# How behavioural insights can improve work health and safety

Dr Vera Newman & Saul Wodak | 7 June 2022

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# WHS is fundamentally behavioural

How can we get people to comply with work health and safety responsibilities?

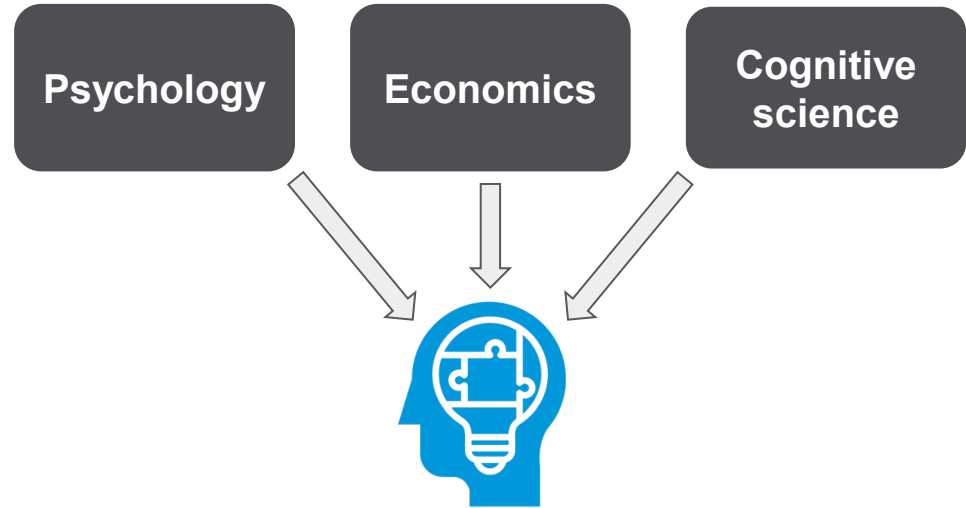How can we put policies and procedures in place that actually work?

# Policy should align with how we really behave

- Regulation
- Incentives
- Information



Understanding how people behave in practice so we can design better policies and services

# How can we put BI into practice?

To create policies that are in line with real-world behaviours, and thereby effectively change behaviour, you need to:

1. Understand the context and behavioural barriers
2. Develop solutions that address behavioural barriers
3. Test the solution rigorously, and scale where it works

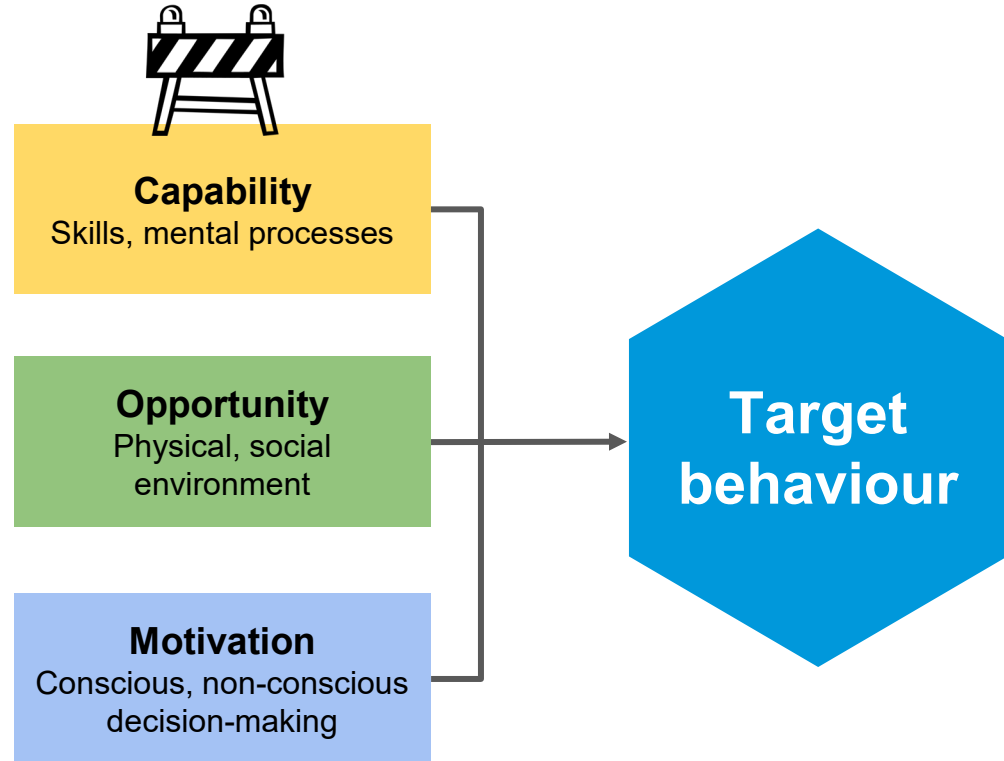# Understand the context and behavioural barriers

