

# Behaviour Change Psychology and Ergonomics for Human Wellbeing

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# “I have felt good about my wellbeing”

Please select the option that best describes your experience  
over the last 2 weeks

The question will open when  
you start your session and  
slideshow.

- A. All of the time
- B. Most of the time
- C. More than half of the time
- D. Less than half of the time
- E. Some of the time
- F. At no time

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Votes : 2  
1   Closed

# “I have felt good about my wellbeing”

Please select the option that best describes your experience over the last 2 weeks

A. All of the time	<div style="width: 100%; background-color: #0070C0; height: 10px; margin-bottom: 5px;"></div> <div style="width: 100%; background-color: #00A0C0; height: 10px;"></div>	50.0%
B. Most of the time		0.0%
C. More than half of the time		0.0%
D. Less than half of the time		0.0%
E. Some of the time	<div style="width: 100%; background-color: #0070C0; height: 10px; margin-bottom: 5px;"></div> <div style="width: 100%; background-color: #00A0C0; height: 10px;"></div>	50.0%
F. At no time		0.0%

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# When answering that question, I was mostly referring to:

- A. Physical aspects of my wellbeing
- B. Thinking and functioning aspects of my wellbeing
- C. Emotional aspects of my wellbeing
- D. Social aspects of my wellbeing
- E. Economic aspects of my wellbeing
- F. Something else

The question will open when  
you start your session and  
slideshow.

# When answering that question, I was mostly referring to:

A. Physical aspects of my wellbeing	0.0%
B. Thinking and functioning aspects of my wellbeing	<div style="width: 100.0%; background-color: #0070C0; height: 10px; margin-bottom: 5px;"></div> 100.0%
C. Emotional aspects of my wellbeing	0.0%
D. Social aspects of my wellbeing	0.0%
E. Economic aspects of my wellbeing	0.0%
F. Something else	0.0%

# WHO-5 Questionnaire (multi-language)

	<i>Over the last two weeks</i>	All of the time	Most of the time	More than half of the time	Less than half of the time	Some of the time	At no time
<b>1</b>	<b>I have felt cheerful and in good spirits</b>	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0
<b>2</b>	<b>I have felt calm and relaxed</b>	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0
<b>3</b>	<b>I have felt active and vigorous</b>	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0
<b>4</b>	<b>I woke up feeling fresh and rested</b>	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0
<b>5</b>	<b>My daily life has been filled with things that interest me</b>	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0

# Definitions of Wellbeing

- “A state of complete physical, mental and social well-being and not merely the absence of disease or infirmity” *World Health Organization*
- “In simple terms, well-being can be described as judging life positively and feeling good.” *Centers for Disease Control and Prevention*

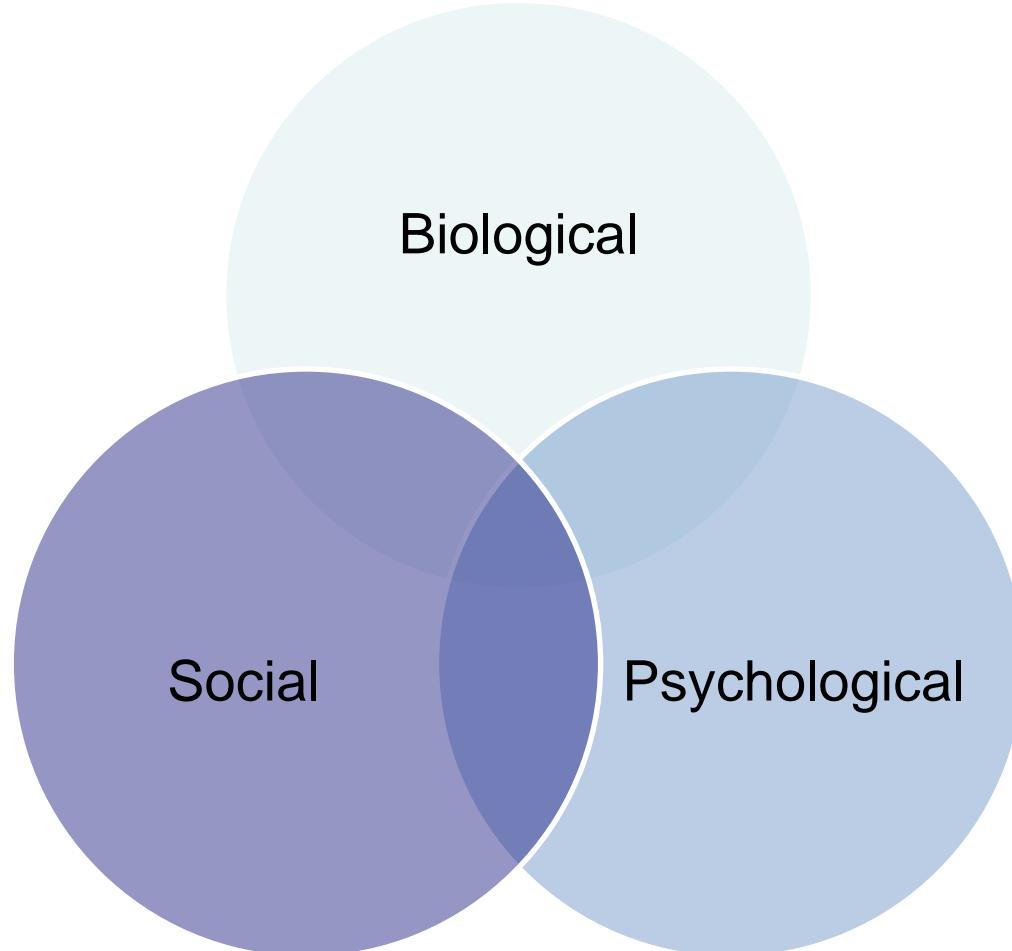


White (2008)

# Wellbeing: A Social Construct

	State	Process
Individual		Collective
Subjective		Objective
Holistic		Reductive
Lay		Scientific
‘Self-help’		Clinical
Free will & agency		Determinism & structure
Rights		Responsibilities

# The Biopsychosocial Model (Engel, 1977)



Stress  
Burnout  
PTS(D) & CIS  
Fatigue  
Comfort  
Psychological safety  
Depression  
Anxiety  
Suicide

# HindSight30

The ability or opportunity to understand and judge an event or experience after it has occurred

## WELLBEING

QF32 AND POST-TRAUMATIC STRESS  
Steven Shorrock interviews Captain Richard Champion de Crespigny

MORAL REASONS FOR PROMOTING WELLBEING IN ORGANISATIONS  
Suzanne Shale

SYSTEM WELLBEING  
Anders Ellerstrand

THE ENERGY PROJECT @MUAC  
Marinella Leone

BURNOUT IN EMERGENCY MEDICINE: HOW DO WE GET BETTER?  
Shannon McNamara

Plus much more on Wellbeing in aviation and beyond



Spring 2020

Facilities  
Mindfulness  
Peer support  
CISM  
Counselling & coaching  
Risk assessment  
Questionnaires  
Reporting  
Behaviour change

# Wellbeing in a pandemic

- How should we communicate about wellbeing?
- How can people be encouraged to take protective measures?
- What influences compliance in the short and long term?
- What are some of the dilemmas, trade-offs and compromises?
- What might be some unintended consequences?

