



# The human factor in fleet safety

## Academic research findings

- Distraction
- Stress factors
- Skills fade



# Who we are

Travis Perkins is the largest distributor of building materials in the UK.

A trade-focused Group, serving generalist and specialist trades with products and services that are designed to help customers grow their businesses in new and established markets.





## Origins

“Looked but failed to see”

“Thoughts were elsewhere due to the cost of living crisis”

“How long does not driving increase the risk of an accident?”

“I have a very sick close family member”

“It felt as if I was driving on autopilot”

**“I’m only human!”**

“What are the risks when we step backward in vehicle technology?”

# > Approach





# Collaborate

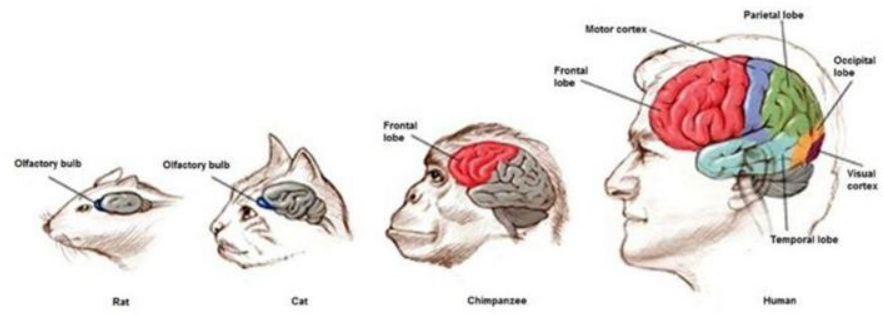
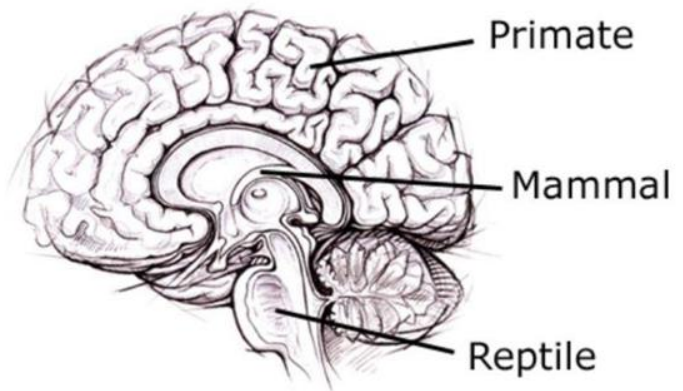
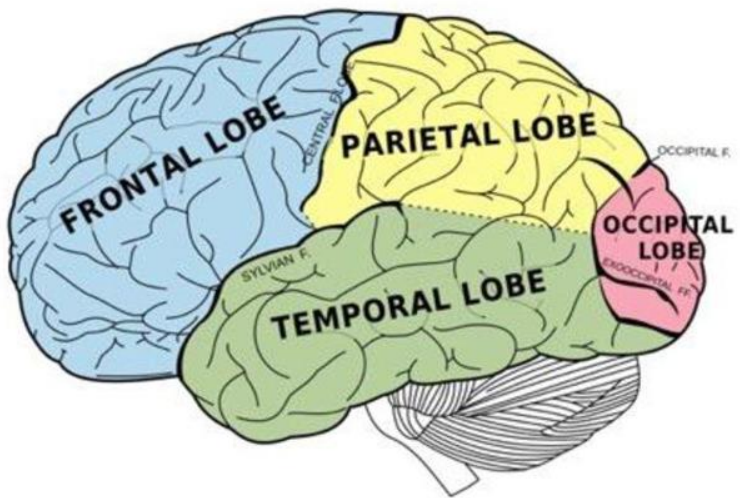


## Collaborate:

To work together with another person or organisation for a particular purpose.



# Basic Neuroanatomy



# > Stress at work

- Impaired cognitive functioning, decision-making and reducing self-control
- Workload
  - Externally-paced
  - Delivery targets
  - Traffic and road demands
- Driver stress linked with stress in other domains
- Safety culture

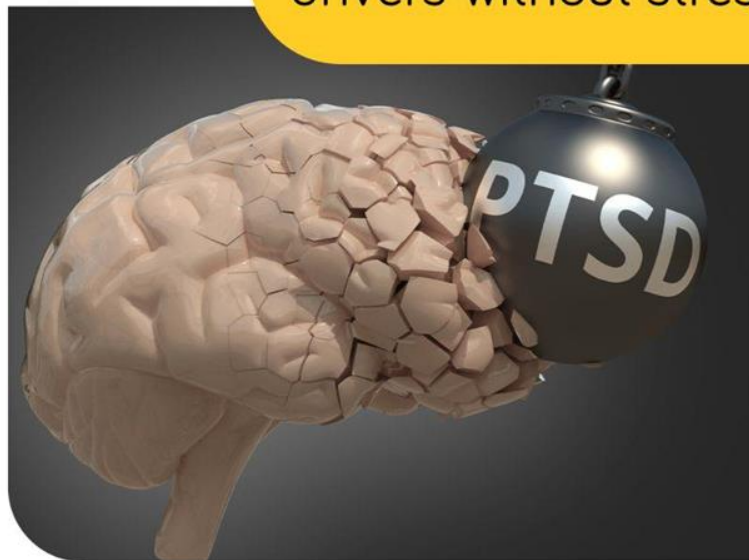




## Stress and PTSD

- Physiological hyperactivation (cortisol) and cardiovascular parameters (HRV) associated with cancer, coronary heart disease/stroke and poor mental health
- With too many unaddressed high beta brainwaves, the body cannot come back to a relaxed state
- Leads to sickness, burnout and other physical or emotional side effects (e.g, PTSD)