# Understanding the context to identify behavioural barriers to success using COM-B

Some workers may not have how to undertake specific WHS behaviours, can not do them in specific environments, or forget to do so

The environment may not be set-up for safe working practices, workers may not have the time to undertake safe working practices, or the social norm may not be to adhere to WHS behaviours
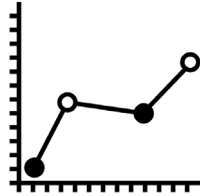
Safety behaviours may not be habitual, workers may not perceive them as effective, or believe the consequences of not doing the behaviour will not be particularly meaningful.

**Capability**
Skills, mental processes

**Opportunity**
Physical, social environment

**Motivation**
Conscious, non-conscious decision-making

**Target behaviour**

Source: Michie, S., van Stralen, M. M., & West, R. (2011). The behaviour change wheel: a new method for characterising and designing behaviour change interventions.

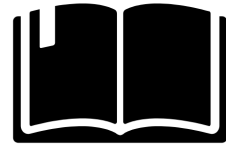# We can identify these barriers through exploring the context

**Observations**

**Data**

**Interviews**

**Secondary research**

I don't get it, we put so much effort into the WHS requirements and information we provide, but people still don't know their rights and responsibilities …

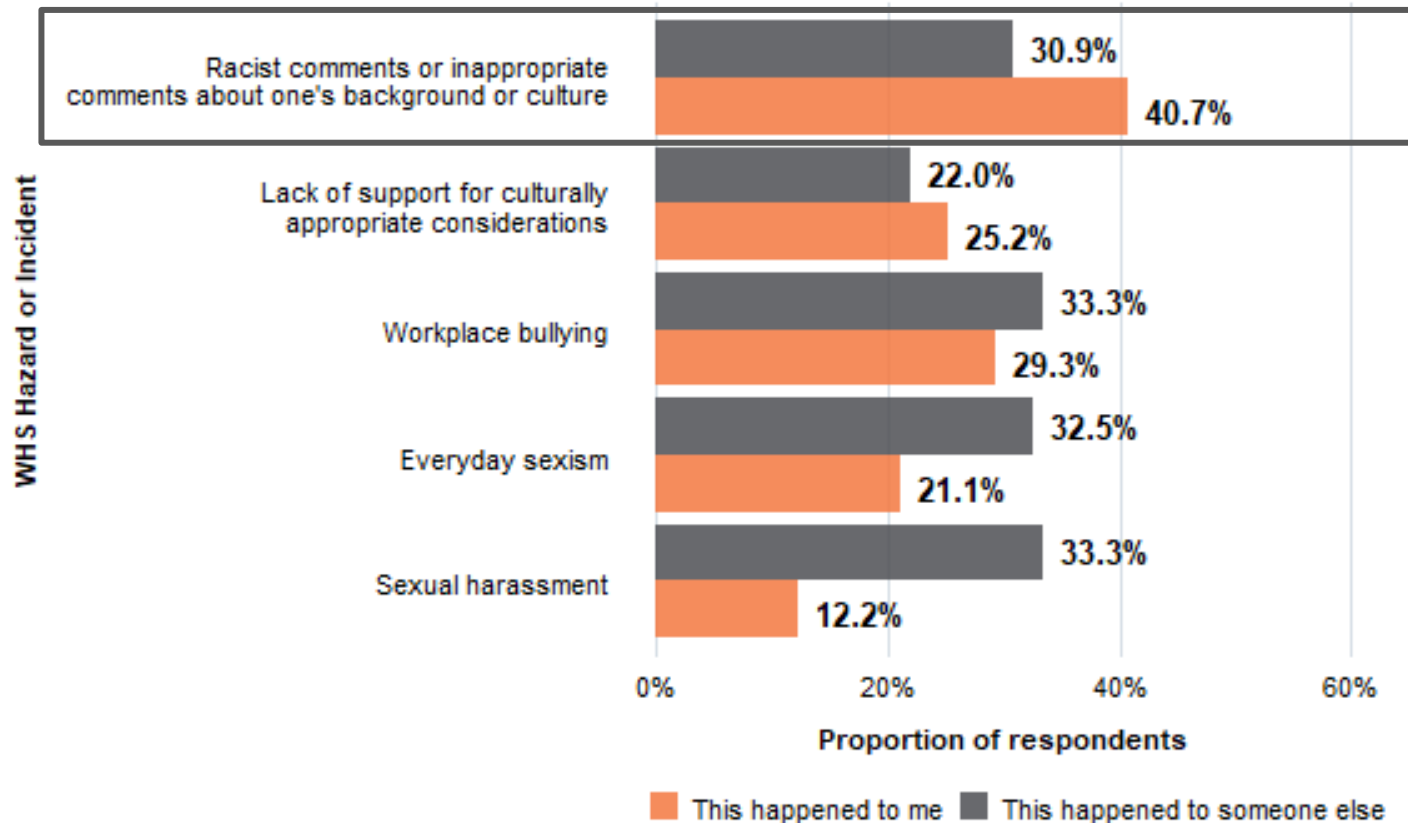Honestly, there's so much information that it's impossible to work out what to do