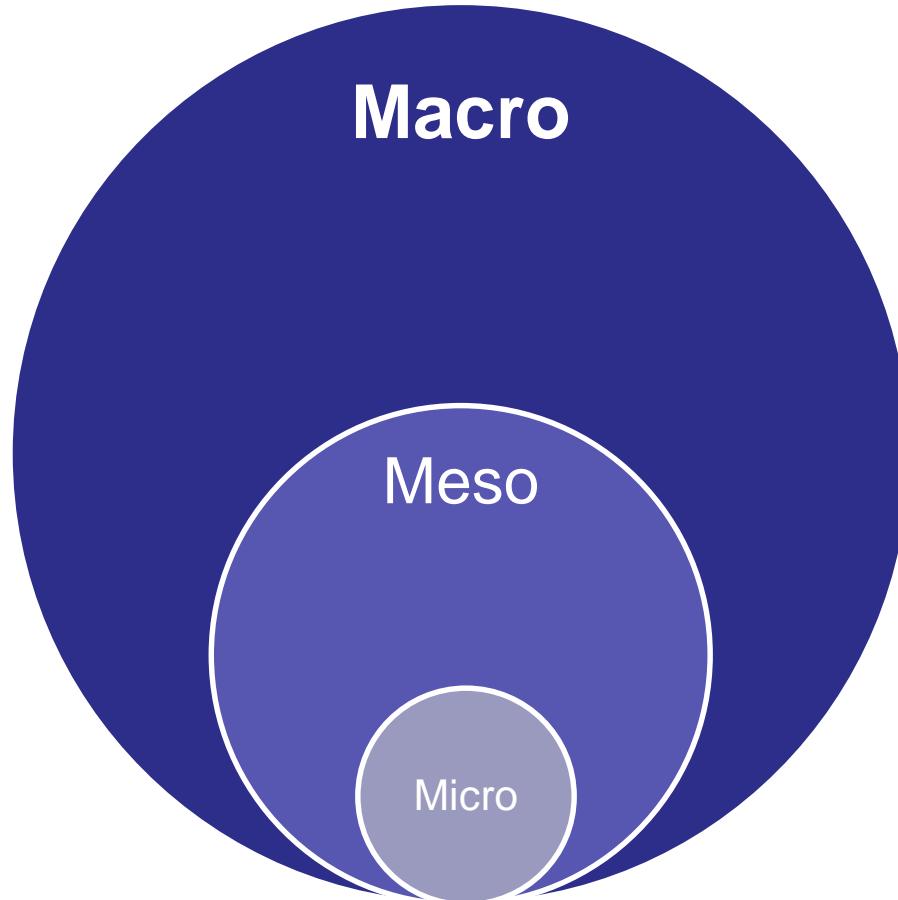
## Opinion Coronavirus outbreak

Quarantine fatigue has well and truly set in  
- and that could spell trouble

*Arwa Mahdawi*

# Wellbeing and Scale

*Dilemmas*



*Trade-offs*

# Wellbeing and Time

## *Dilemmas*

**Acute**

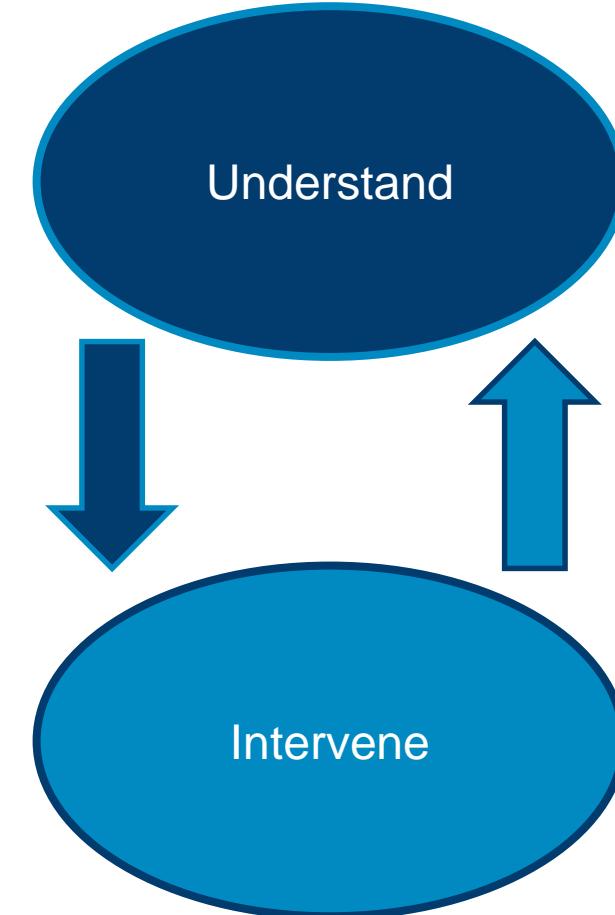


**Chronic**

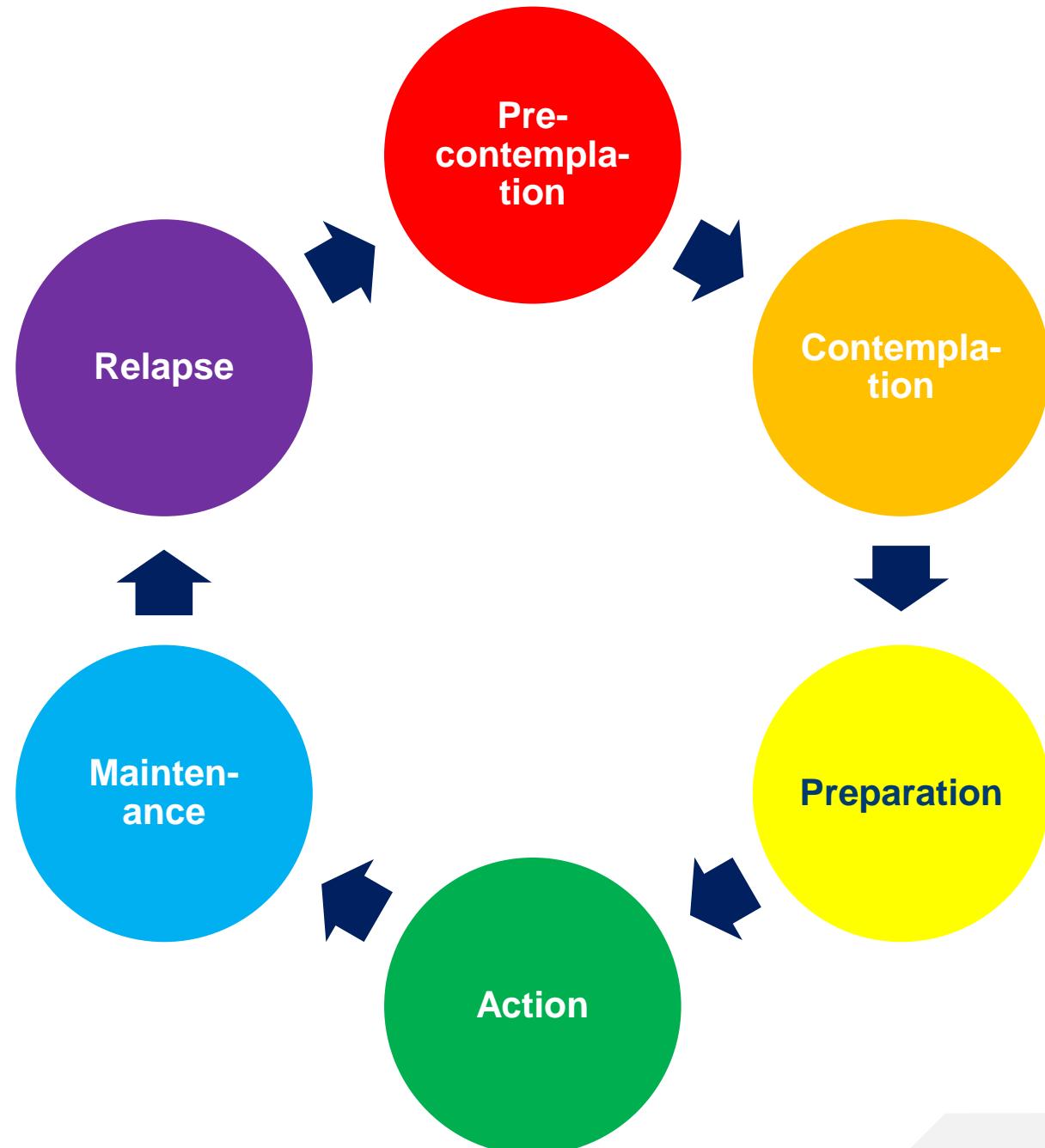
## *Trade-offs*

# Summing up: Understanding wellbeing

- Wellbeing is about judging life positively and feeling good
- It is a multifaceted social construct
- It can only be understood by via multiple perspectives
- There are always trade-offs
- Rights & responsibilities are shared by individuals & groups/organisations



# Stages of Change (Transtheoretical Model)



*Adapted from Prochaska and DiClemente (2005)*

# Processes of Change

- **Get the facts** about healthy behaviour
- **Pay attention to your feelings** about the unhealthy behaviour and the healthy behaviour
- **Create a new self-image**
- **Notice the effect on others** of unhealthy behaviour
- **Notice public support** of the healthy behaviour
- **Decide and make a commitment** to change and prepare to take action
- **Get support** from people who support the change
