HEALTHY CHOICES:
WHY PSYCHOLOGY AND THE BRAIN
PLAY A VITAL ROLE

Rachel Evans. MSc. MBPsS.
revans9@sheffield.ac.uk
HEALTHY CHOICES

• Apple vs Cake (dichotomous choice)
• 1 slice of cake vs multiple (portion control)
• ‘80:20 rule’ (frequency)
HEALTHY CHOICES

- Fruit and vegetables
- High nutrient dense
- Low calorie

- Junk food / processed
- Low nutrient dense
- High calorie
HOW MANY FOOD CHOICES DO YOU MAKE PER DAY?

A) 15
B) 226
C) 157
HOW MANY FOOD CHOICES DO YOU MAKE PER DAY?

226
‘Monkey Brain’ (system 1)
- Developed early in evolution; limbic system
- Controls automatic and instinctive responses
- Executes familiar routines / habits
- Acts on emotion
- Seeks immediate pleasure
- Fast and effortless responses

Dual process model - Strack & Deutsch, 2004
‘Monkey Brain’ (system 1)
• Developed early in evolution; limbic system
• Controls automatic and instinctive responses
• Executes familiar routines / habits
• Acts on emotion
• Seeks immediate pleasure
• Fast and effortless responses

‘Rational Brain’ (system 2)
• Functioning of the cerebral cortex
• Controls rational and logical thought
• Capable of abstract thinking
• Sense of choice and control
• Can set intentions and plan for long-term goals
• Slow and effortful responses

Dual process model - Strack & Deutsch, 2004
Goal: To eat healthily
WHY DO WE MAKE UNHEALTHY FOOD CHOICES?

1 - Preference for immediate rewards
2 - Tastiness automatically captures attention
3 - Failure to recognise self-control dilemmas
The ability to delay gratification and a preference for future rewards is related to BMI, intentions, and healthy food choices (Amlung et al., 2016; Barlow et al., 2016; Evans et al., 2017; Mischel, 2015).
Data from mouse tracking and eye-tracking studies suggests that tastiness is processed faster than healthfulness (Motoki et al., in press; Sullivan et al., 2015).
3- FAILURE TO RECOGNISE SELF-CONTROL DILEMMAS

Detecting a conflict between our desires and long term goals is important to trigger self-control efforts (De Ridder et al., 2012; Van der Laan et al., 2014).
IMPLICATIONS

• Implement strategies to avoid temptations when faced with an immediate reward

• Focus on the immediate benefits of healthy choices (e.g. de Bruijn & Budding, 2016)

• Decide to eat unhealthy options *some other time* (Mead & Patrick, 2016)

• Develop If-Then plans (Adriaanse et al., 2011; Vilá et al., 2017)
INTERVENTIONS

• Mindfulness to reduce reactivity to food cues (Keesman et al., 2017; Marchiori & Papies, 2014)

• Cognitive defusion (Moffitt et al., 2012; Jenkins & Tapper, 2014)
MORE BARRIERS TO HEALTHY CHOICES!

- Food history / past experiences
- Education
- Cooking skills + self efficacy
- Availability of healthy options
- Perceived cost, time + effort
- Motivation
- Self-control processes
- Environmental cues
SUMMARY

• System 1 (Monkey brain) + System 2 (Rational brain)

• Why do we make unhealthy choices?
  1 - Preference for immediate rewards
  2 - Tastiness automatically captures attention
  3 - Failure to recognise self-control dilemmas

• Implications; to make healthier choices we need to break the automatic link between unhealthy food and consumption behaviour
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Rachel Evans. MSc. MBPsS. revans9@sheffield.ac.uk twitter: @healthyandpsych
REFERENCES (ARTICLES)


REFERENCES (BOOKS)