# Case study: WHS experiences of Aboriginal and Torres Strait Islander workers

# 40% of Aboriginal and Torres Strait Islander workers report experiencing racism at work



**WHS Hazard or Incident**

**Racist comments or inappropriate comments about one's background or culture**
- This happened to someone else: 30.9%
- This happened to me: 40.7%

**Lack of support for culturally appropriate considerations**
- This happened to someone else: 22.0%
- This happened to me: 25.2%

**Workplace bullying**
- This happened to someone else: 33.3%
- This happened to me: 29.3%

**Everyday sexism**
- This happened to someone else: 32.5%
- This happened to me: 21.1%

**Sexual harassment**
- This happened to someone else: 33.3%
- This happened to me: 12.2%

**Proportion of respondents**

■ This happened to me  ■ This happened to someone else

# Understanding barriers for employees and employers can help us to design solutions for prevention

**Reducing perceived negative repercussions:**

Our data suggested that approximately 25% of Aboriginal and Torres Strait Islander workers surveyed who experienced racism didn't report the incident because they were worried about the repercussions of doing so.

**Promoting the importance of employer action:**

Employers were more likely to take steps to prevent future sexism or sexual harassment, compared to experiences of racism at work.

# Develop solutions that address behavioural barriers

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# So, how *do* you change someone's behaviour?

