





Strength

Speed

Stamina

Motor learning

# MOVEMENT

Anabolic steroids

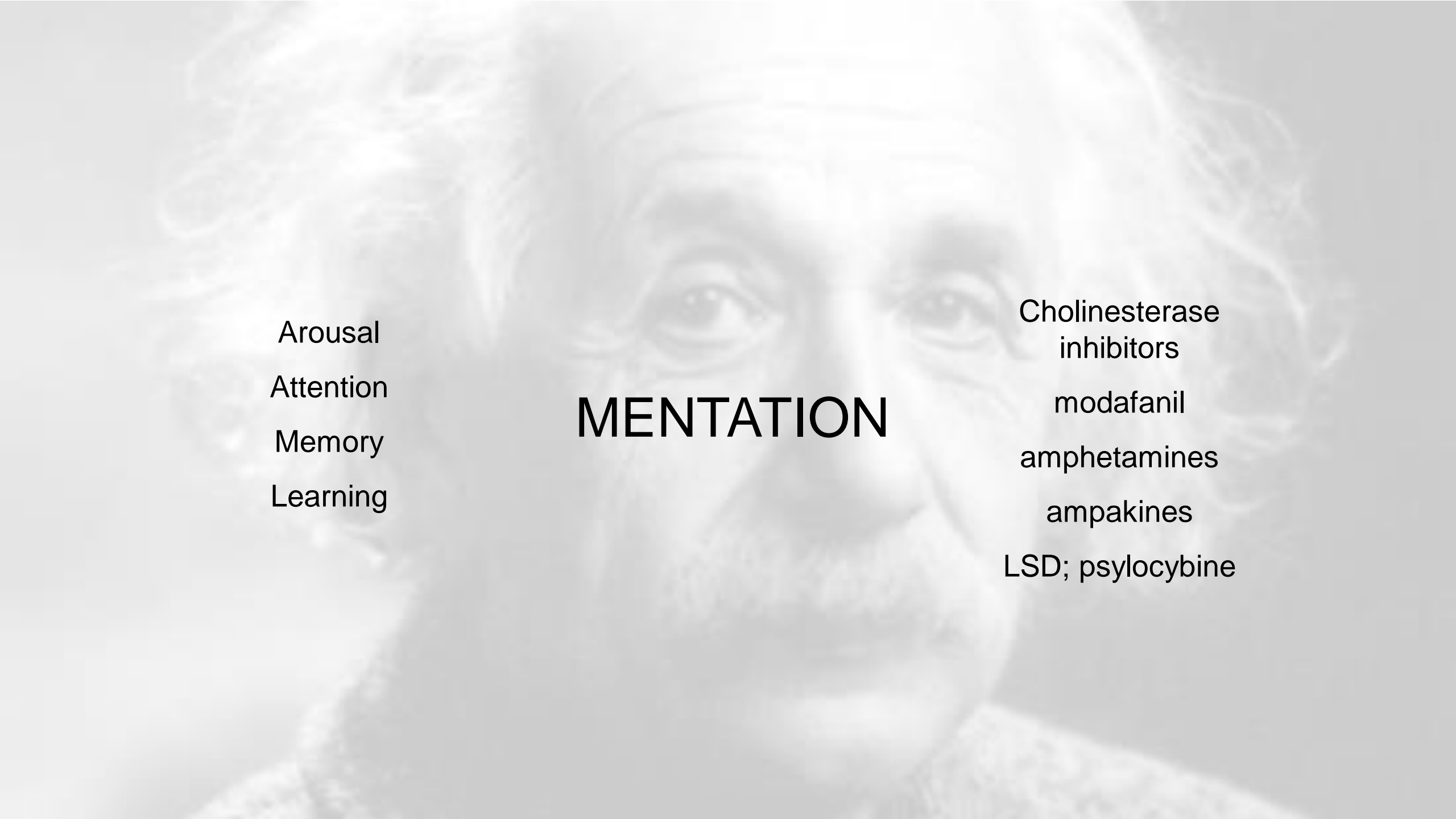
IGF

Erythropoetin

Sildenafil

Amphetamines

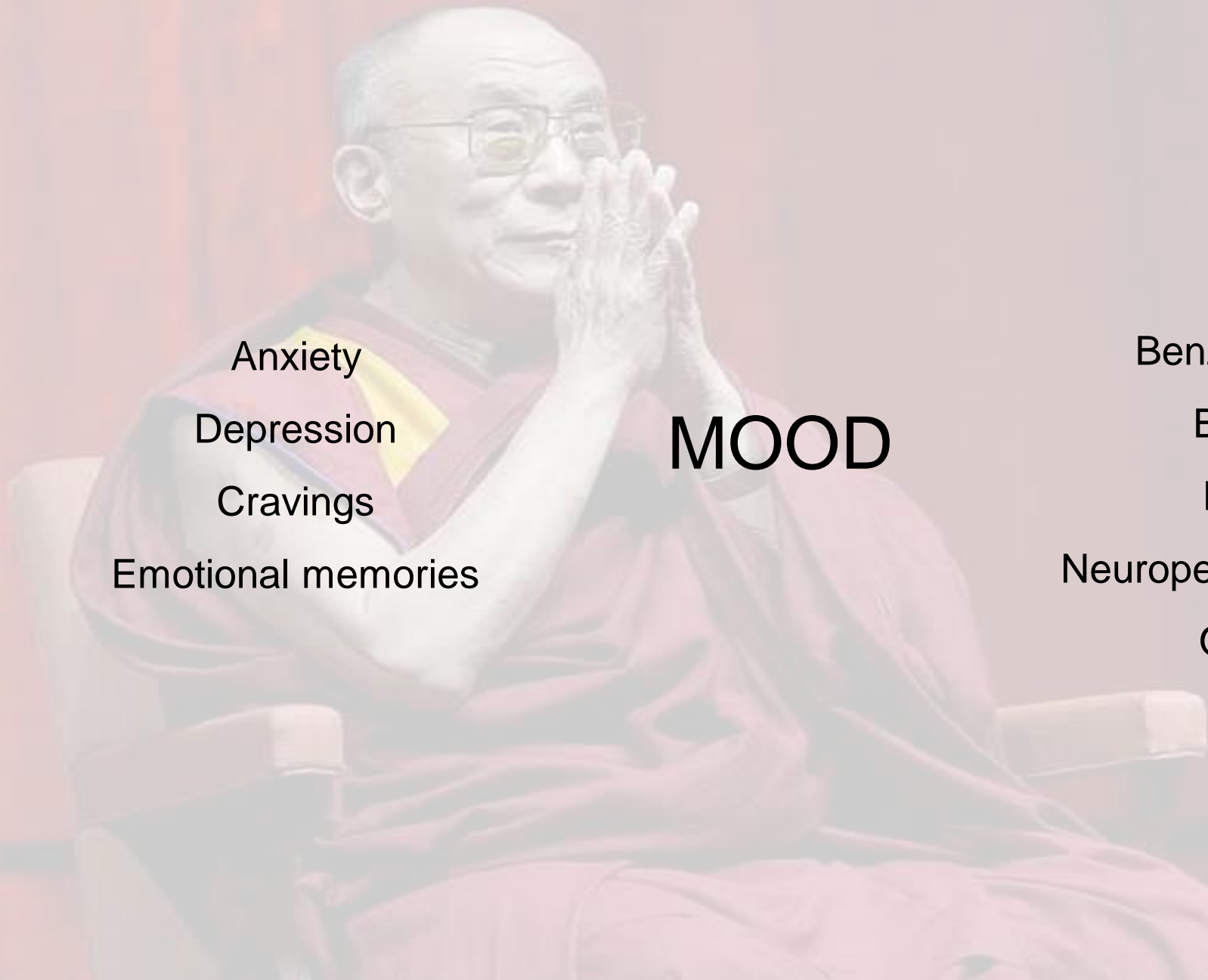
Modafinil



Arousal  
Attention  
Memory  
Learning

# MENTATION

Cholinesterase  
inhibitors  
modafanil  
amphetamines  
ampakines  
LSD; psilocybine



Anxiety  
Depression  
Cravings  
Emotional memories

# MOOD

SSRIs  
Benzodiazepines  
B blockers  
Naloxone  
Neuropeptide regulators?  
Oxytocin?