Recent social stress  
5 times more likely to  
cause a fatal crash as  
drivers without stress



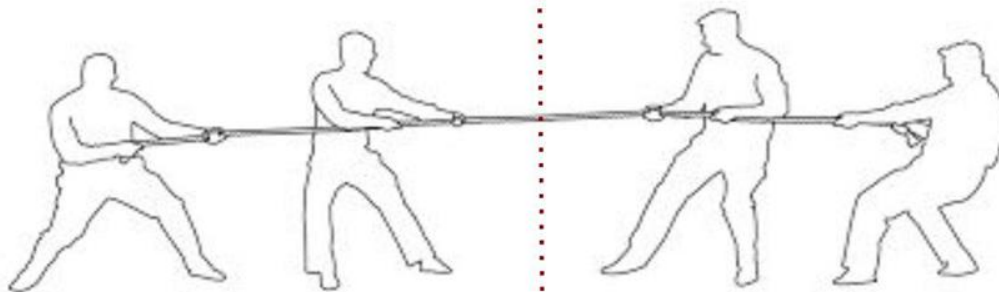
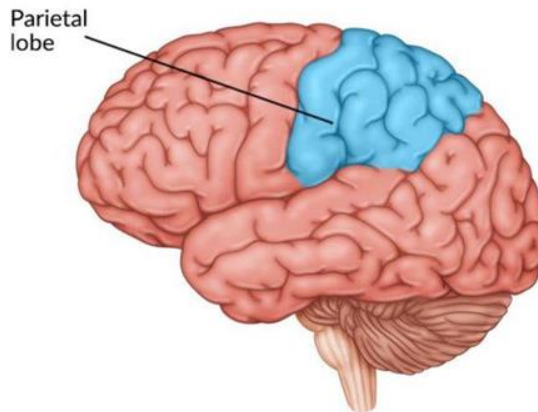
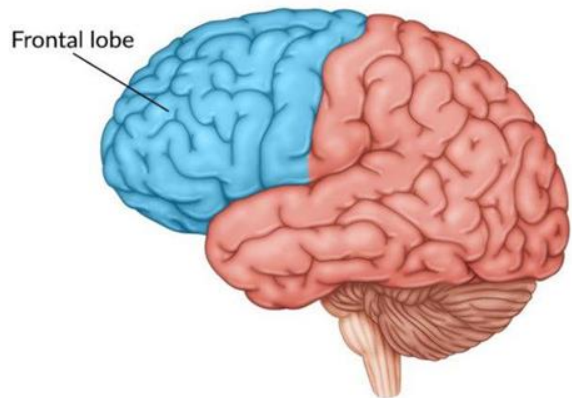
## Amygdala hijack

- Amygdala directs attention towards emotion and away from cognitive tasks required for safe driving
- Processing emotion requires the brain's resources
- This is why stress causes distraction

An amygdala hijack occurs when any strong emotion — anger, fear, anxiety, or even extreme excitement — impairs the part of the brain in the frontal lobe that regulates rational thought.



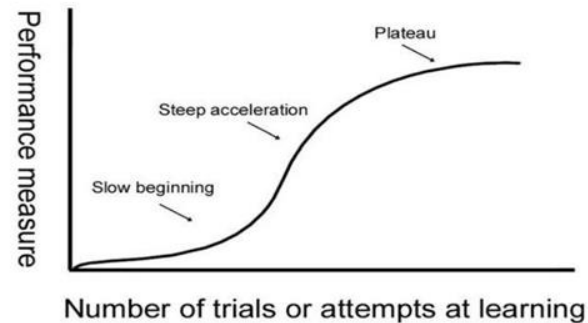
# > Distraction - a tug of war



# Skills fade



Poor skills 3 months break after licensure -  
brief intermittent practice required

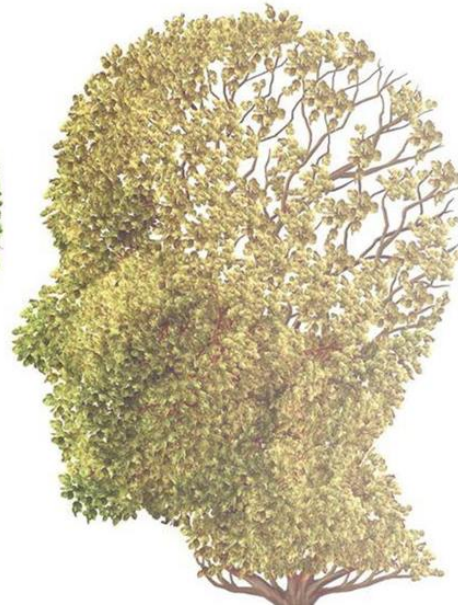


Greater rate of decay for cognitive skills



# Effects of Cognitive Skills Fade on driving

- Driving errors and/or an increased response time
- Loss of expectancies, situational awareness
- Interference from newly acquired skill
- Third trained in driving knowledge forget after 3–5-month break
- Dealing with emergency situations may be compromised
- Cognitive skills need refresher after 6 mths with no practise





# Findings PsyDrive GROUP

## Stress

- Profile to identify vulnerable drivers (e.g, SRRS)
- Group training in mindful driving and better coping strategies

## Distraction

- Training in context (e.g, specialist vehicles)
- Cognitive skills training

## Skill

- Newly qualified (professional) driver must practise after licensure
- Assess cognitive skills after 6 mth driving break



# ➤ Currently Implementing

## Pre-employment Driver Profiling



- Review of recruitment process to include risks related back to research findings

## Evolving Driver Behaviour Program



- Elevating the driver incentive criteria, rewarding the professional driver

## Improved Collision Analysis



- Strengthening our data by standard and consistent RTI categorisation