**The EAST framework**

If you want to encourage a behaviour, make it...
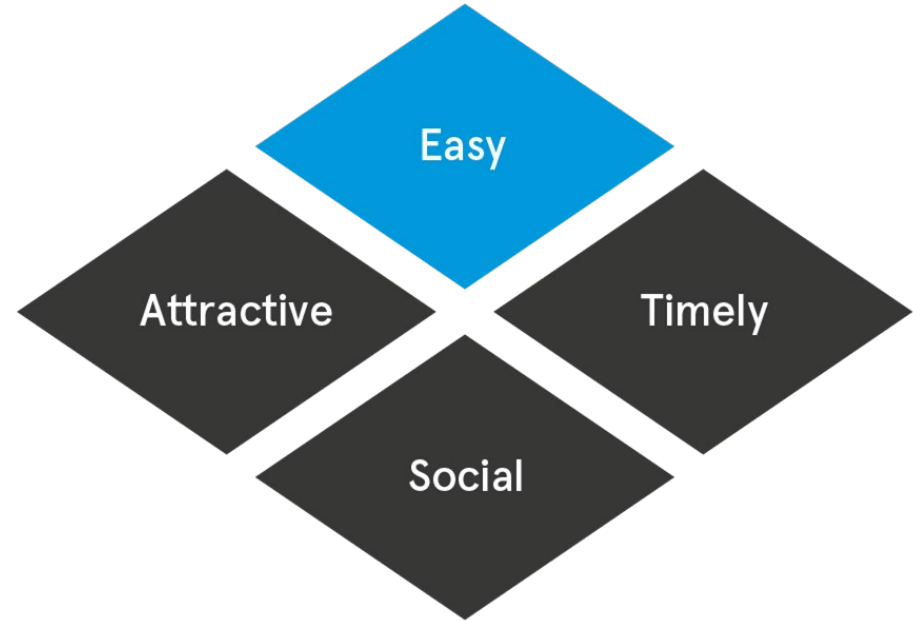
# Make it EASY



## Simplification

We are more likely to act on a message if it is easy to understand - use plain language and design elements to make it clear

## Checklists

Checklists help people complete a process, particularly in stressful situations - break the task down into steps so they can be worked through one at a time

# Example: Getting teachers back to work faster

## The problem

- Too many stakeholders
- Too many crossed wires
- Burden borne by person who is least able to cope with bureaucracy

## The solution

- Put all the information in a single letter to the teacher, sent jointly from employer and insurance company
- Conference calls between employer, insurance, and GP

## The outcome

- Teachers returned to work 27% faster in the first 90 days post-claim
- Less time and resources needed from all the stakeholders

# Make it ATTRACTIVE

### Salience

People's attention is drawn to what is new and relevant - make the desired action clear and attention-grabbing by using visual and design element (e.g. colour, positioning)

### Personalisation

We are more likely to respond to information which is tailored to us - use a person's name, vehicle type, or geographical area in communication materials

●●●○○ Sprint  LTE    12:12 AM    75% ▮

< Messages  **Delivery Co**    Details
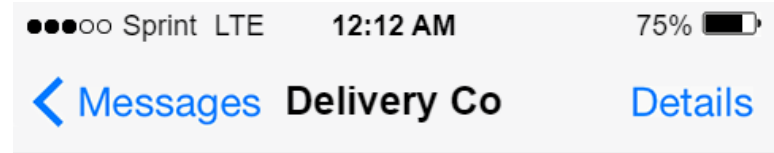
Hey John, it's going to be a bit rainy tonight in Surry Hills. Before you start your shift, have you got your high-vis rain gear?

# Make it SOCIAL



**Social Norms**

We tend to behave the way we think most other people do - so tell people when most of their peers are behaving a certain way

**Messenger Effect**

We give different weight to information depending on who communicates it to us - who does the target audience see as persuasive?

# Example: Reducing burnout in 911 dispatchers

Hi,

We've joined a group of cities focused on learning from 911 call takers and dispatchers across the country. Call takers and dispatchers save lives. I was inspired by a story that a colleague in West Palm Beach shared recently. A dispatcher in West Palm Beach was assisting officers in the pursuit of armed suspects fleeing in a stolen vehicle. This dispatcher remained calm and collected, helping keep the situation under control. She anticipated the needs of responders, was resourceful and dedicated, and communicated clearly with everyone involved. (All of this while training a trainee!) We have a lot of stories like this in our own department.

Over the next six weeks, we'll ask you to share some of your stories that could help new recruits feel more comfortable in their jobs and gain confidence. We'll also send you stories that other call takers and dispatchers send in.