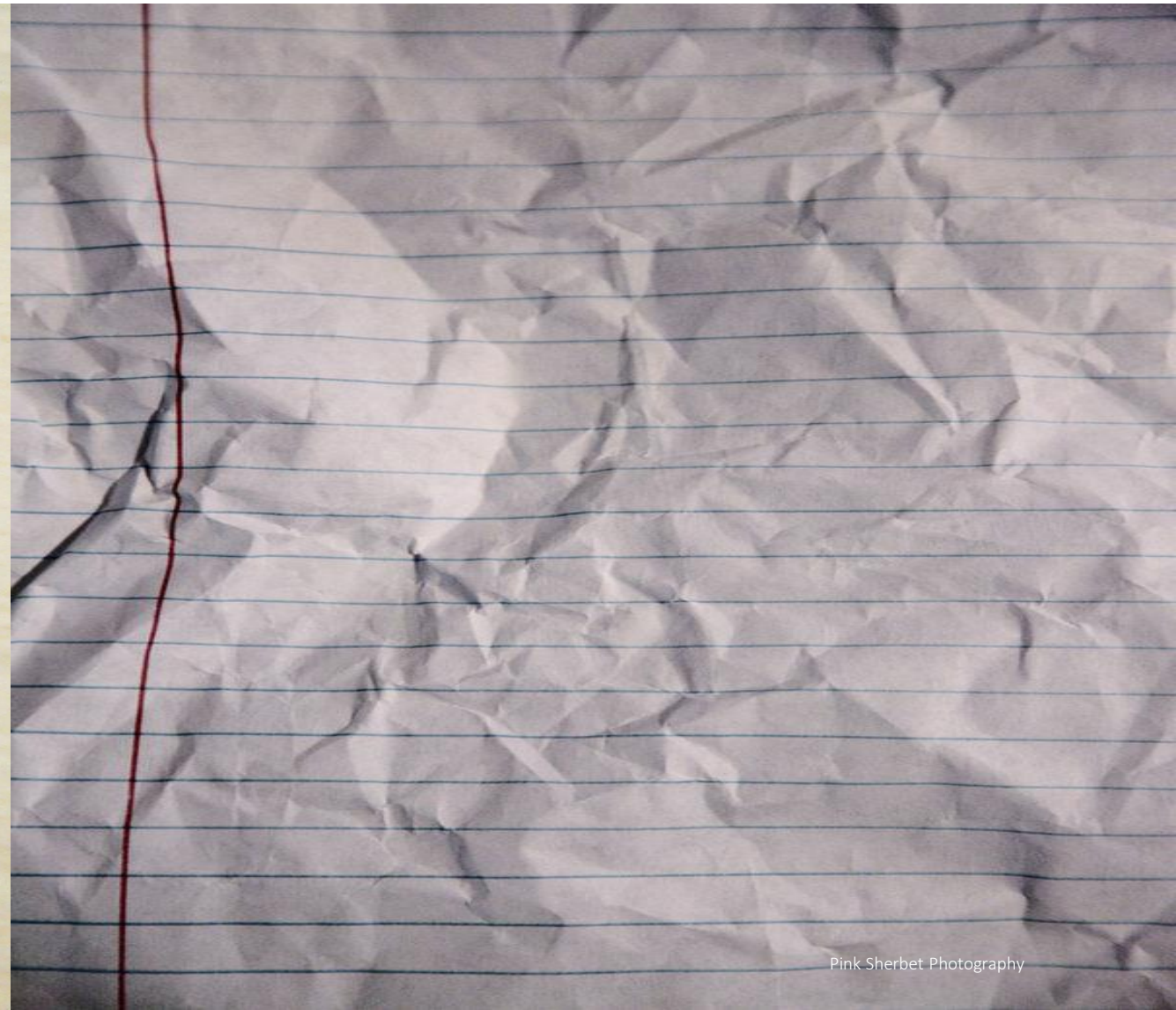
safety



fairness/character



# access/dist justice



# autonomy/coercion







# Lifetime Use Rates

Students: 5 – 40%

Poker players: 28%

Economists: 19%

Medical students: 18%

Surgeons: 9%

Anecdotal:

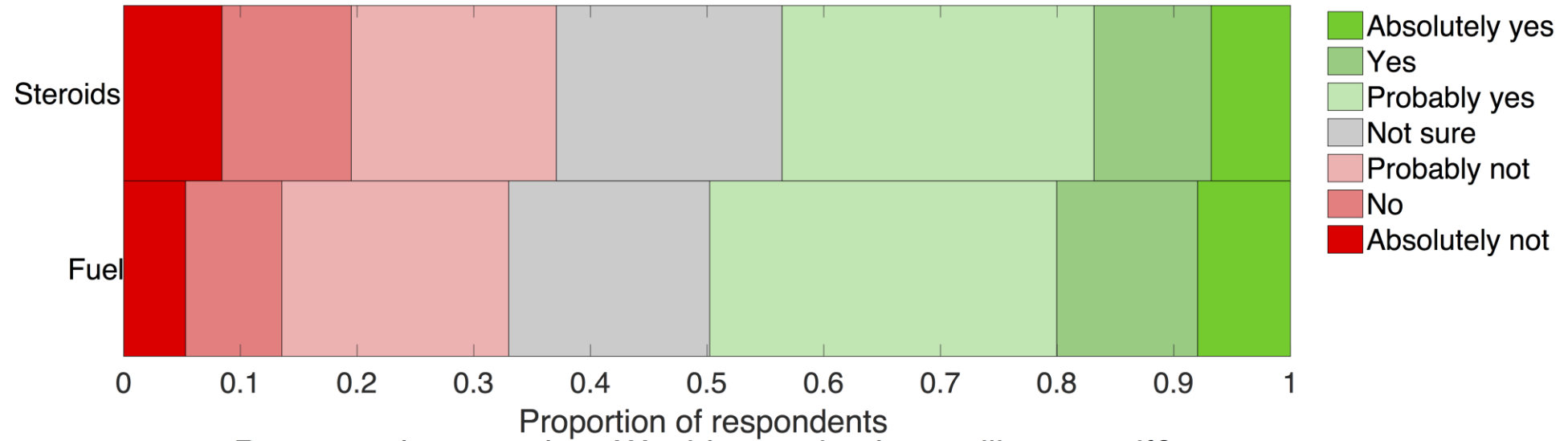
Paul Erdos

Charlie Parker

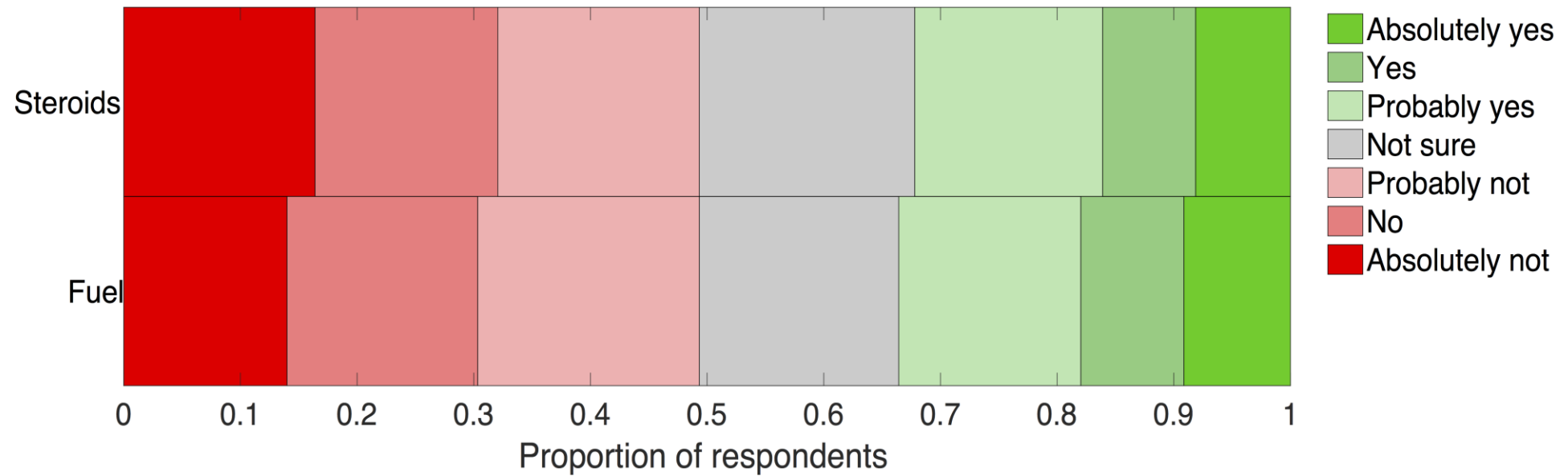
Metaphoric framing? Context? Other vs Self

