

PILOT WELLBEING, STRESS COPING & RESILIENCE

Dr Joan Cahill
Captain Paul Cullen



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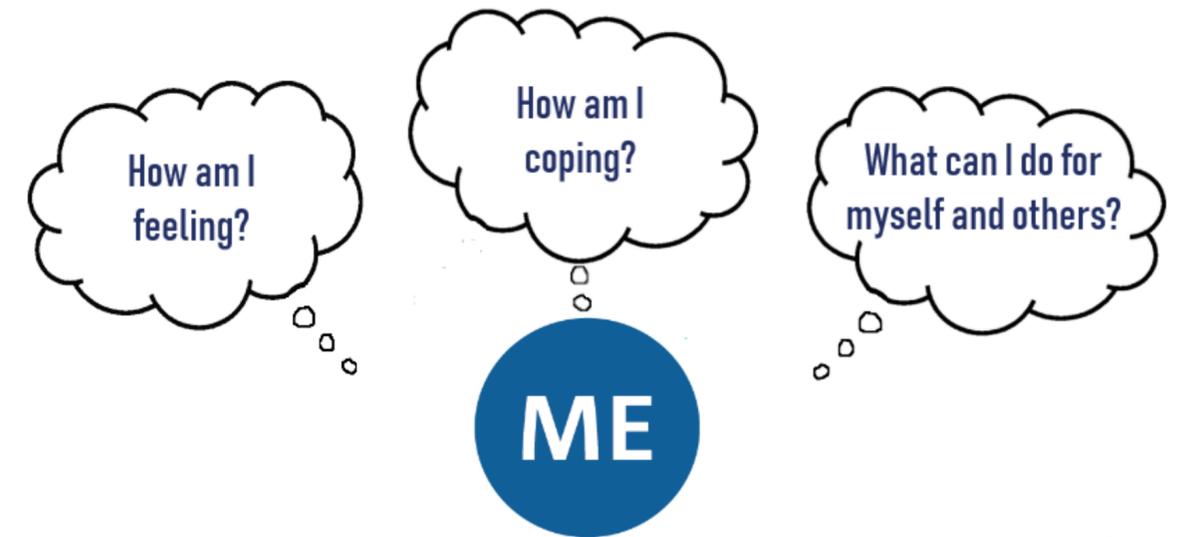


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Centre for Innovative Human Systems

Wellbeing Webinar Overview (Lived Experience Project)

1. Lived Experience Project & Team
2. Understanding Wellbeing
3. COVID
4. Stress Coping (Survey Findings)
5. Wellbeing Questions
6. Tools (pilot level)
7. Research Roadmap
8. Next Steps
9. Conference Preview
10. Resources
11. Questions



PILOT LIVED EXPERIENCE PROJECT

- Capt. Paul Cullen
- Dr. Joan Cahill
- Dr. Keith Gaynor
- Prof. Simon Wilson
- Sohaib Anwer

<https://www.tcd.ie/cihs/projects/pilot-lived.php>



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PILOT LIVED EXPERIENCE PROJECT

- Measuring WRS & Wellbeing
- Understanding measuring impact of WRS on wellbeing, performance and safety?
- Why do some pilots cope better than others?
- Change - solutions for pilots and industry?

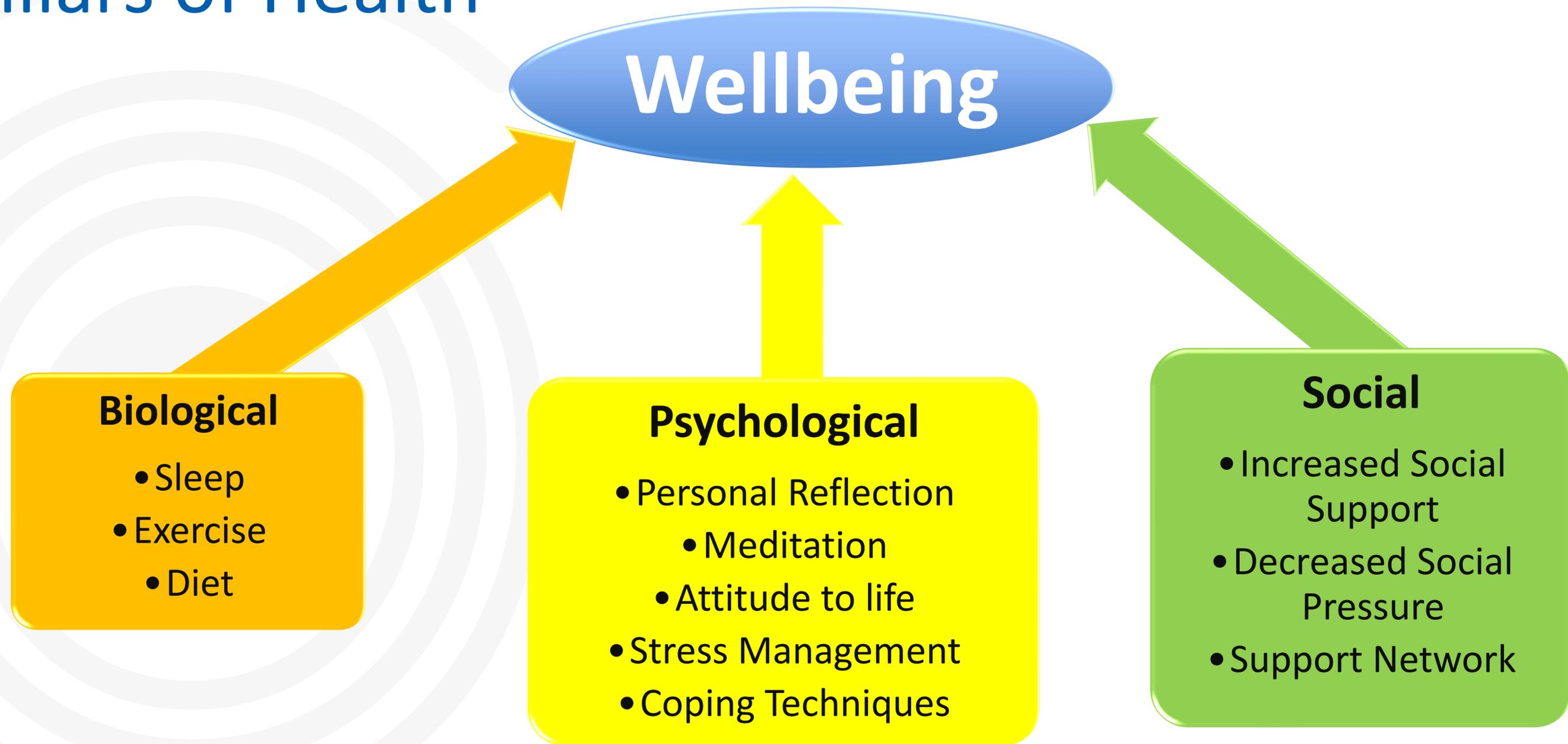


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3 Pillars of Health



COVID Situation & Need for Resilience

Pre COVID-19, pilots experiencing WRS and wellbeing challenges

COVID: OPERATIONAL SCENARIOS (FSF)