- **Use substitutes** for unhealthy ways of thinking and acting
- **Use rewards** for positive behaviour and reduce rewards that come from negative behaviour
- **Manage your environment** using reminders and cues that encourage healthy behaviour
- **Focus on success** instead of failure
- **Set goals** that are specific and incremental
- **Plan the behaviour change**, including how you will tackle barriers and solutions
- **Identify difficult situations**, especially risk situations, selecting and practising solutions
- **Accept setbacks**, understanding that setbacks are normal and can be overcome.

*Expanded from Prochaska and Velicer (1997)*

# Health Psychology

# What is the main reason that you don't exercise as much as you'd like to?

The question will open when you start your session and slideshow.

- A. Medical/physical reasons
- B. Access to necessary facilities/environment is difficult
- C. I don't have time
- D. I'm not motivated enough
- E. (I exercise as much as I'd like to)

Internet

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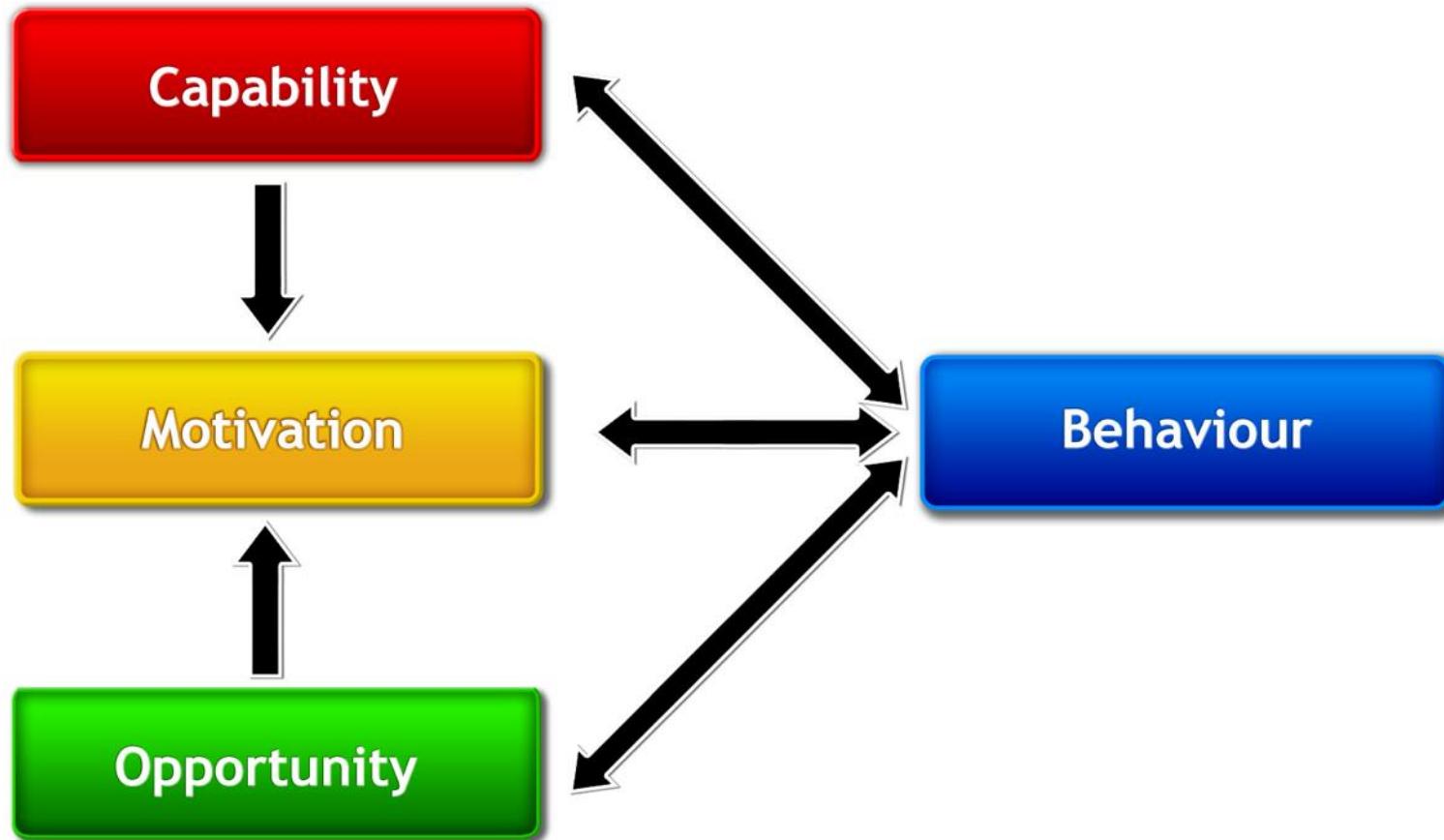
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Votes : 2  
1   
Closed