**This week, please tell us about a time one of your coworkers was able to make a difference in someone's life because of their actions at work.**
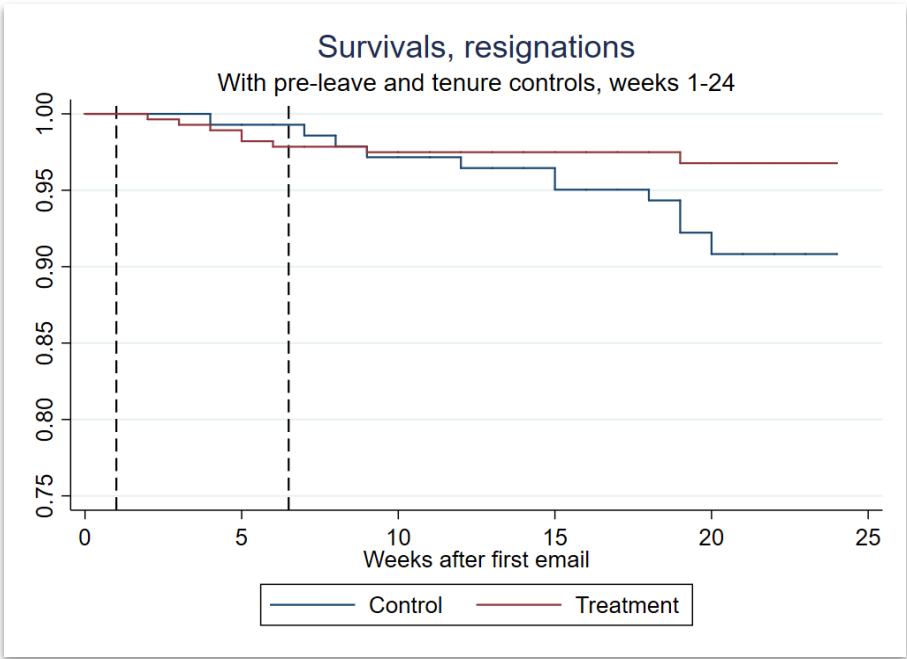
Thanks,
Anna

# Example: Reducing burnout in 911 dispatchers



Burnout scores 6-months post-intervention
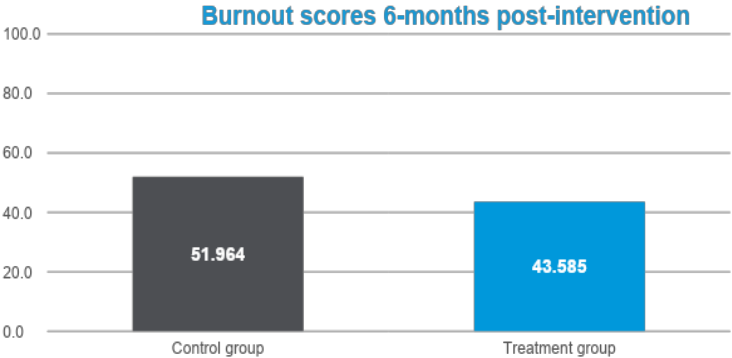
N = 152 (nine 911 emergency centers)    *** p<.001, ** p<.01, * p<.05