1: In work

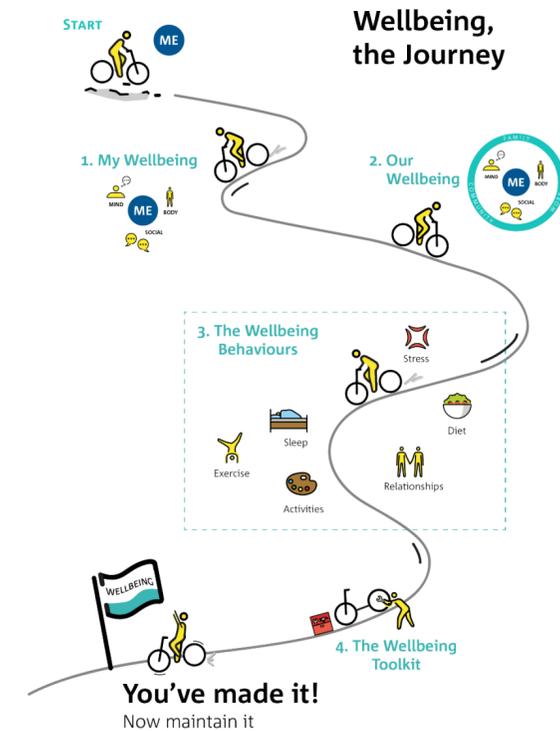


2: Off work



3: Going back to work

Is EASA IR/Guidelines Enough?
Have we the right tools to cope (Pilots, Airlines, Industry)?



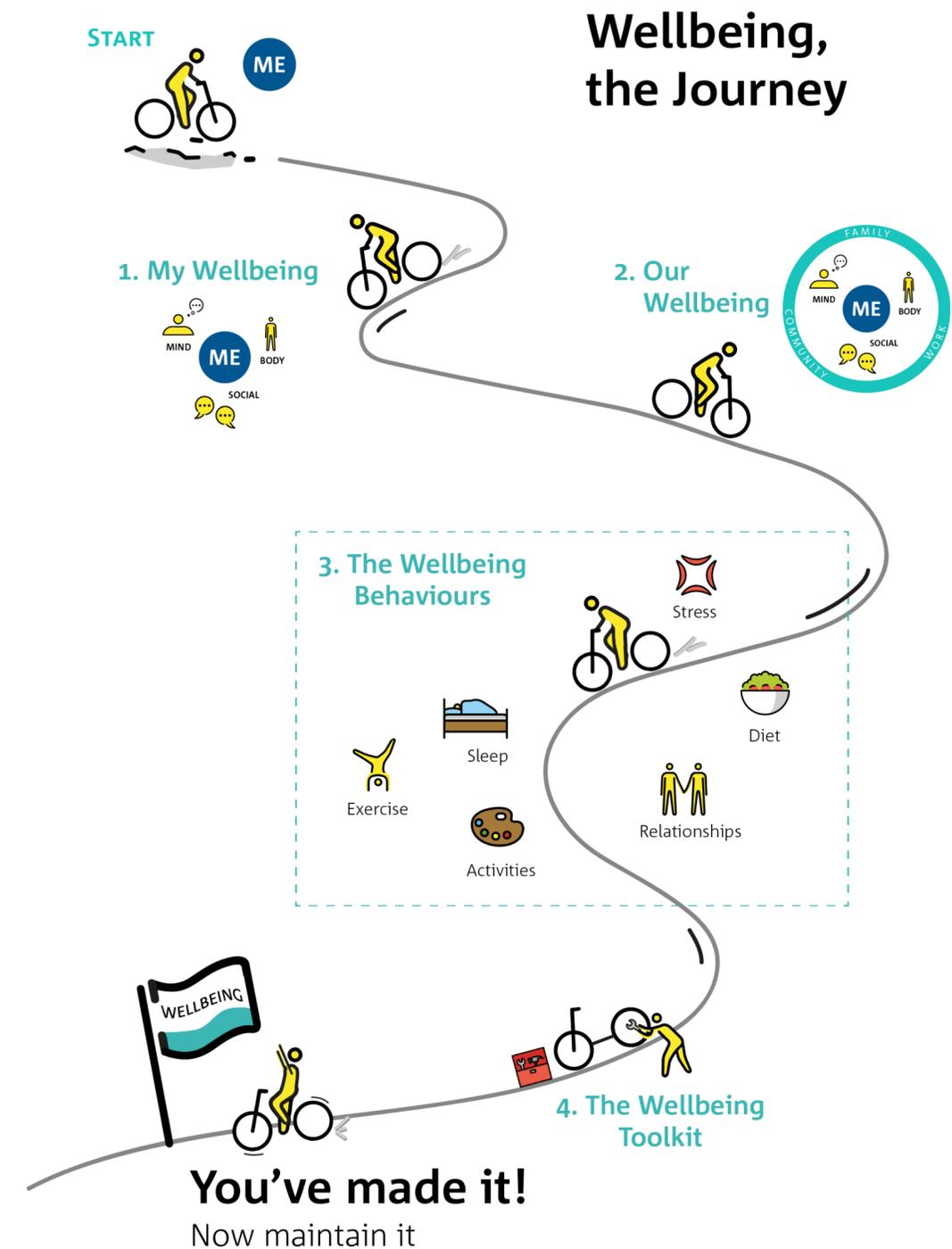
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Resilience & Wellbeing Journey

- **Resilience** is defined as the ‘demonstration of positive adaptation in the face of significant adversity
- It is a response to stressful circumstances, as opposed to a trait or capacity residing in the person (Fikretoglu and McCreary, 2012)
- **Process**
- **Wellbeing Journey** (FSF, 2020)