Cognitive enhancing pills are [**fuel/steroids**] for the brain. People who take these pills may be able to think more quickly and efficiently. [*Athletes sometimes take these pills while training so that they can learn their skills more effectively and perform better/Students sometimes take these pills while studying so that they can learn new information more effectively and perform better/Employees sometimes take these pills at work so that they can learn their duties more effectively and perform better*].

### Response by metaphor: Is it fine for athletes/students/employees to take these pills?

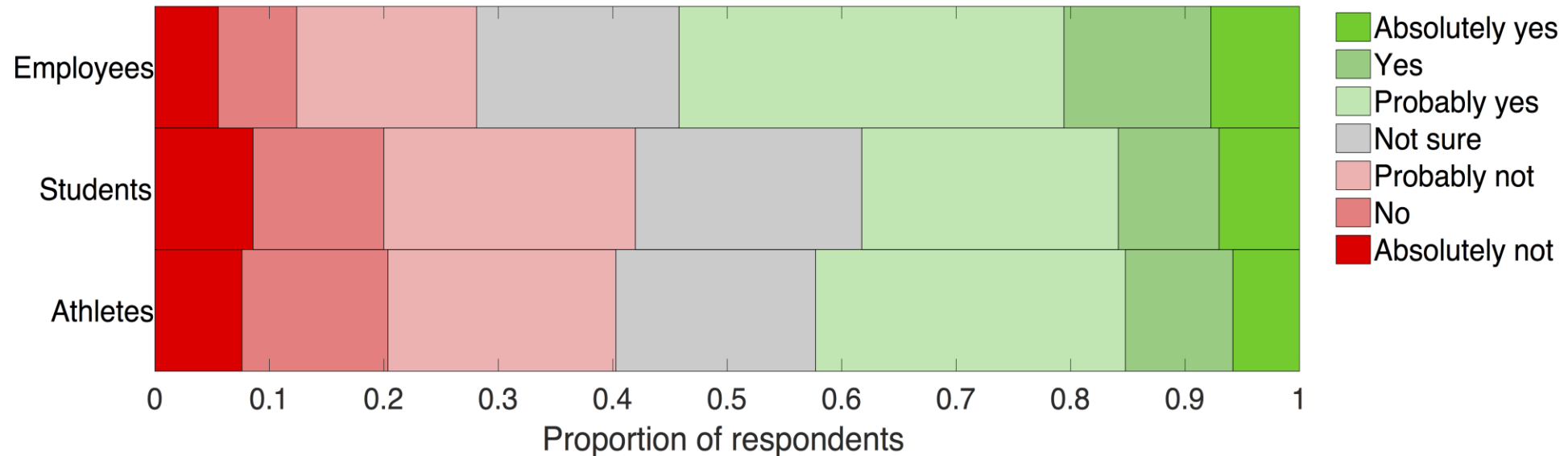


### Response by metaphor: Would you take these pills yourself?

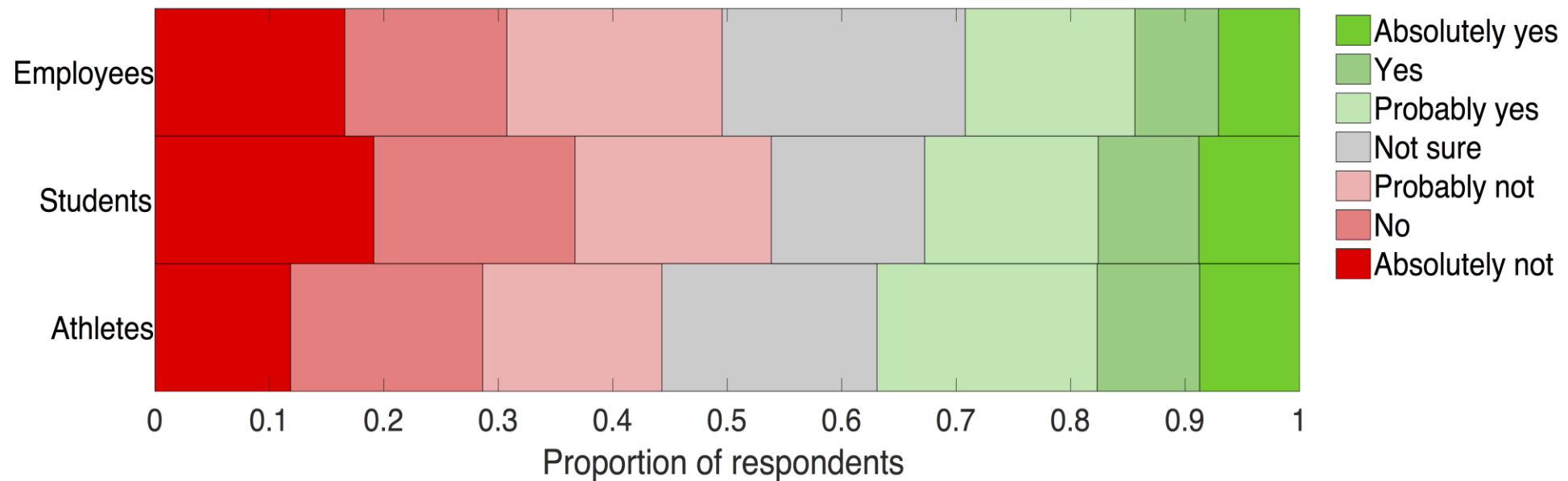


N = 1354, other > self; metaphor: > other, = self

Response by context: Is it fine for athletes/students/employees to take these pills?



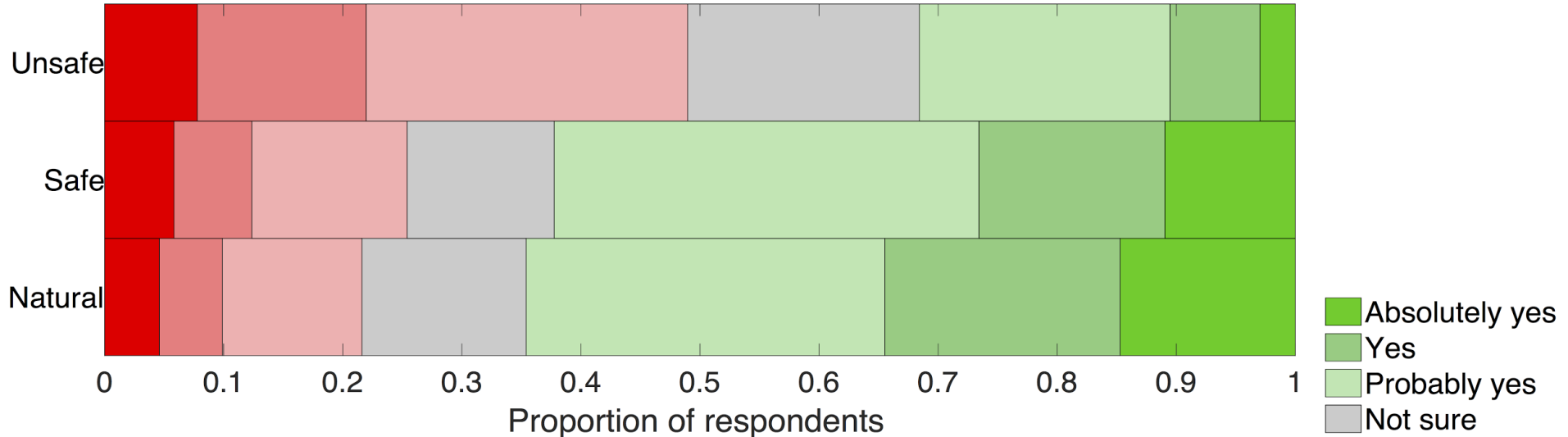
Response by context: Would you take these pills yourself?



