

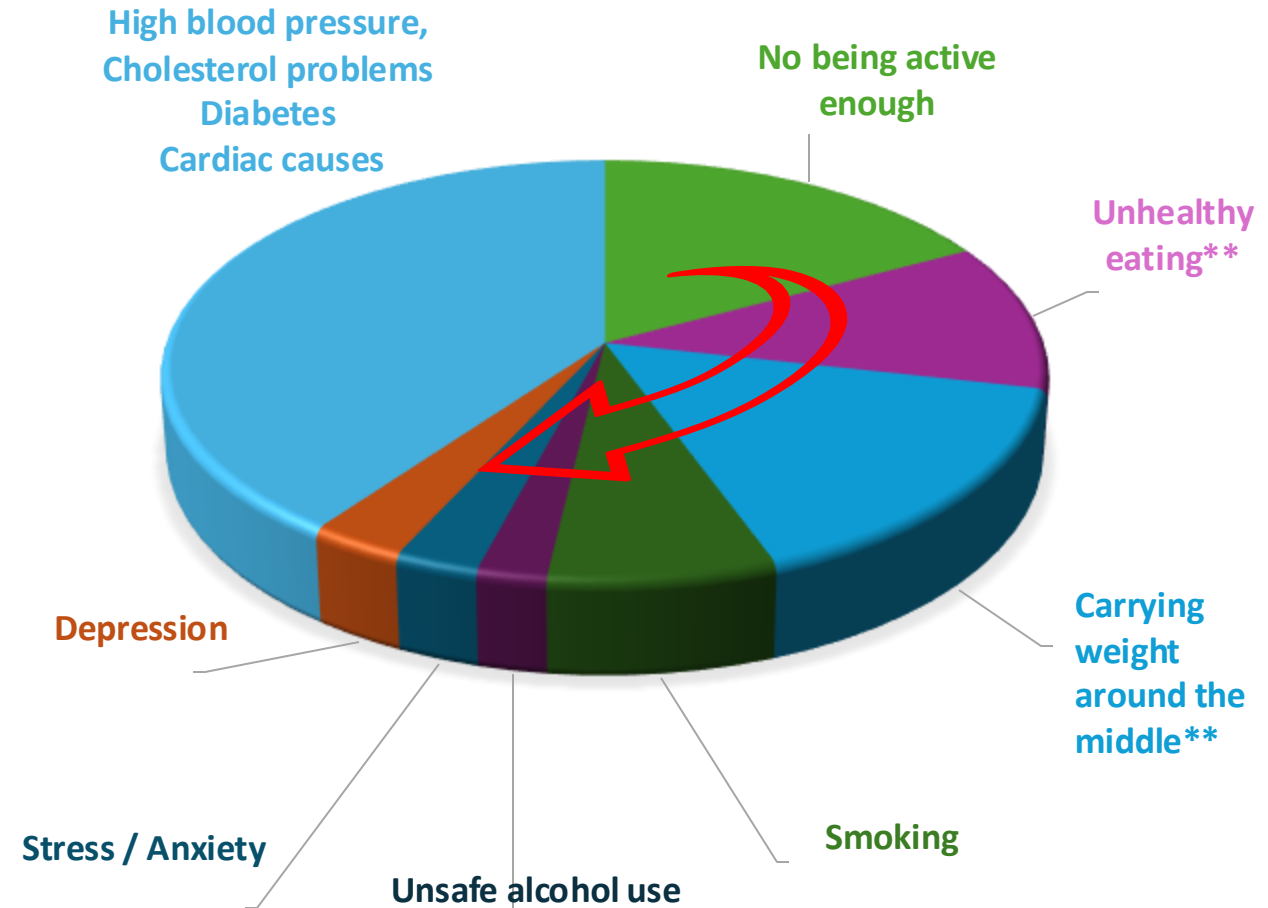
# Lifestyle behaviour change theories/techniques relevant to stroke secondary prevention