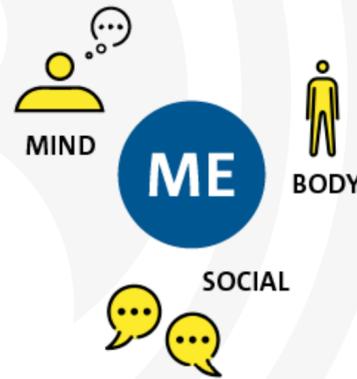


Wellbeing, the Journey

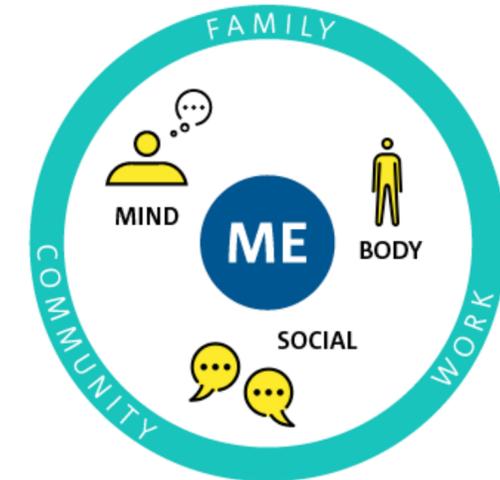
START

ME

1. My Wellbeing



2. Our Wellbeing

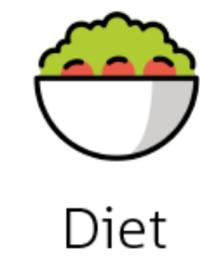


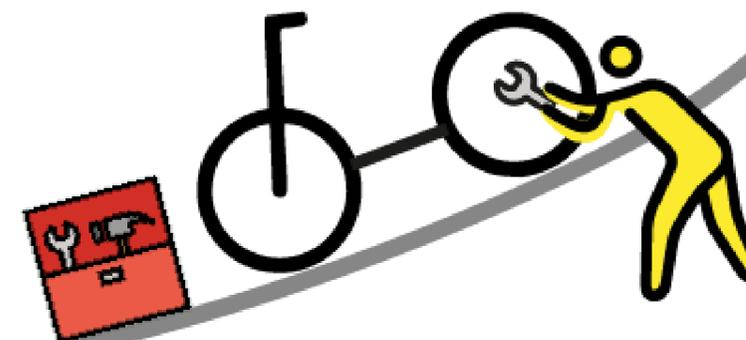
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3. The Wellbeing Behaviours





4. The Wellbeing Toolkit

You've made it!

Now maintain it

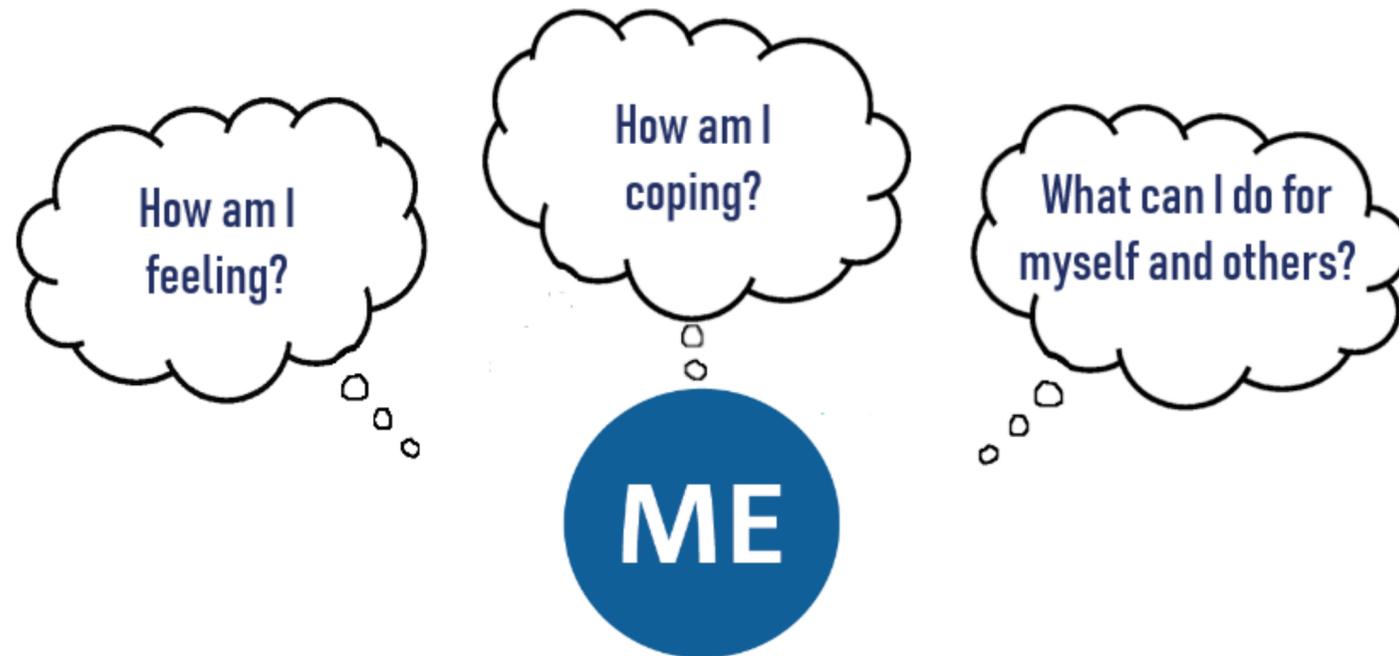


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3 Wellbeing Questions



Flight Safety Foundation: An Aviation Professional's Guide to Wellbeing (2020)

<https://flightsafety.org/wp-content/uploads/2020/04/Guide-to-Wellbeing.pdf>



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Stress Coping & Self Management

- People vary in relation to their ability to cope successfully with stress (including WRS)
- The practice of healthy behaviours strengthens the person's resistance to stress
- Substitution of maladaptive coping with more adaptive coping
- Common stress coping strategies include exercise, the practice or relaxation techniques and seeking social support and/or social participation.