Survivals, resignations
With pre-leave and tenure controls, weeks 1-24

# Make it TIMELY



## Present Bias

**Insight:** We value costs and benefits more in the present than in the future - so move the costs of good behaviour into the future but bring rewards into the present
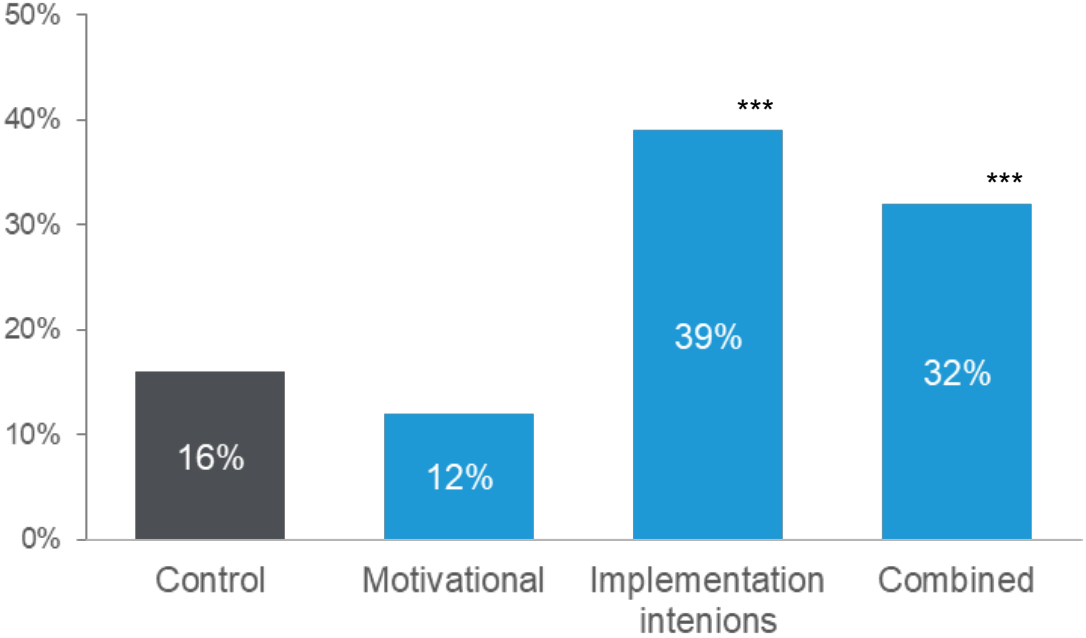
## Prompts

**Insight:** Giving people reminders at the right time can help them take action - the timing of messages or interventions is key

# Example: Improving fire safety training attendance

*"Write down the time, date, and location of your fire safety training session"*



n=271   *** p<0.001,  ** p<0.01, * p<0.05,  + p<0.1

Sheeran, P., & Silverman, M. (2003). Evaluation of three interventions to promote workplace health and safety: evidence for the utility of implementation intentions. *Social Science & Medicine*, 56(10), 2153–2163

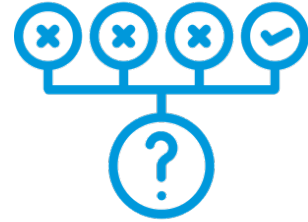# Test the solution rigorously, and scale where it works

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# The importance of testing



**User testing**

- Get individual experiences
- Iterate idea based on feedback
- Can't generalise
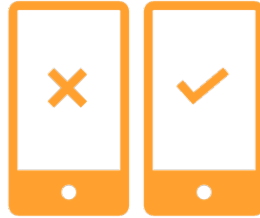
**A/B testing**

- Test different versions
- Compare outcomes for whole groups

**Randomised controlled trial**

- Control and treatment groups
- Random assignment
- Most robust design but need large sample size

# Case study: Food delivery gig workers



## Why do they take risks?

- Achieve and maintain high in-app ratings
- Maximise income
- Satisfy customers
- Many believe that delivery times are deadlines, with penalties if missed

# How do we understand the problem?

Field **observations** of food delivery worker hotspots and busy restaurant strips

**Interviews** with food delivery workers who are active in WHS reform

Online **survey** of wider food delivery worker community in Australia

**Textual analysis** of food delivery workers' social media posts

**Interviews** with representatives of food delivery platforms and other stakeholders

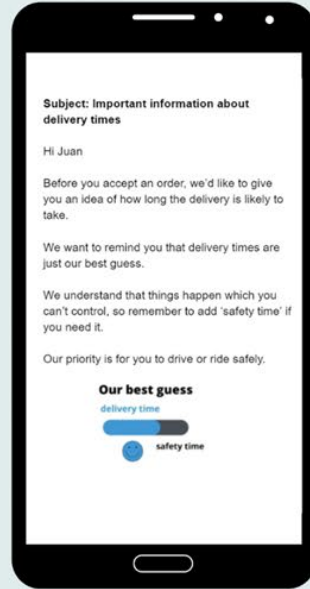A **service safari**: signing up to the platforms, going through onboarding, and riding a shift