Olive Lennon

Changing habits is hard



# Why do we need to change habits after stroke?

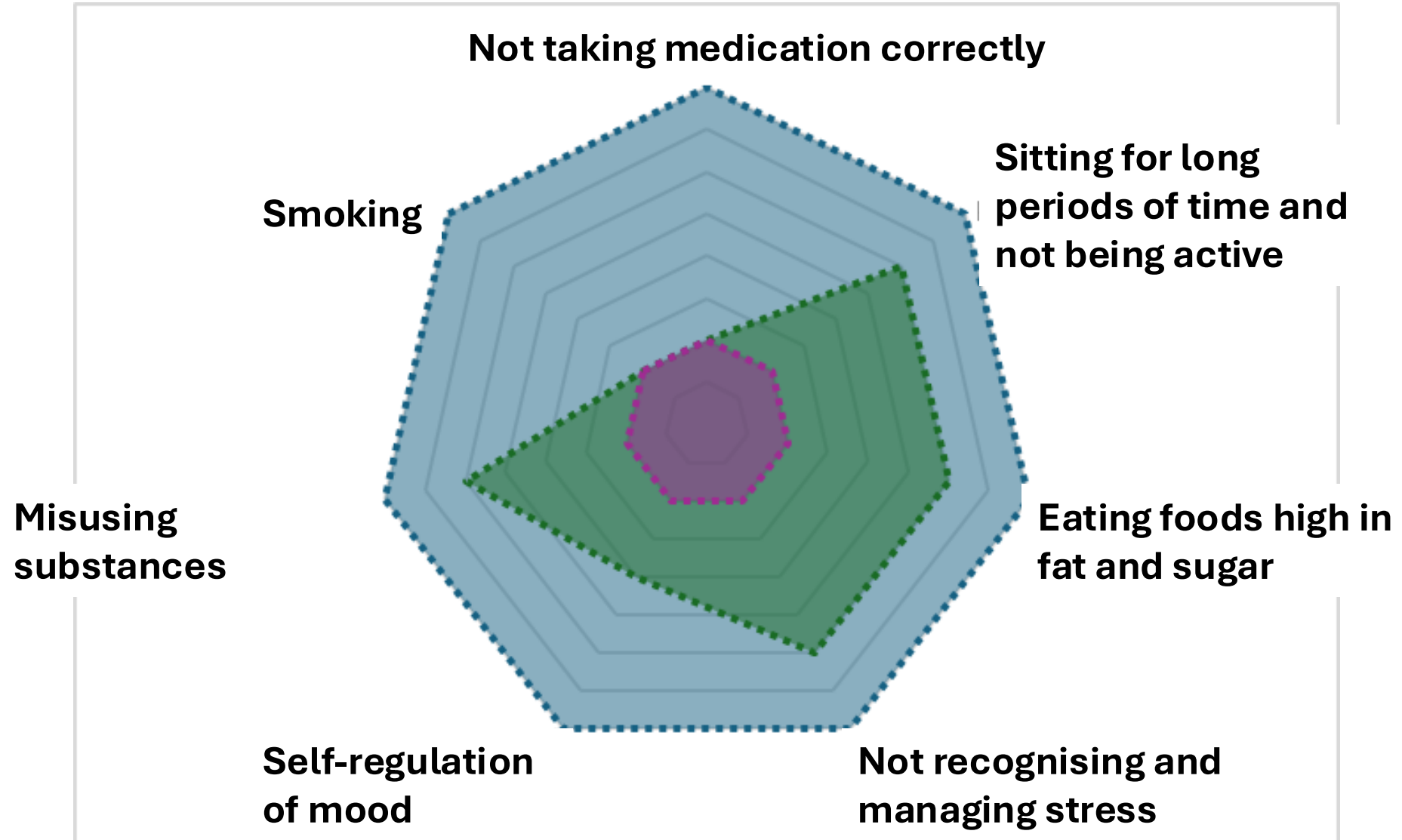


\* >30 drinks per month or binge drinking; \*\* waist-to-hip ratio (highest vs lowest tertile); \*\* diet risk score

O'Donnell MJ, Xavier D, Liu L, Zhang H, Chin SL, Rao-Melacini P, Rangarajan S, Islam S, Pais P, McQueen MJ, Mondo C. Risk factors for ischaemic and intracerebral haemorrhagic stroke in 22 countries (the INTERSTROKE study): a case-control study. The Lancet. 2010 Jul 16;376(9735):112-23