# What is the main reason that you don't exercise as much as you'd like to?

- A. Medical/physical reasons 0.0%
- B. Access to necessary facilities/environment is... 0.0%
- C. I don't have time 0.0%
- D. I'm not motivated enough  50.0%
- E. (I exercise as much as I'd like to)  50.0%

# COM-B Model (Mitchie, et al, 2011)

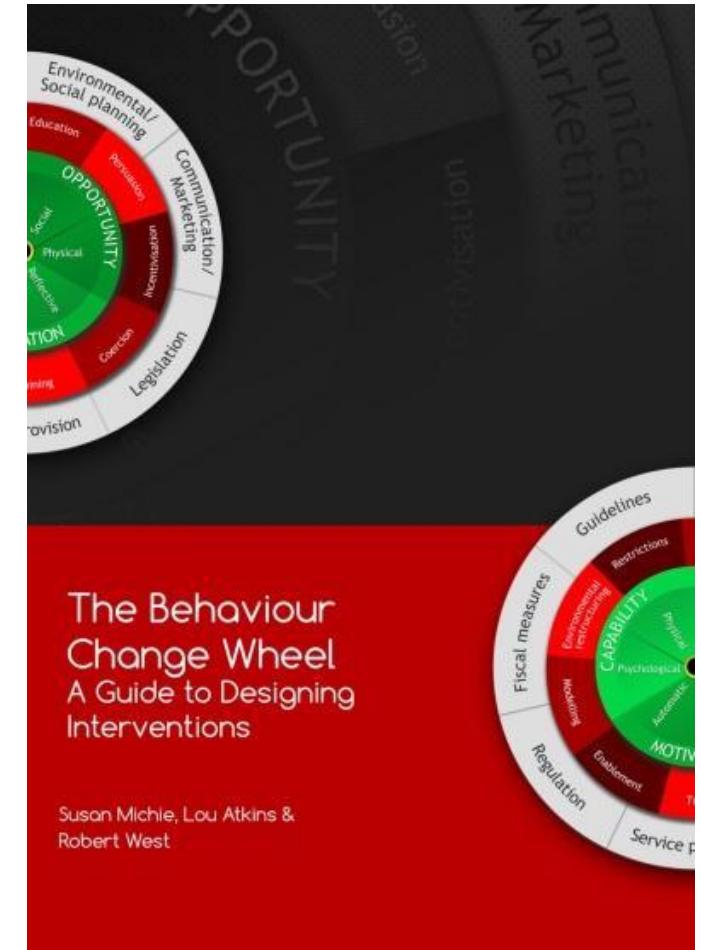


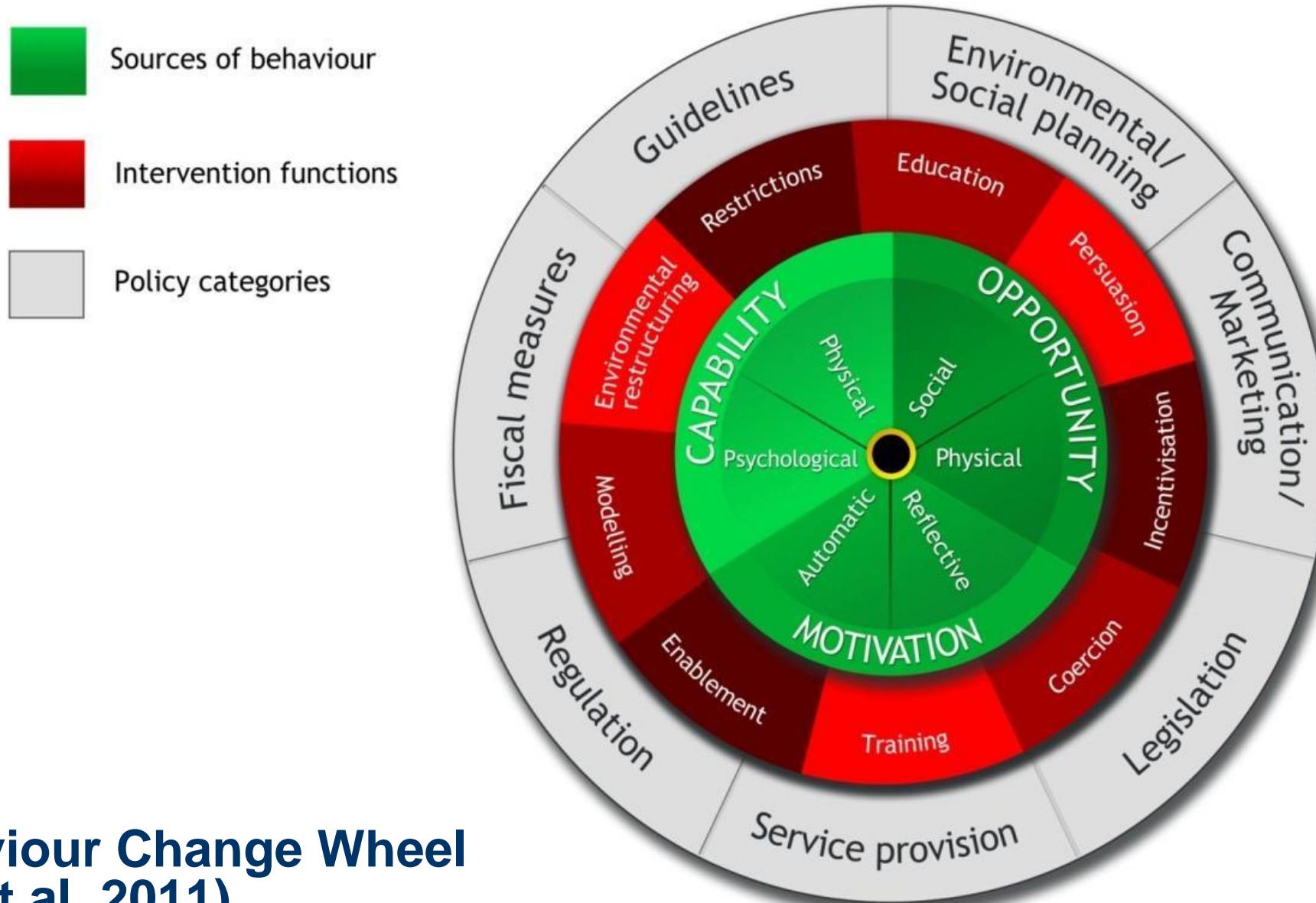
*Handy mnemonic: '**behaviour dot com**' (not the website)*