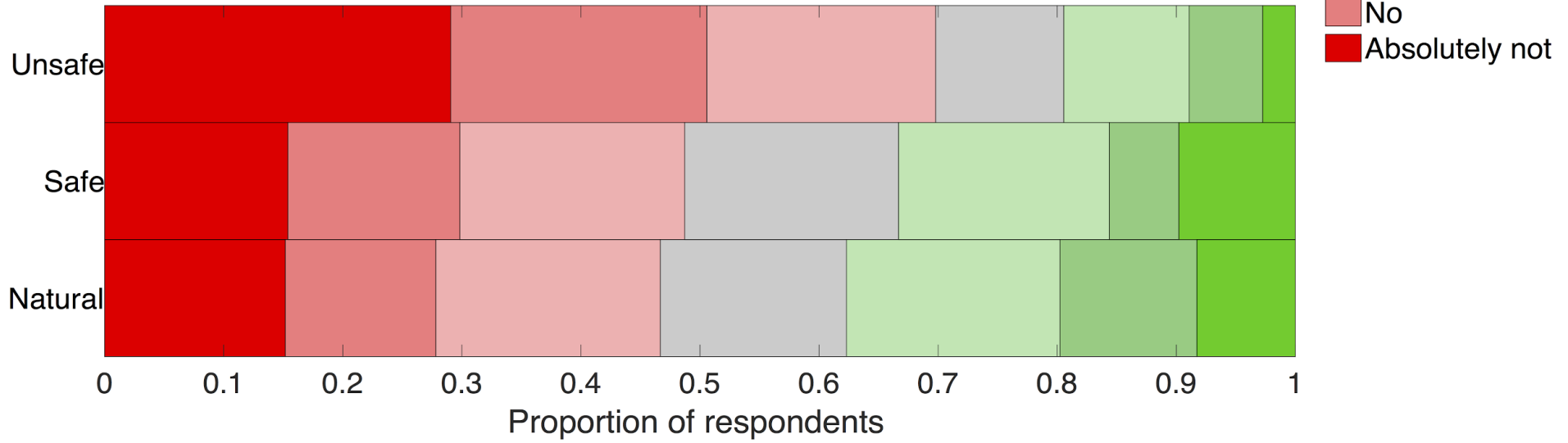
N = 1354 other: employee > student, athlete

**[Cognitive enhancing pills boost the brain, helping us to maximize our fullest potential/Cognitive enhancing pills boost the brain's abilities, helping us to minimize effort needed to perform].** People who take these pills may be able to think more quickly and efficiently. Employees sometimes take these pills at work so that they can conduct their duties more effectively and perform better. *[These pills are natural ingredients from organic sources/These pills are pharmaceuticals that have been shown to be safe in multiple clinical trials/These pills are new pharmaceuticals and their risks and side effects are not well known].*

Response by natural/safe/unsafe: Is it fine for employees to take these pills?



Response by natural/safe/unsafe: Would you take these pills yourself?



N = 1301 other > self, natural/safe pharma > pharma; Max/Min no effect

Cognitive enhancing pills are fuel for the brain. People who take these pills may be able to think more quickly and efficiently. Employees sometimes take these pills at work so that they can learn their duties more effectively and perform better. [*Tom is an employee in a contentious office where he and his co-workers compete for raises and promotions. His success means that he gets ahead/Tom is an employee in a collaborative office where he and his co-workers cooperate toward a common goal. His success means that the company gets ahead*].

N = 1072 replicate other > self, Competition no effect



More permissive with others' than self use  
Metaphoric framing influences attitudes towards  
other use



Employees > Students or Athletes  
Natural, Safe Pharma > Pharma w unknown SE



Demographic: more permissive  
Early tech adopters  
Men  
Younger



**NETFLIX**

**TAKE  
YOUR  
PILLS**