# What kind of bad habits?



## Cerebrovascular disease



RESEARCH PAPER

# Impact of a healthy lifestyle on all-cause and cardiovascular mortality after stroke in the USA

Amytis Towfighi,<sup>1,2</sup> Daniela Markovic,<sup>3</sup> Bruce Ovbiagele<sup>4</sup>

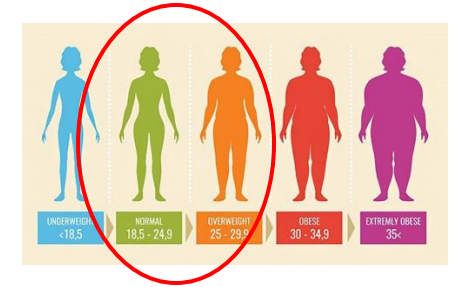
► Additional tables are published online only. To view these files please visit the journal online (<http://jnnp.bmj.com/content/83/2.toc>).

### ABSTRACT

**Background** Little is known about the effects of a healthy lifestyle on mortality after stroke. This study assessed whether five healthy lifestyle factors had

numbers of healthy lifestyle behaviours were associated with a greater survival benefit.

### METHODS



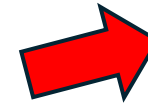
## Outcome of cardiovascular mortality:

a dose dependent response is seen

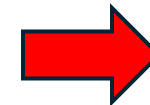
4-5 healthy factors vs none: HR 0.08

1-3 healthy factors vs none: HR 0.15

4-5 healthy factors vs 1-3 factors: HR 0.53