# COM-B Model (Michie, et al, 2011)

- **Capability** is the psychological and physical ability to enact the behaviour.
- **Motivation** involves the reflective and automatic mechanisms that activate or inhibit behaviour.
- **Opportunity** is the physical and social environment that enables the behaviour.

Michie (2015)





## The Behaviour Change Wheel (Mitchie, et al, 2011)

# Behavioural Science (& 'Behavioural Economics')

# What would be the strongest influence on your decision to wear a mask?

The question will open when you start your session and slideshow.

- A. Easily available when I need them
- B. Attractive masks that I like
- C. Many other people wearing them
- D. Good comfortable fit

# What would be the strongest influence on your decision to wear a mask?

- A. Easily available when I need them  50.0%
- B. Attractive masks that I like  0.0%
- C. Many other people wearing them  50.0%
- D. Good comfortable fit  0.0%

Internet

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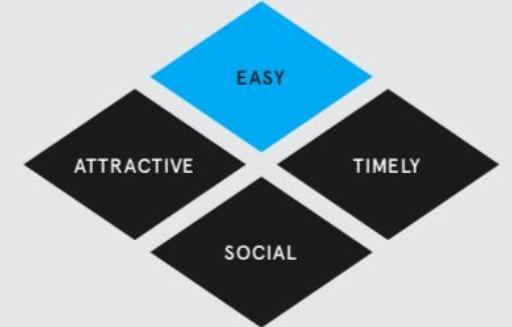
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Closed

# EAST



THE  
BEHAVIOURAL  
INSIGHTS TEAM.



**EAST**  
Four simple ways to  
apply behavioural insights

Owain Service, Michael Hallsworth, David Halpern,  
Felicity Algate, Rory Gallagher, Sam Nguyen, Simon Ruda, Michael Sanders  
with Marcos Peleñur, Alex Gyani, Hugo Harper, Joanne Reinhard & Elspeth Kirkman.

IN PARTNERSHIP WITH  Cabinet Office  Nesta

# Make it Easy



- Harness the power of defaults
- Reduce the 'hassle factor'
- Simplify messages

# Make it Easy



# Make it Attractive

- Attract attention
- Design rewards and sanctions for maximum effect



## Coronavirus: More than 9,000 fines for lockdown breaches

30 April 2020

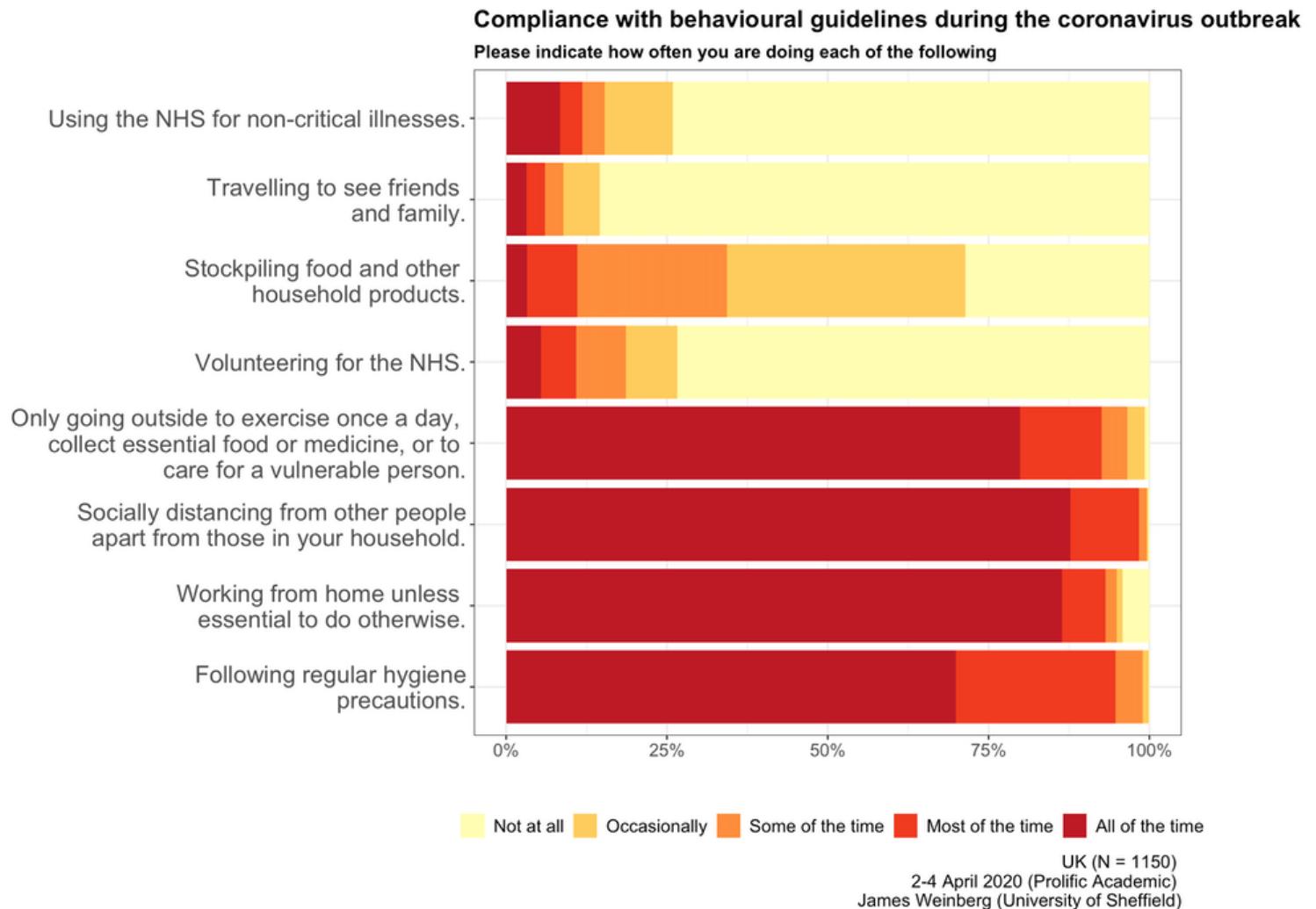
[Share](#)