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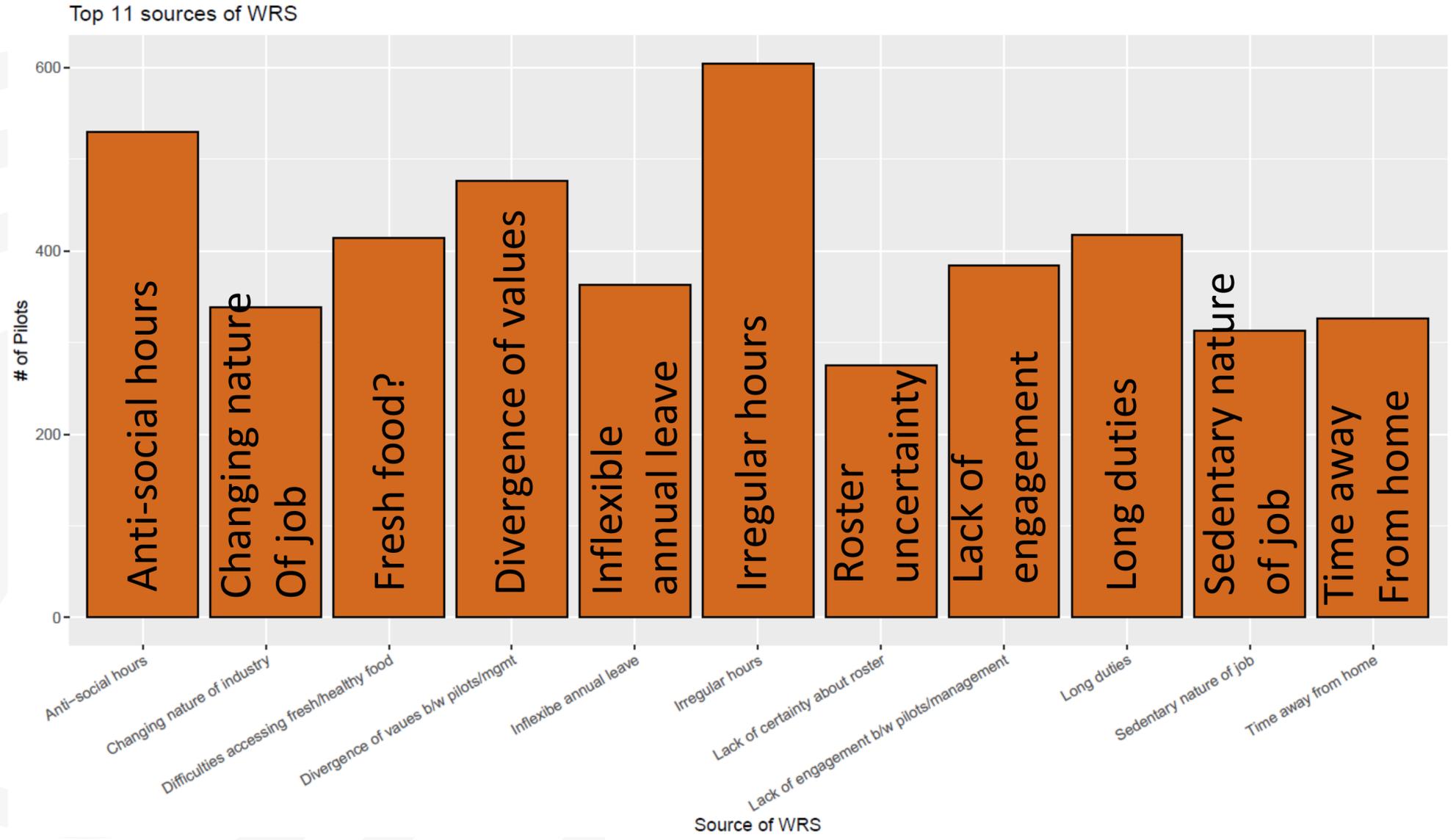
Pilot Lived Experience Survey & Stress Coping

- Anonymous web-based survey with commercial pilots investigating the relationship between sources of WRS, effects on wellbeing and coping mechanisms.
- Nearly **60% are using coping mechanisms** to manage WRS and its impact on wellbeing
- Certain coping strategies are **associated** with lower depression severity levels.
- Pilots using coping mechanisms such as **sleep management, taking physical exercise, diet management and talking to others** were found to have lower depression severity levels.

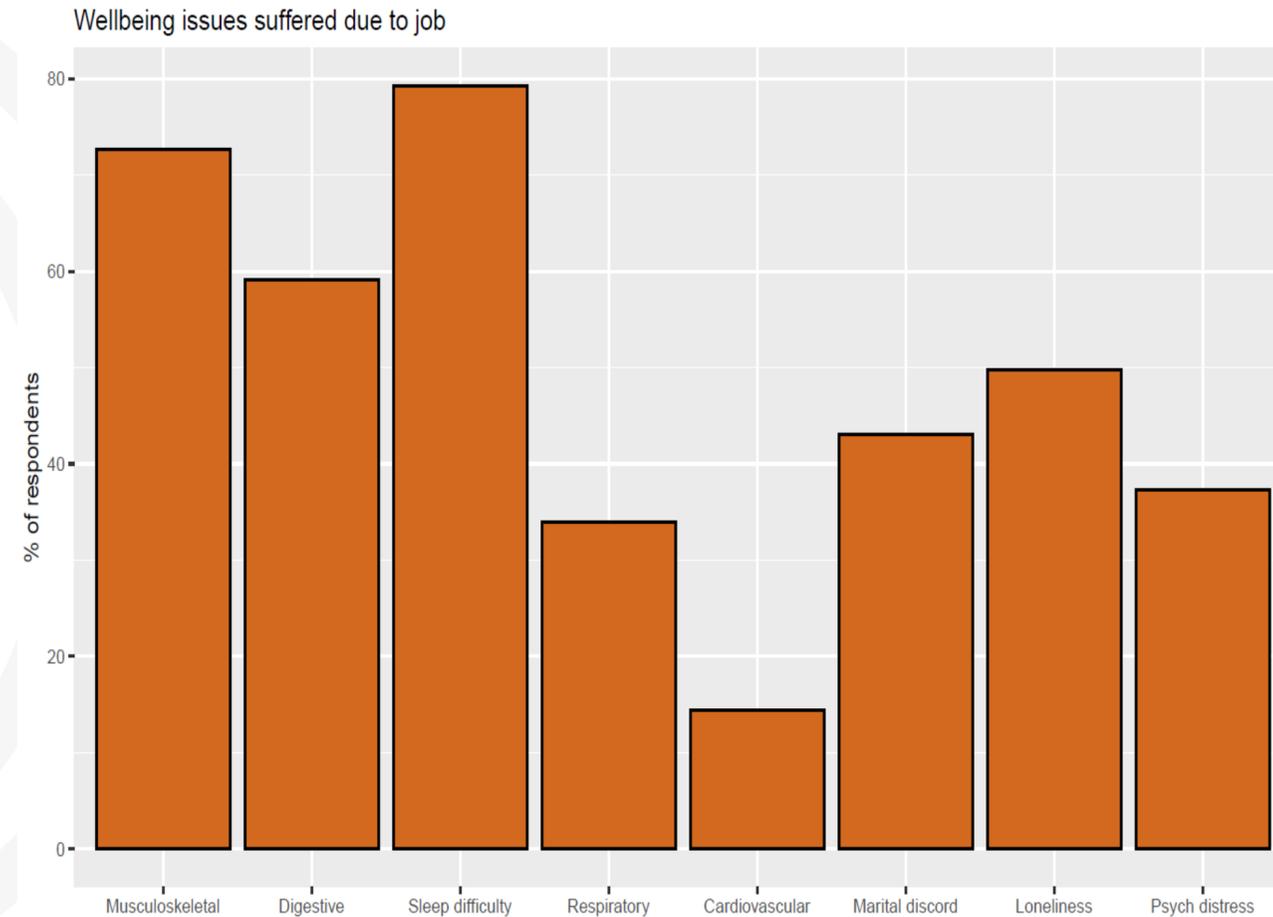
- **Not all pilots are suffering**
- Individual differences
- Pilots **adopting strategies** to enable them to **cope** with various work stressors