Reduction of 92%



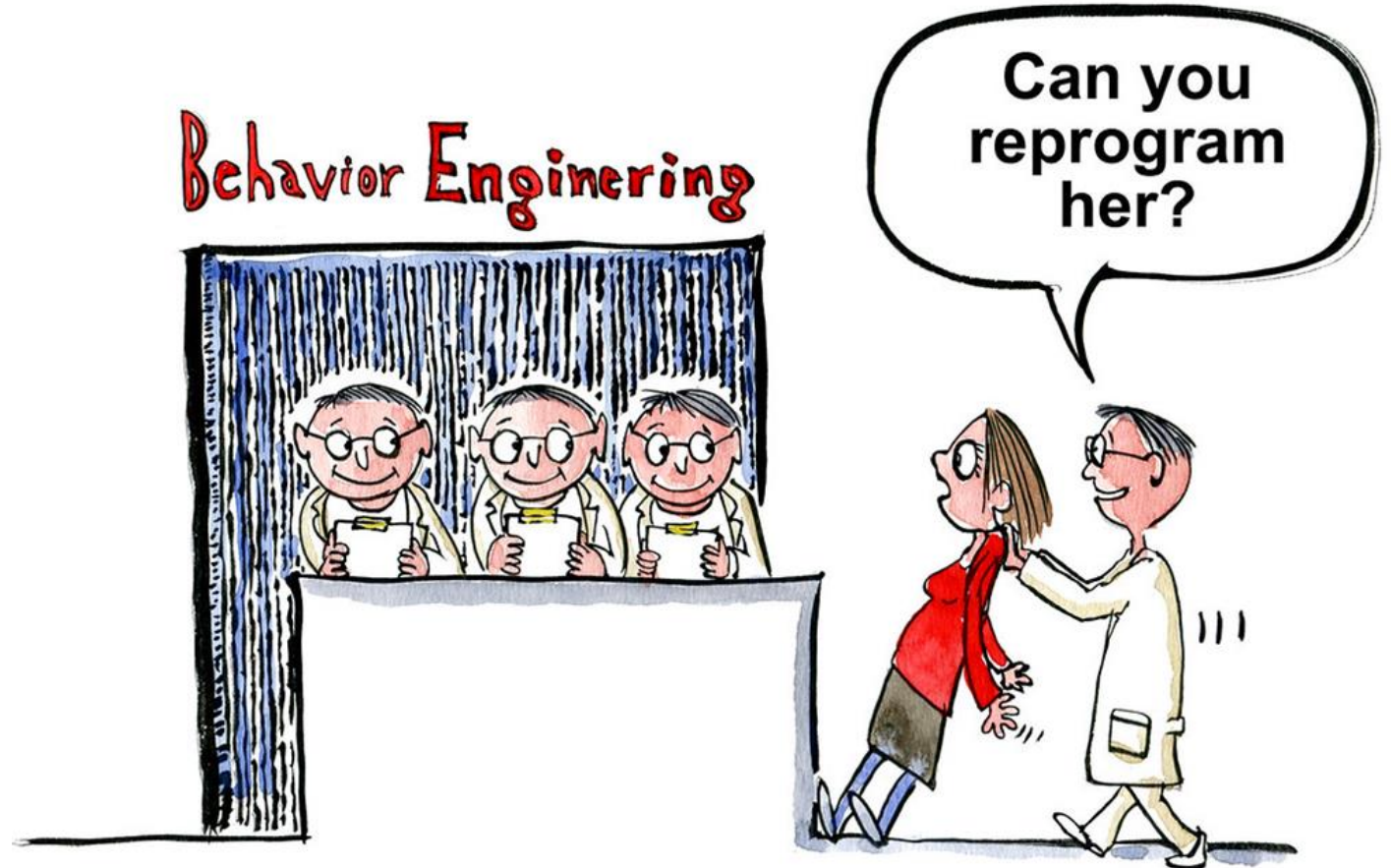
Reduction of 85%



Reduction of 47%

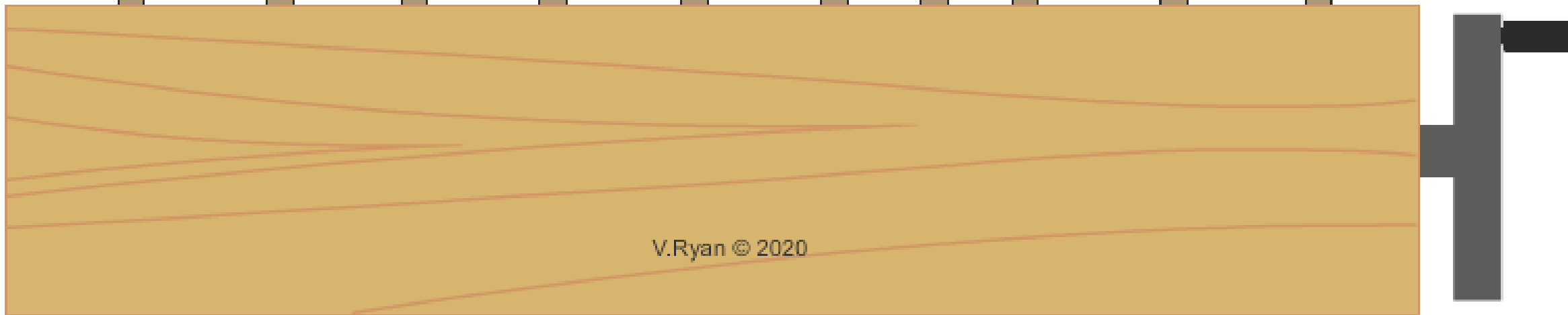


HOW?



By HikingArtist.com

# MECHANISMS



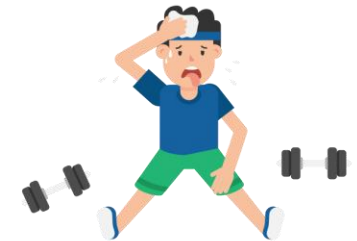
V.Ryan © 2020

# The active ingredients that can help change behaviours





# What are the experiences and perceptions of stroke survivors adopting personalised risk reduction behaviours?



- Knowledge of risk factors & lifestyle behaviour change
- If discussed and with whom
- What made it ease / difficulty to change behaviours
- What made it easy / difficult to maintain behaviours over time



Beliefs about capabilities

“I think the more you can do something for yourself the more confidence it gives you”

Beliefs about consequences

“I tell myself, this will prevent you from ever going through what you went through again”

Goals

“it was like... a goal I could look forward to...”

Social influences

“... and the interaction with people with the same condition...”