Coronavirus pandemic



# Make it Social

- Show that most people perform the desired behaviour
- Use the power of networks



# Make it Timely



- Prompt people when they are likely to be most receptive
- Consider the immediate costs and benefits
- Help people plan their response to events

# Choice architecture (information design)

The application of design principles and methods to the presentation of choices, and the impact on decision making.

- Number of choices
- Complexity
- Order/sequence
- Partitioning
- Location
- Framing
- Defaults

## Organ donation

All adults in England to be deemed organ donors in 'opt-out' system

'Max and Keira's law' will presume consent for deceased unless family intervenes



▲ 'Opt-out' system which takes effect from 20 May could save hundreds of lives. Photograph: NHS Blood and Transplant/PA

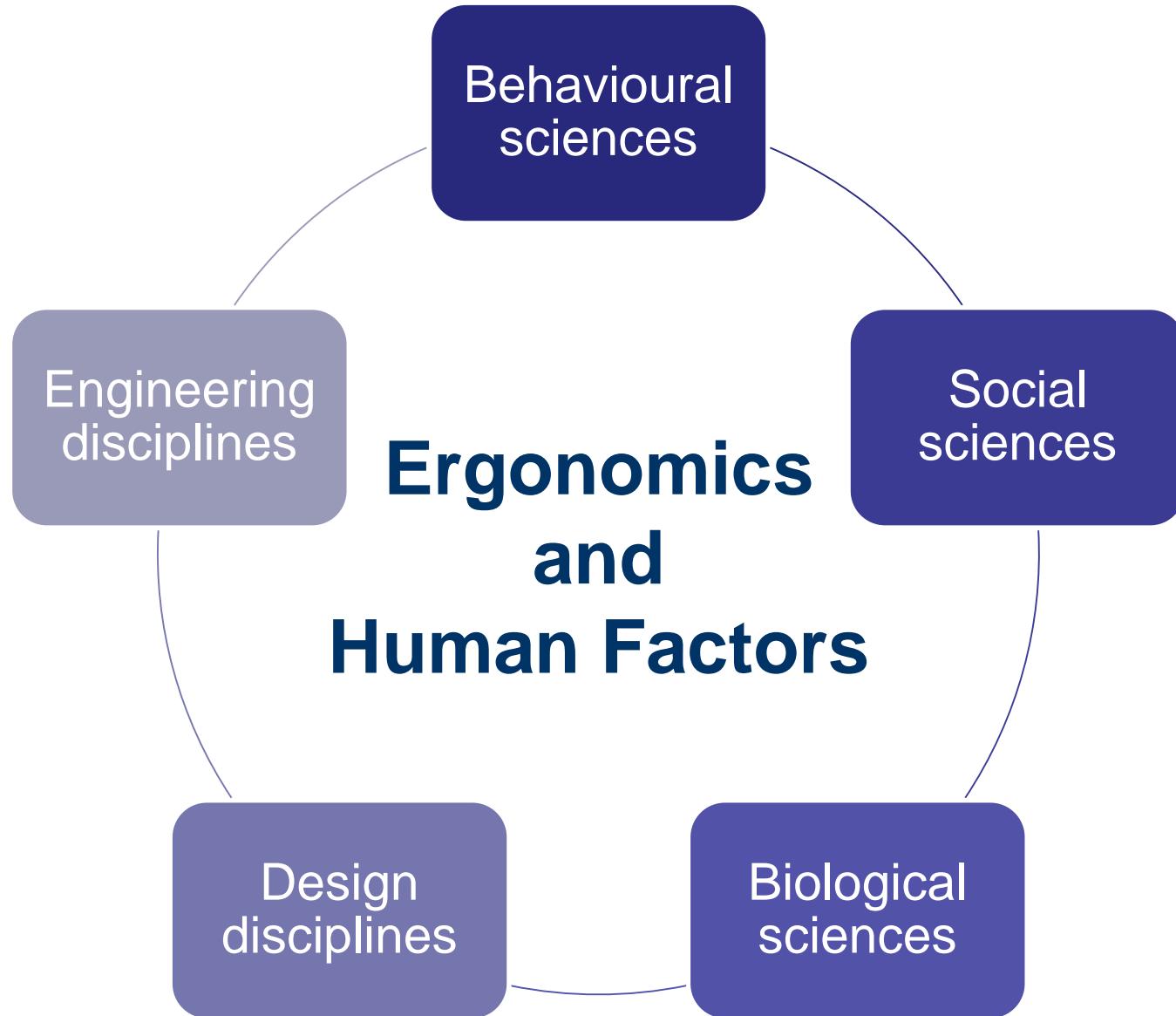
# Ergonomics

# Ergonomics

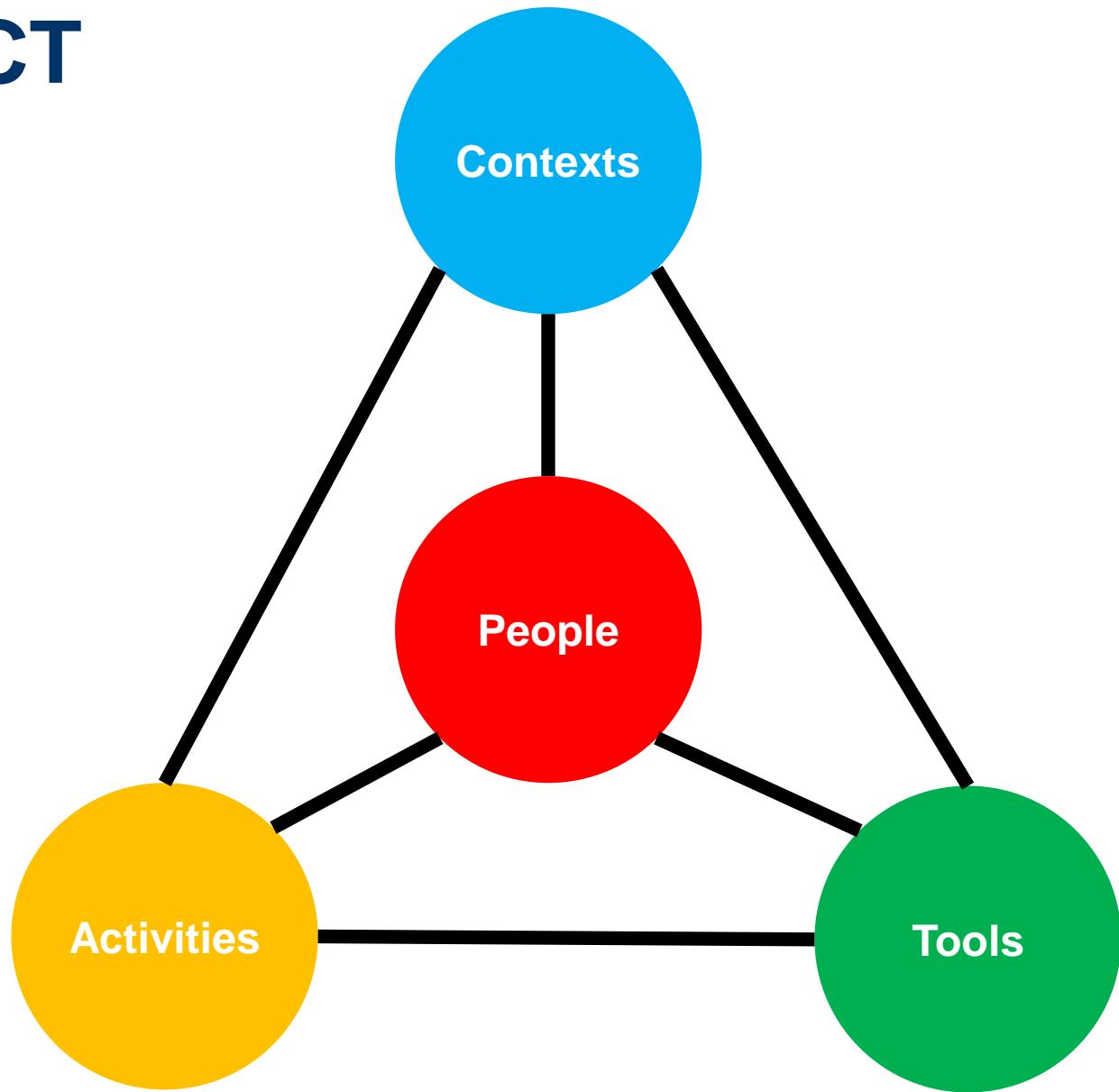
Ergonomics (or human factors) is the scientific discipline concerned with the understanding of the interactions among humans and other elements of a system, and the profession that applies theoretical principles, data and methods to design in order to **optimize human well being** and overall system performance. (IEA, 2000)