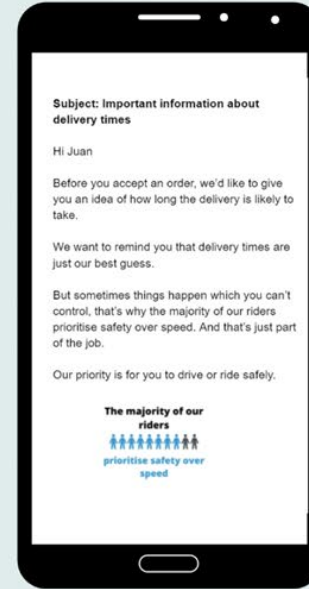# Delivery times are a guideline, not a deadline
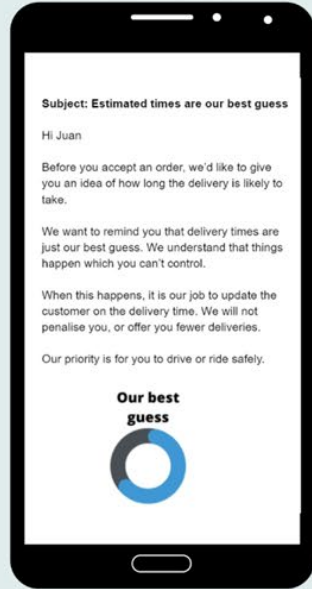


**Beliefs about consequences**
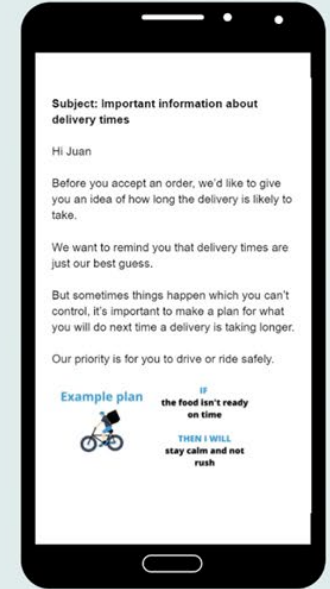To alter workers' belief that they would be penalised for not meeting delivery times.

**Anchoring**
To anchor workers on a new reference point (delivery time combined with "safety time")

**Descriptive social norms**
To encourage social comparison of workers' safety behaviour with their peers
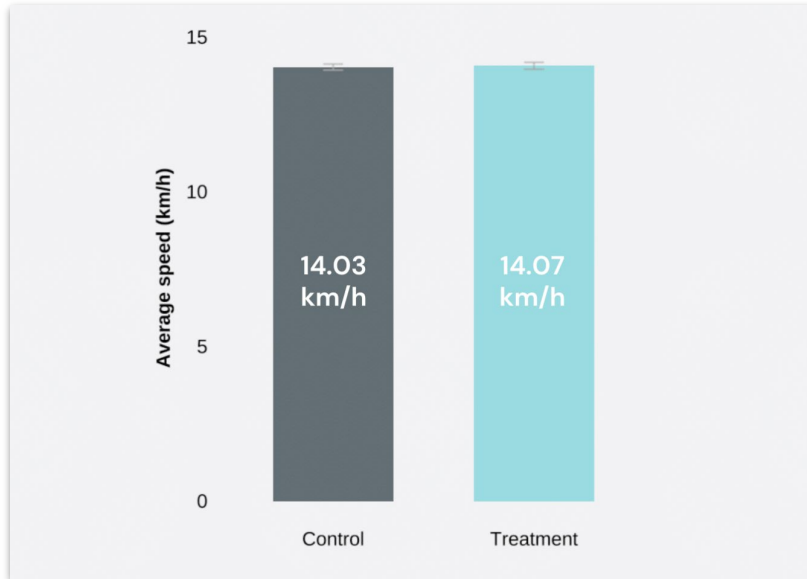
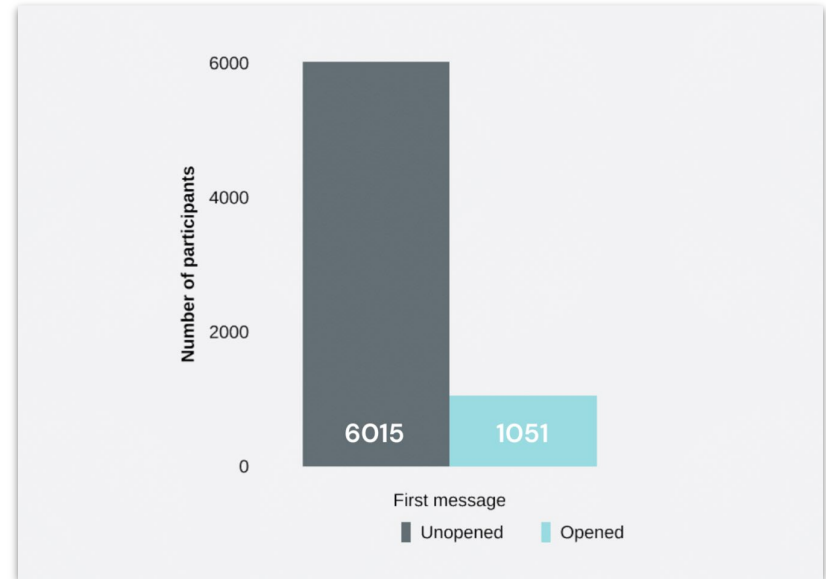**Implementation intentions**
To encourage workers to make an advance plan for handling unexpected events.

