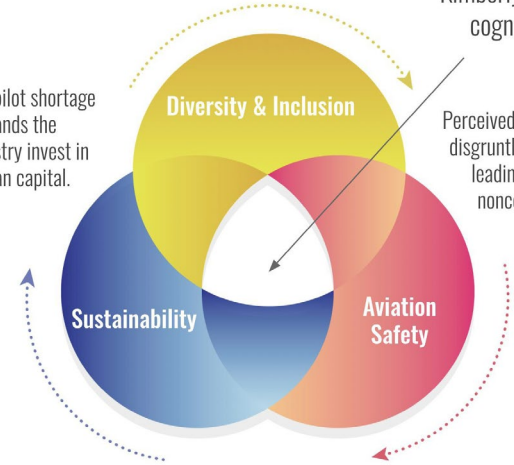
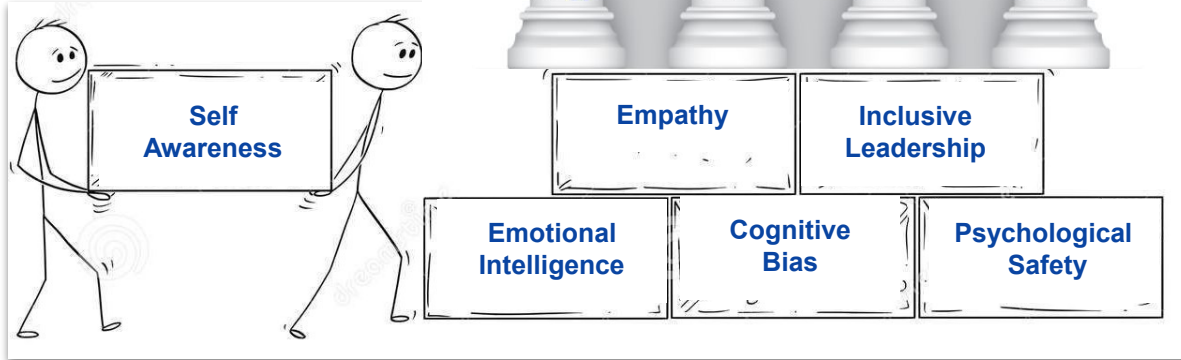
Diversity & Inclusion

Aviation
Safety

Low psychological safety
results in the poor
retention rate of
women in aviation.

Kimberly's research:
cognitive bias


Perceived bias results in
disgruntled employees
leading to subtle
noncompliance



United Sets New Diversity Goal: 50% of Students at New Pilot Training Academy To Be Women and People of Color

United Airlines is only major U.S. airline to own flight school: United Aviate Academy

April 06, 2021

CHICAGO, April 6, 2021 /PRNewswire/ -- United Airlines, the only major U.S. airline to own a flight school, will begin accepting applications today as it embarks on an ambitious plan to train 5,000 new pilots by 2030, at least half of them women and people of color. Backed by scholarship commitments from United Airlines and JPMorgan Chase, [United Aviate Academy](#)  will create opportunities for thousands of students, including women and people of color to pursue a career as a commercial airline pilot, one of the most lucrative careers in the industry.

In addition, for those United Aviate Academy students who may need additional financing, United has partnered with Sallie Mae to offer private student loans to ensure that no highly-qualified, highly-motivated, eligible applicants will be turned away solely because they can't afford to enroll. United Aviate Academy expects to enroll 100 students in 2021.

"Over the next decade, United will train 5,000 pilots who will be guaranteed a job with United, after they complete the requirements of the Aviate program – and our plan is for half of them to be women and people of color," said United CEO Scott Kirby. "We're excited that JPMorgan Chase has agreed to support our work to diversify our pilot ranks and create new opportunities for thousands of women and people of color who want to pursue a career in aviation."

To break down the financial barriers that limited access to the airline pilot career path for generations of women and people of color, United has committed to fund \$1.2 million in scholarships. The airline's credit card partner, JPMorgan Chase has also committed \$1.2 million to support women and people of color who are accepted to United Aviate Academy.

Inclusionary Safety Culture

- Increased world-view “lenses” improves hazard identification/SRM
- Improved buy-in/participation drives tighter surveillance/assurance processes
- Active Promotion of Diverse Input to Bolster Reporting Culture
- Psychological Safety Critical to Generative Safety Culture

Pluralism Promotes Performance

Hey, aviation industry.

Where are the women?

Women comprise **46.8%** of the total US labor force.

But, just **5.6%** in the pilot workforce.

Only 2% of them are Captains.

Reference 1: 46.8% and 5%

Reference 2: 2%



Here's what 5% looks like

Bias & Discrimination

Why we can't recruit or retain women in aviation

- In a 2019 study, 24% of career female pilots said that **bias and discrimination** was the **#1** reason that the industry can't recruit more woman.
- A second study showed that a “**perceived negative culture**” was the second biggest deterrent for young girls considering a career in aviation (behind cost).
- 27% of career female pilots surveyed said that ending **bias and discrimination** was the most important factor to retaining women in the industry (behind schedule predictability).

Study reference [here](#).



In-group Bias

Noun

prejudice in favor of or against one thing, person, or group compared with another, usually in a way considered to be unfair.