**“It is better to bend metal  
than to twist arms”**

**Sanders and McCormick (1987)**

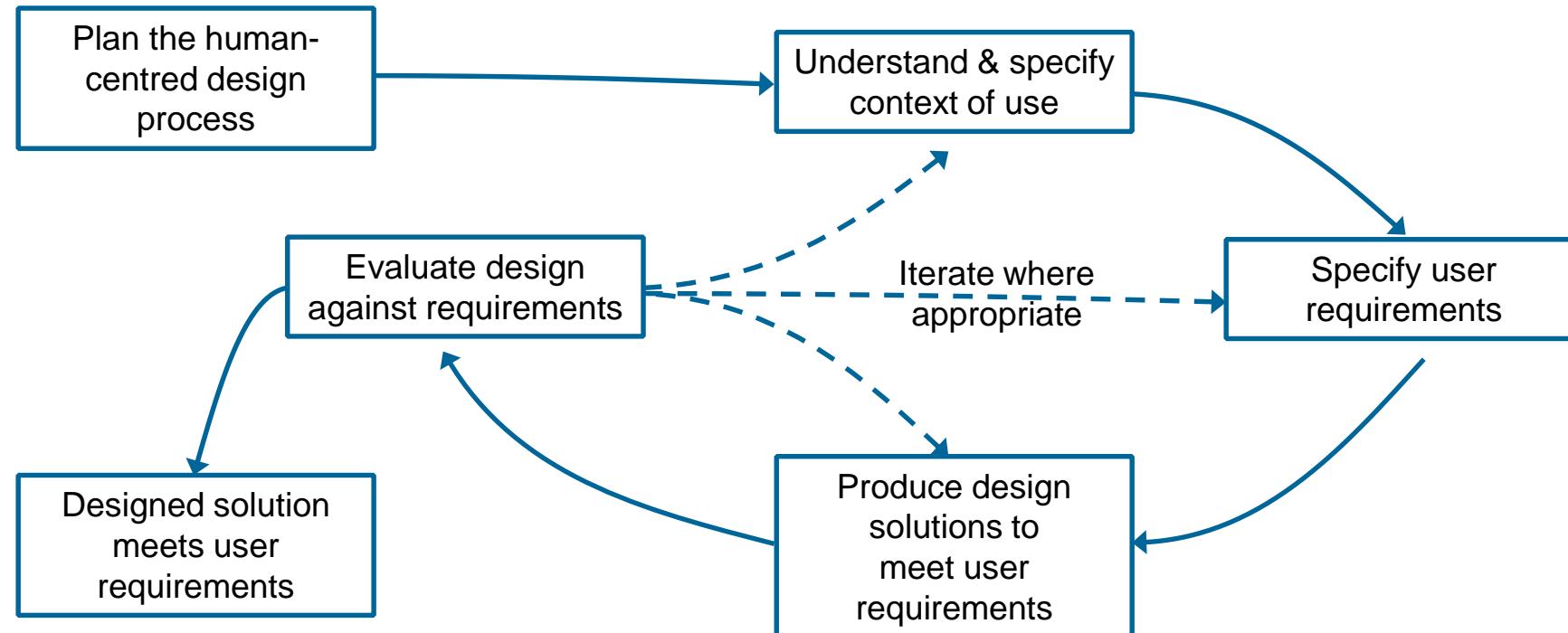


# Make a PACT



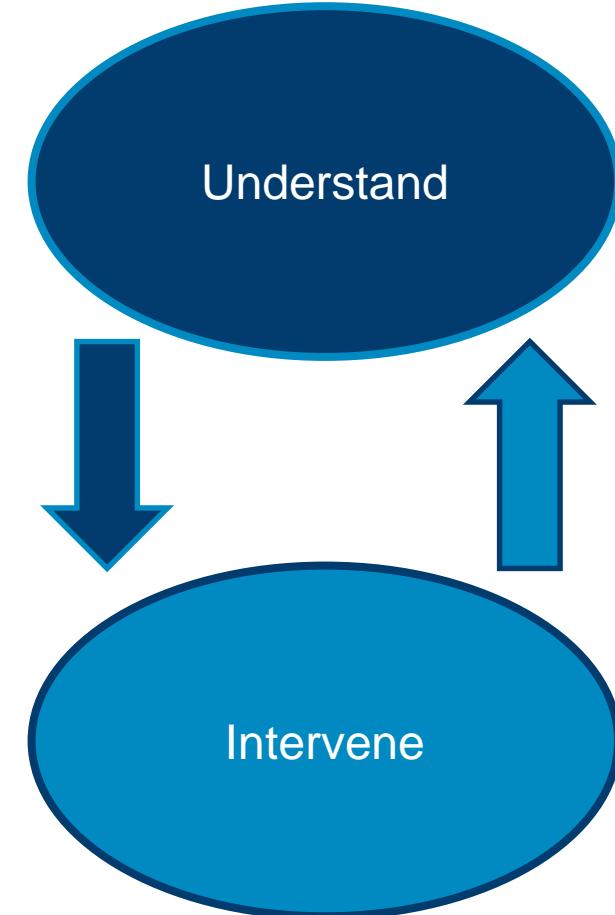
# Human-Centred Design

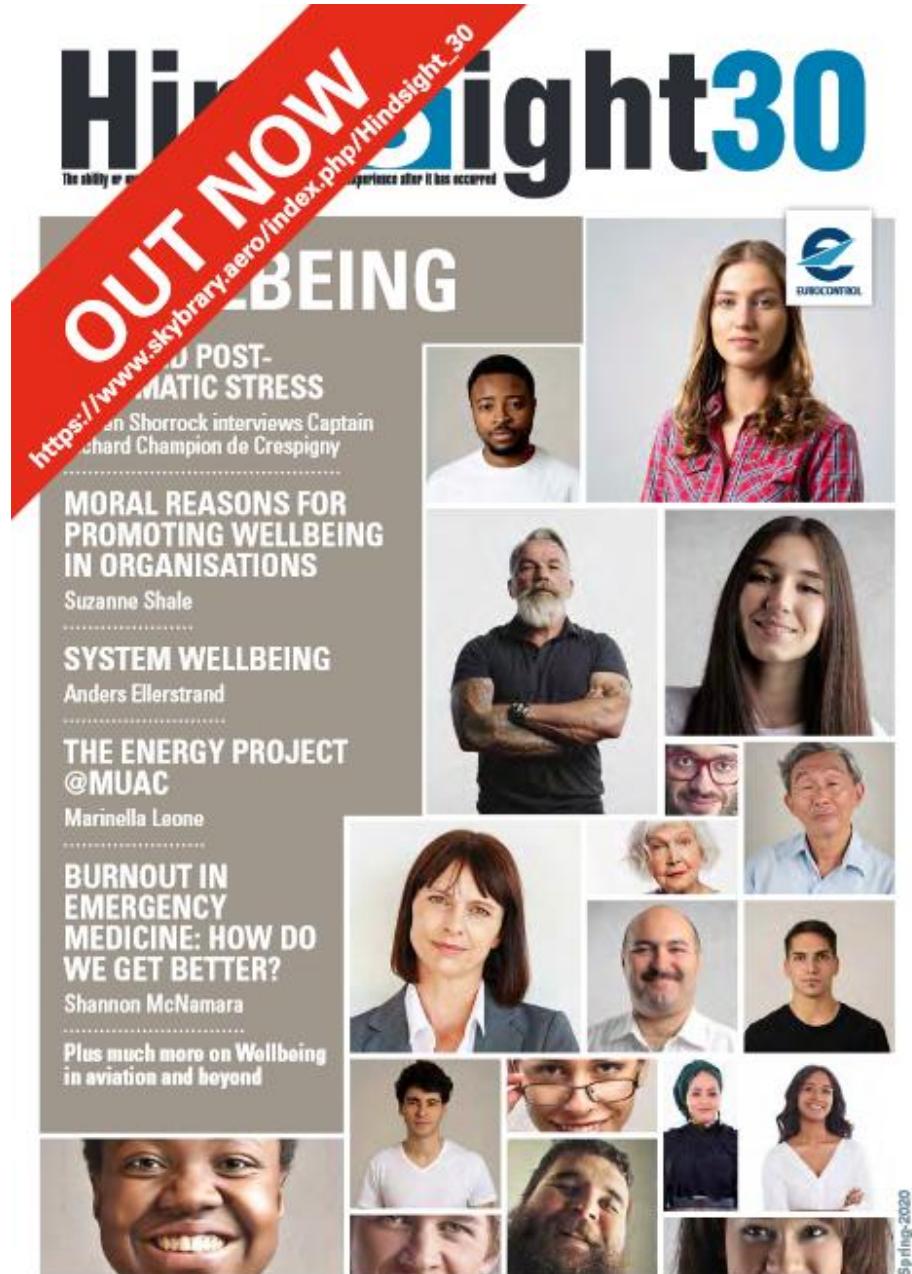
**ISO 9241-210:2010 Ergonomics of human-system interaction**  
**Part 210: Human-centred design for interactive systems**



# Summing up: Intervening for wellbeing

- Think about **stages** of change
- Remember 'behaviour dot com'
- Head **EAST**: make things **easy**, **attractive**, **social** and **timely**
- **Make a PACT** to understand how the situation
- Use **human-centred design** expertise to get it right by design



The image shows the front cover of the Hindsight30 magazine. At the top, a red diagonal banner reads "OUT NOW" in white. Below it, the title "Hindsight30" is displayed in large, bold, black and blue letters. A subtitle "The ability to learn from experience after it has occurred" is visible at the bottom of the title. The main content area features several small portraits of diverse individuals. On the left, there are several text blocks: "BEING", "POST-CRITICAL STRESS" (with a link to a video interview), "MORAL REASONS FOR PROMOTING WELLBEING IN ORGANISATIONS" (by Suzanne Shale), "SYSTEM WELLBEING" (by Anders Ellerstrand), "THE ENERGY PROJECT @MUAC" (by Marinella Leone), and "BURNOUT IN EMERGENCY MEDICINE: HOW DO WE GET BETTER?" (by Shannon McNamara). A final text block at the bottom left says "Plus much more on Wellbeing in aviation and beyond". The bottom right corner of the cover has the text "Spring 2020".

# Thanks for your participation

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