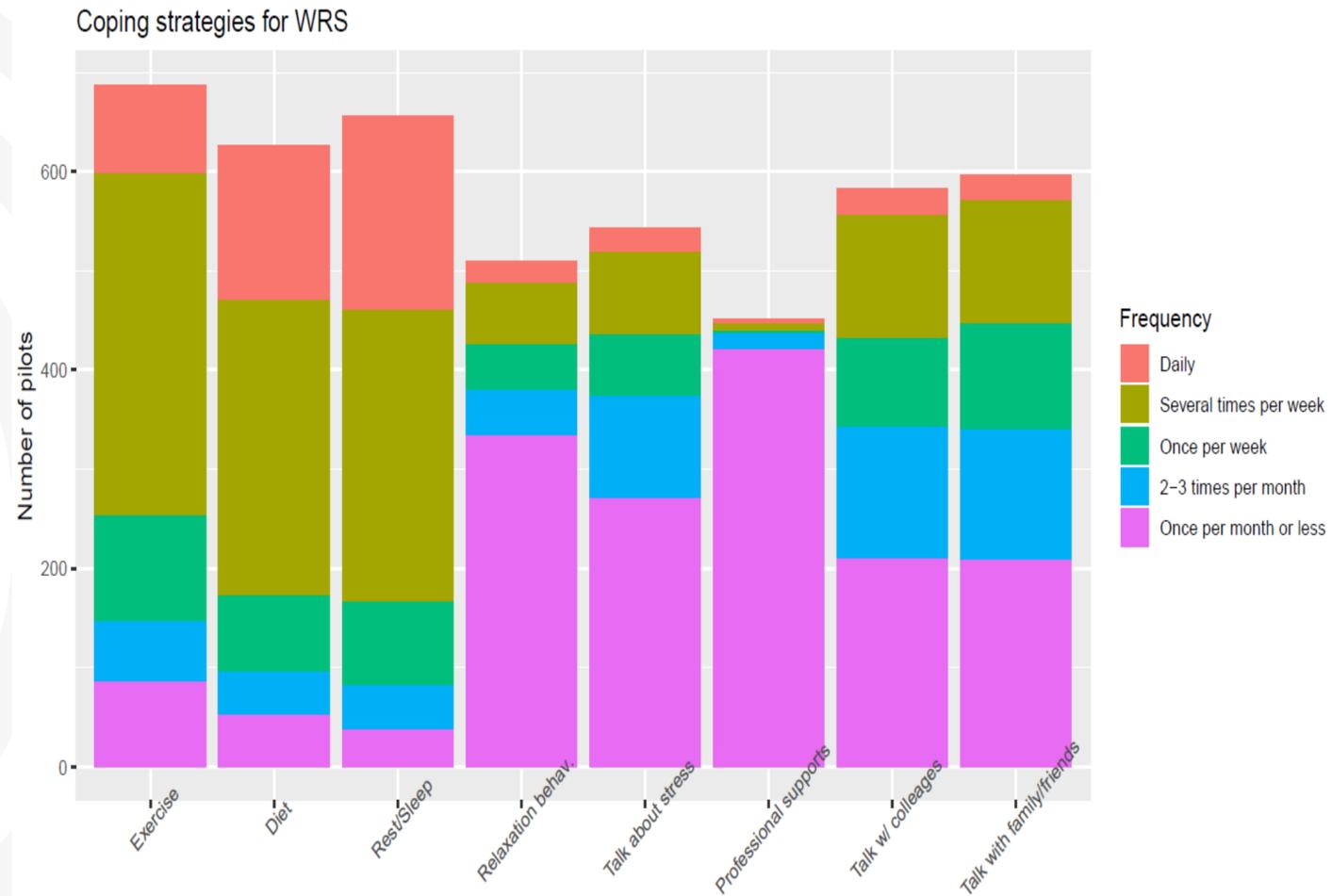
Sources of WRS



Wellbeing Issues



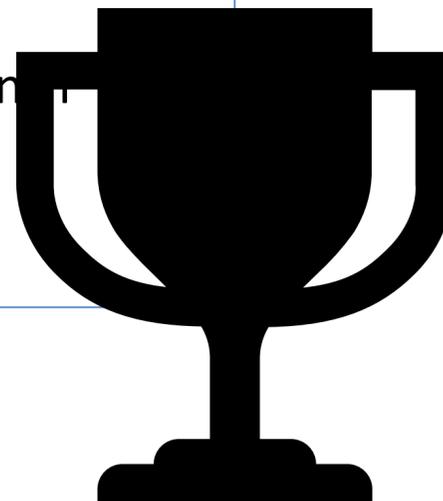
Coping Strategies



Coping Strategies & Depression Severity

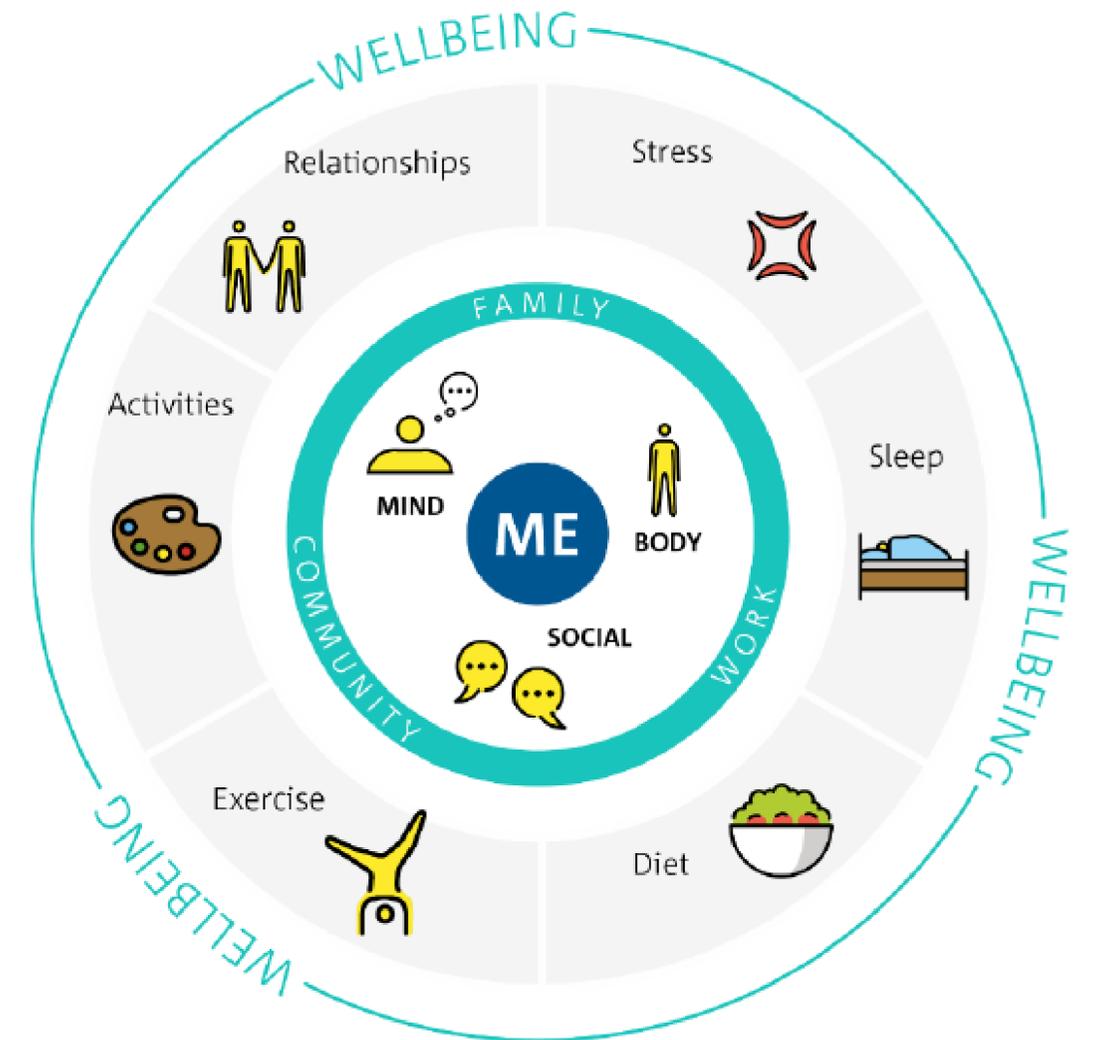
The coping strategies most associated with lower depression severity levels are

- Focussing on sleep daily
- Focussing on physical exercise several times a week
- Focussing on physical exercise daily
- Focussing on physical exercise 2 to 3 times a month



Wellbeing Management Across the Three Pillars

| Pillar | Example | How Am I Doing? Current Rating/ Status? (Good, Ok, Poor) | What Can I Do to Improve this? What Am I Currently Doing to Improve this? |
|---------------|---|--|---|
| Biological | Sleep, Diet, Exercise | | |
| Psychological | Attitude to life, Mood, Stress Management, Use of Coping Strategies | | |
| Social | Support network, social support | | |