Emotion

“it took a long time to accept it and I’d be really angry”

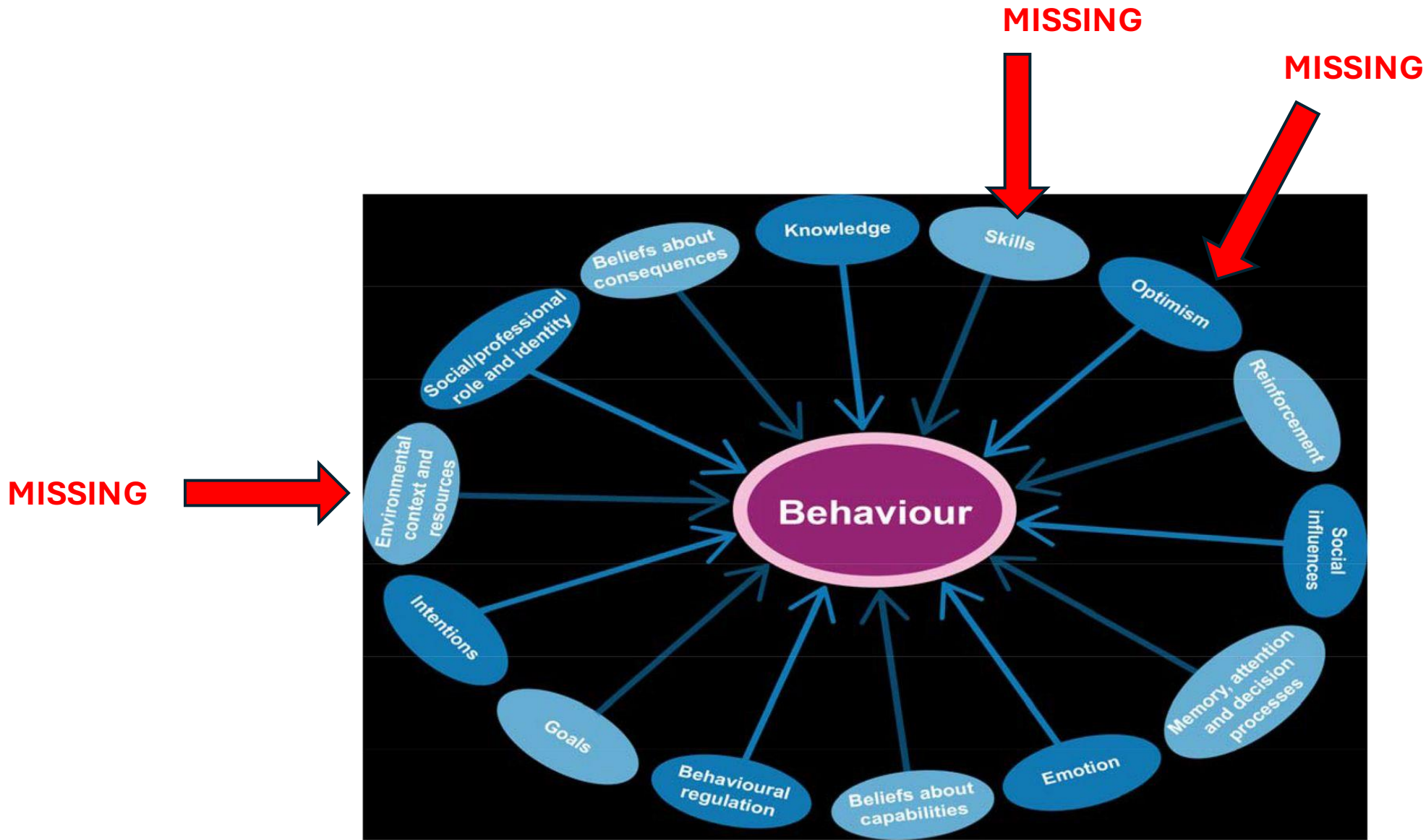
Social role / identity

“I was a postman for 38 years and I always had a sort of routine

“when I wake up in the morning, get up, and get dressed, and get out for a walk...”