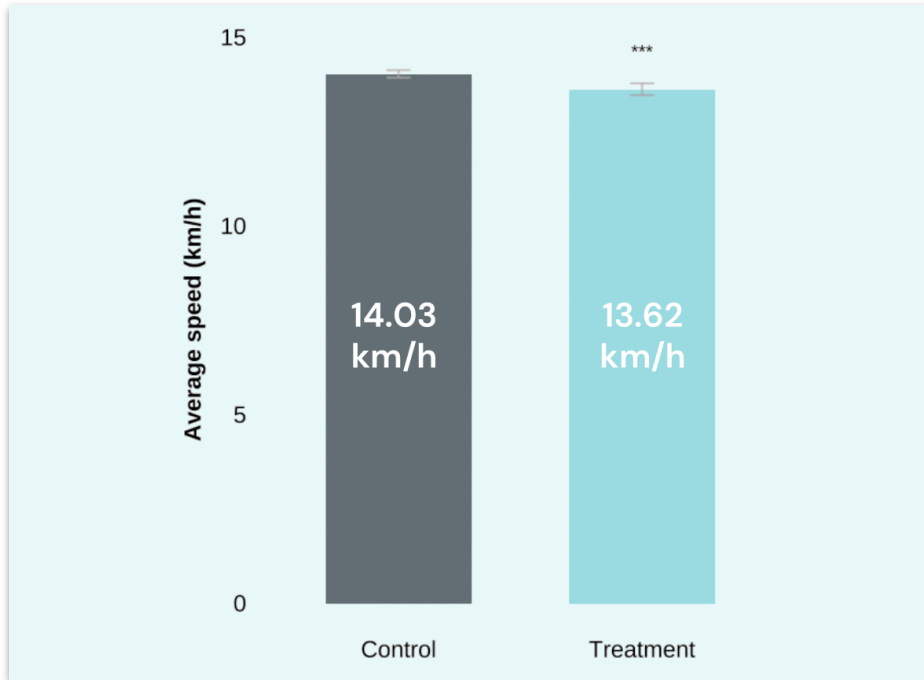# Low engagement, low impact



No significant difference in travel speed



Very low worker engagement with the messages

# Significant effect on engaged workers



1. The messages **are** effective, but…

2. Worker engagement is a problem that needs to be fixed first, so…

3. Without testing, we wouldn't have uncovered this barrier to success

# Take-aways: Look EAST to change behaviour:

- WHS policies and procedures should **work *with* our behavioural quirks**, rather than against them

- Understand the context, develop fit-for-purpose solutions, and test those solutions rigorously

- Look EAST to change behaviour: make desired behaviours **Easy, Attractive, Social, and Timely**

# Thank you!

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