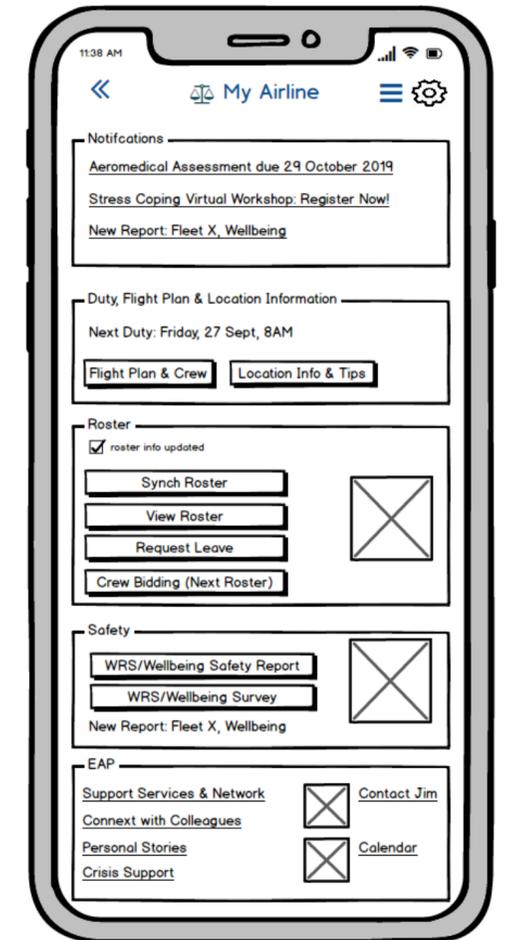
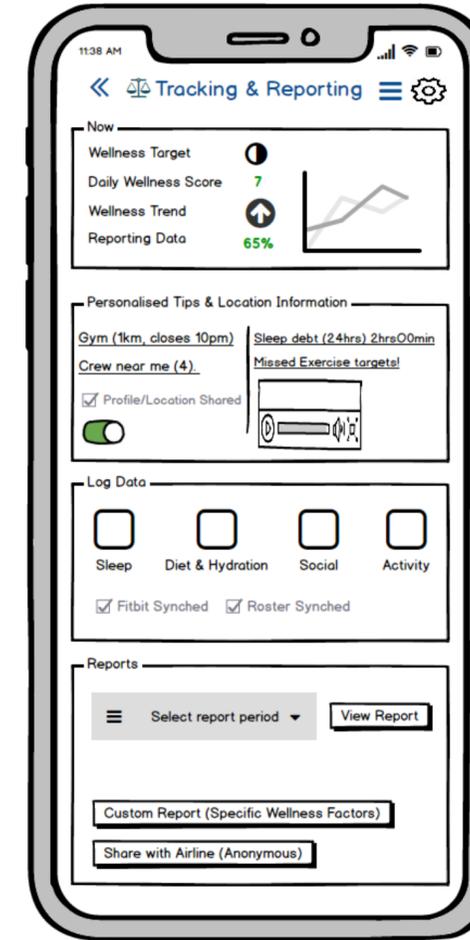
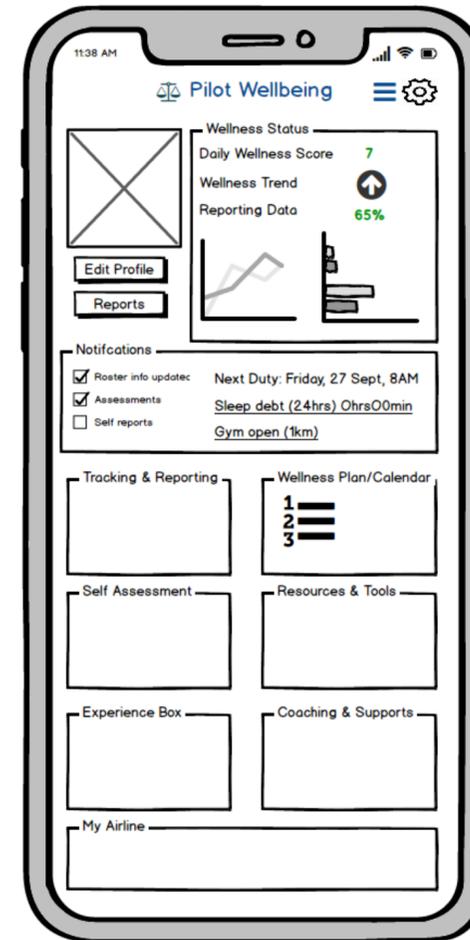
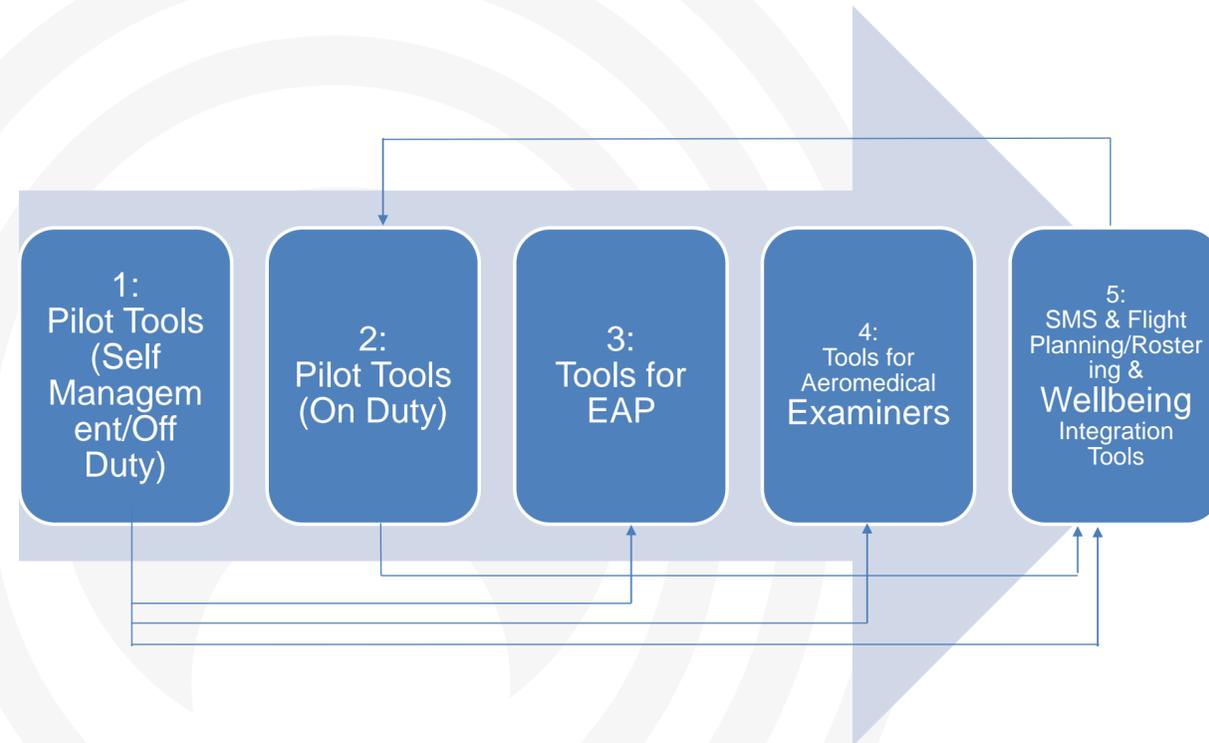
Weekly/Daily Checklist

WEEKLY TO DO

| AREA | MON | TUE | WED | THU | FRI | SAT | SUN |
|--|-----|-----|-----|-----|-----|-----|-----|
| Stress | | | | | | | |
| Sleep | | | | | | | |
| Diet – Breakfast Lunch Dinner | | | | | | | |
| Physical Exercise | | | | | | | |
| Activities | | | | | | | |
| Relationships | | | | | | | |