Behavioural regulation





Moderate GRADE Evidence

Multicultural programme

Education / Behavioural counselling

Self-management support

Moderate GRADE Evidence

Psychological therapies

Theoretical Domains Framework (TDF) - Domains

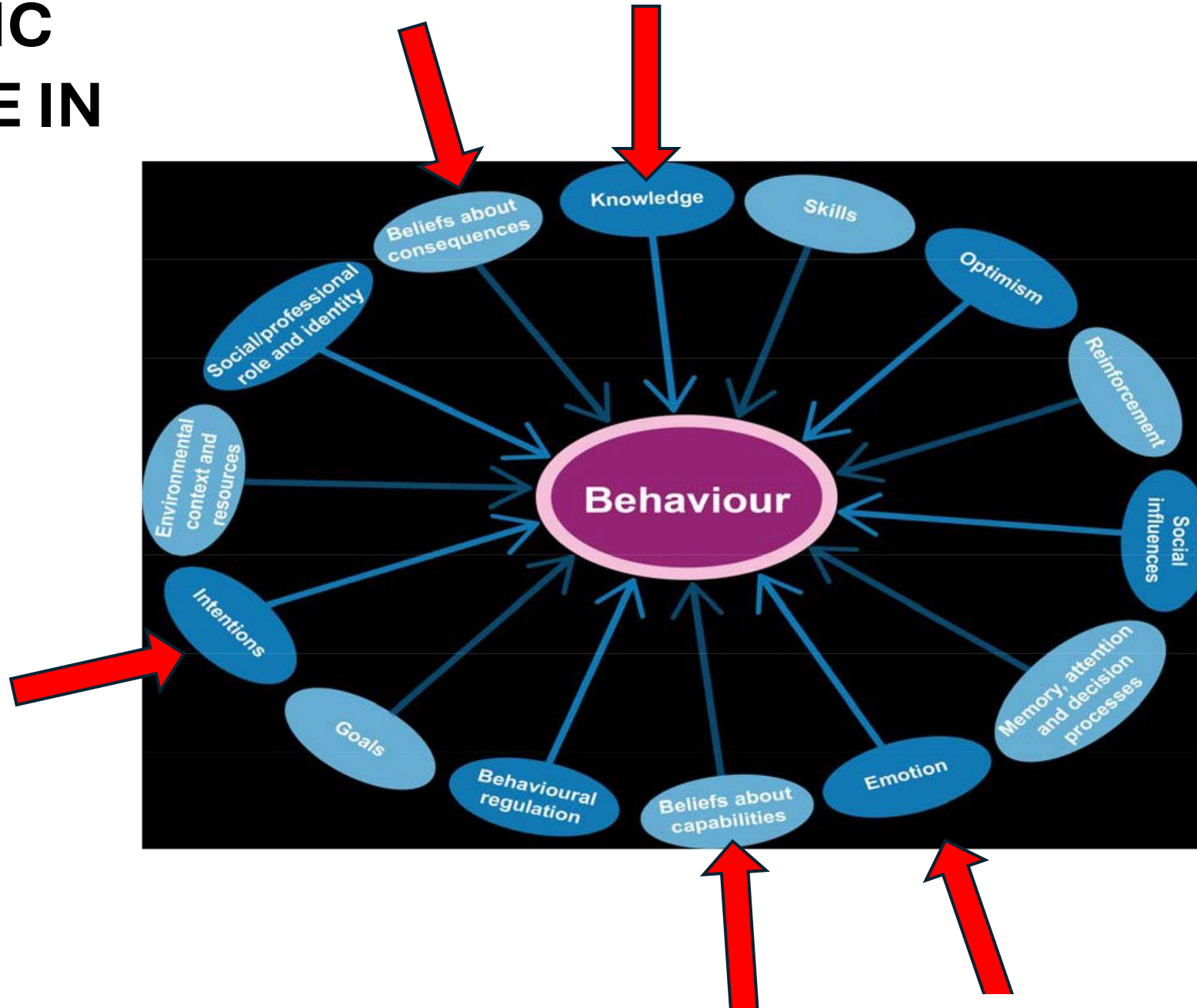
- Knowledge
- Skills
- Goals
- Social influences

- Knowledge
- Beliefs about consequences
- Goals

- Beliefs about capabilities
- Skills
- Goals
- Intentions

- Skills
- Emotions

# SCIENTIFIC EVIDENCE IN STROKE?



# Understand your risks- take action-hit the bullseye