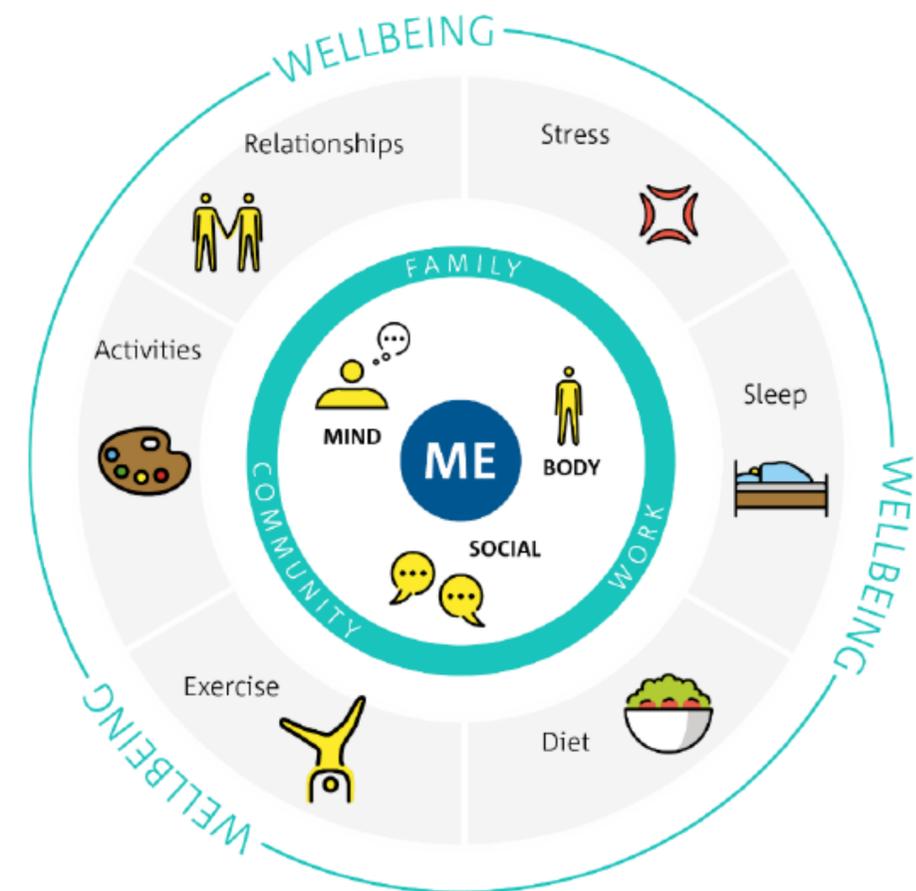


Research Roadmap: Tools for Pilots, Airline & Industry



Next Steps: Wellbeing Community & Virtual Challenge

1. Join a User Community
2. Participate in a wellbeing game/virtual challenge?



- In progress
- For more information, please email aviationwellbeing@gmail.com
- Or see: <https://www.tcd.ie/cihs/projects/pilot-lived.php>



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RAeS 2020 Conference Preview

- **Present our latest research**
- Solutions to support positive wellbeing for pilots
- Progress: wellbeing community
- Wellbeing challenge/virtual game



**ROYAL
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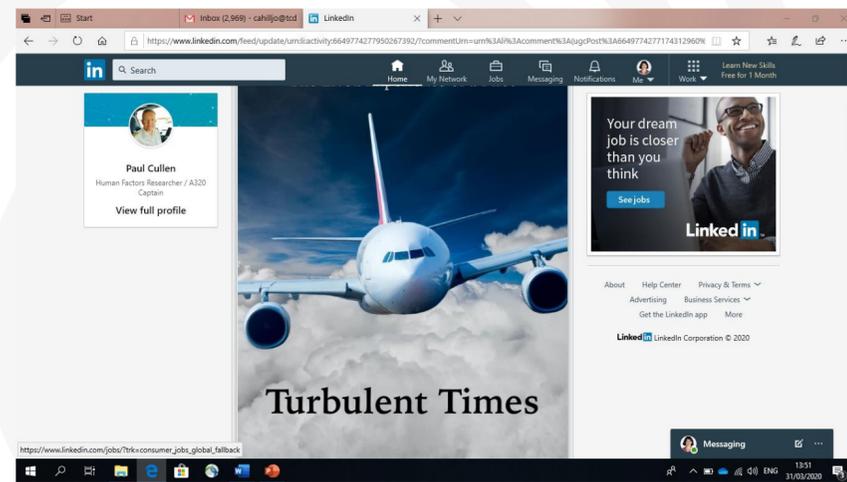
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Resources

Stress Coping Booklet



Aviation Professional's Guide to Wellbeing



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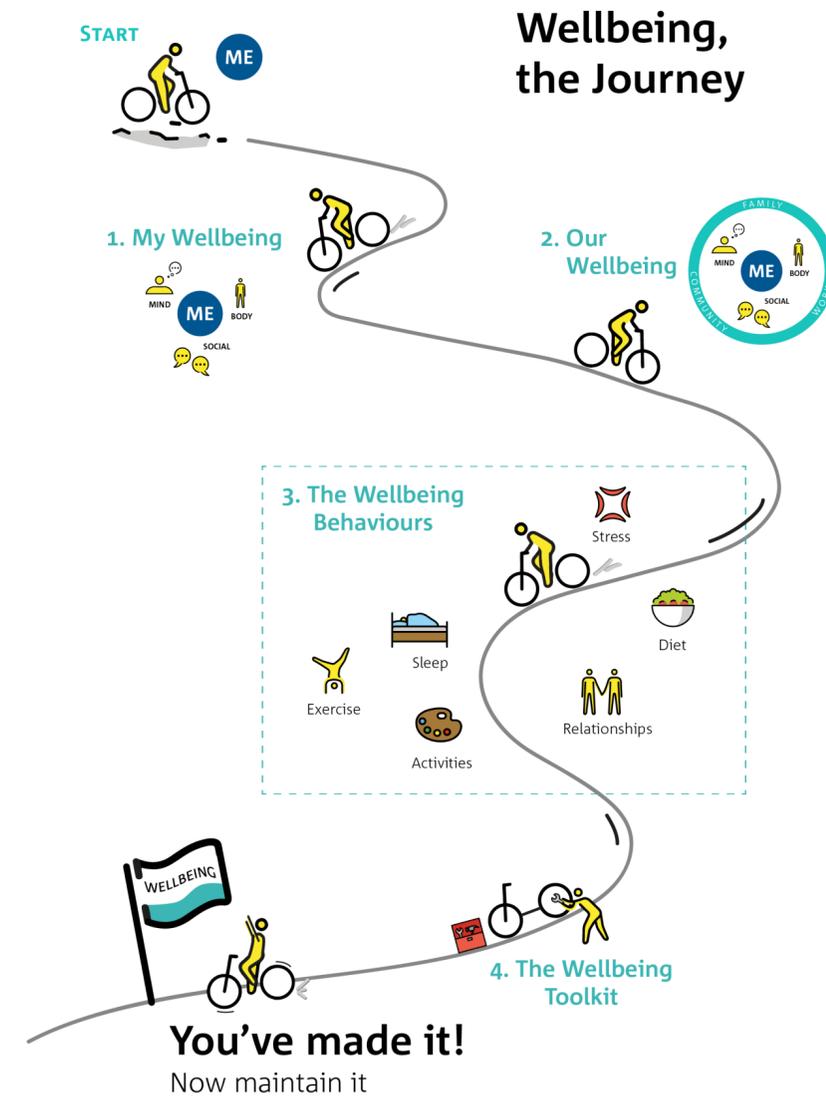


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Questions



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