# 5 Implementation and dissemination of low intensity interventions: challenges and solutions

Tereza Ruzickova Psychopharmacology and Emotion Research Lab University of Oxford



10th May 2022

## But first, let's catch up...

## Driving forces of behaviour

... according to behaviourists

Reinforcement = ?

Positive reinforcement

behaviour => \_\_\_\_\_?

Negative reinforcement

behaviour => \_\_\_\_\_?

• Punishment = ?

behaviour => \_\_\_\_\_?

## Driving forces of behaviour

... according to behaviourists

Reinforcement = leads to increase in behaviour

Positive reinforcement

behaviour => something good happens





Negative reinforcement

behaviour => something bad doesn't happen





Punishment = leads to decrease in behaviour



behaviour => something bad happens or something good doesn't happen

## Behaviourists & depression

- Depression is characterised by:
  - Decrease in positive reinforcement
  - Increase in negative reinforcement
  - Increase in punishment
  - Examples?



## Behaviourists & depression

- Depression is characterised by:
  - Decrease in positive reinforcement:

Less social connection, less work fulfilment, lower enjoyment from hobbies, exercise, lower income...

• Increase in negative reinforcement:

Avoidant behaviour - increase in watching TV, sleeping, substance use, social media scrolling, ignoring contact from friends...

Increase in punishment? Feeling like effort was wasted?

Loss of a job, loss of a relationship, social rejection...

# The mechanism of depression onset & maintenance

#### Something difficult happens

(that reduces positive reinforcement / increases negative reinforcement / increases punishment)



Sadness, lack of energy Interrupted routine

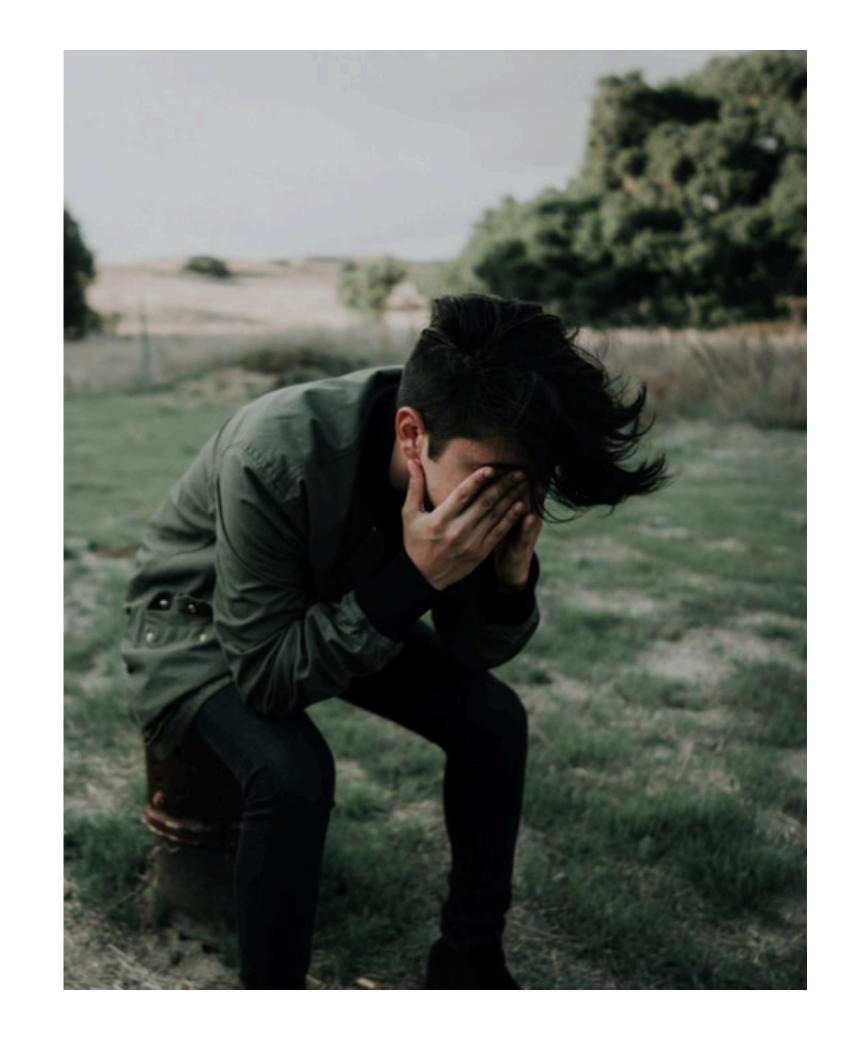


Lower activity



Anhedonia

Lack of motivation



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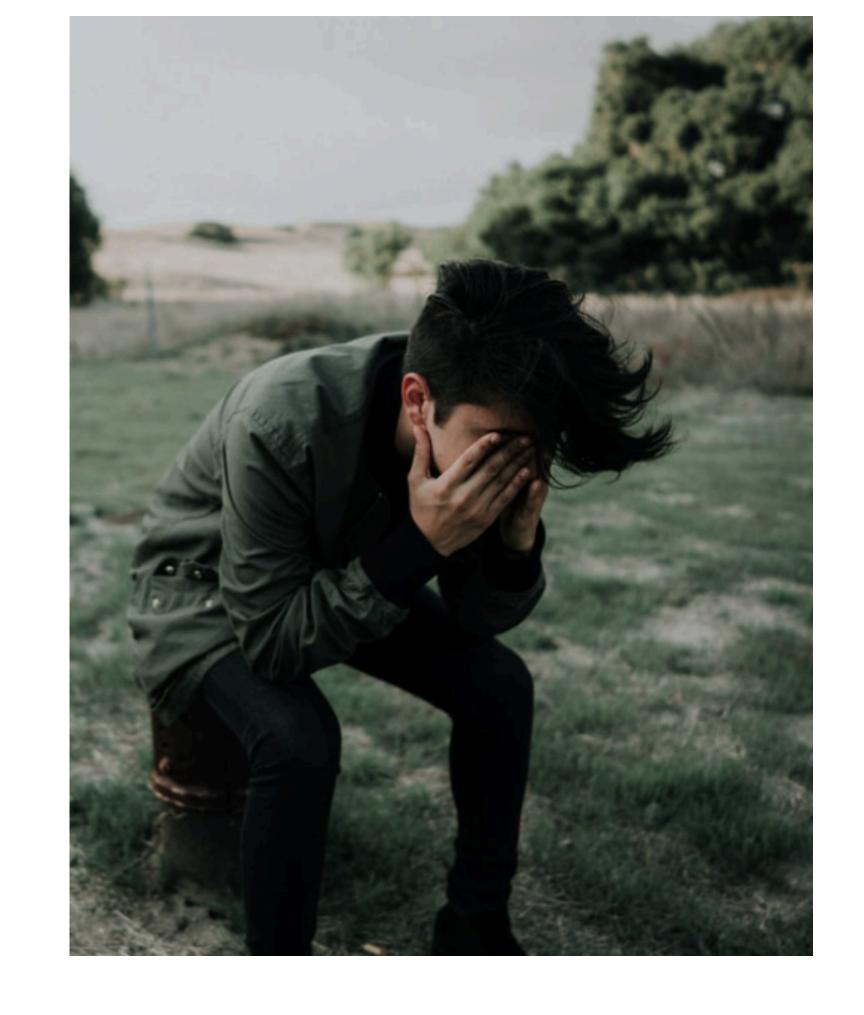


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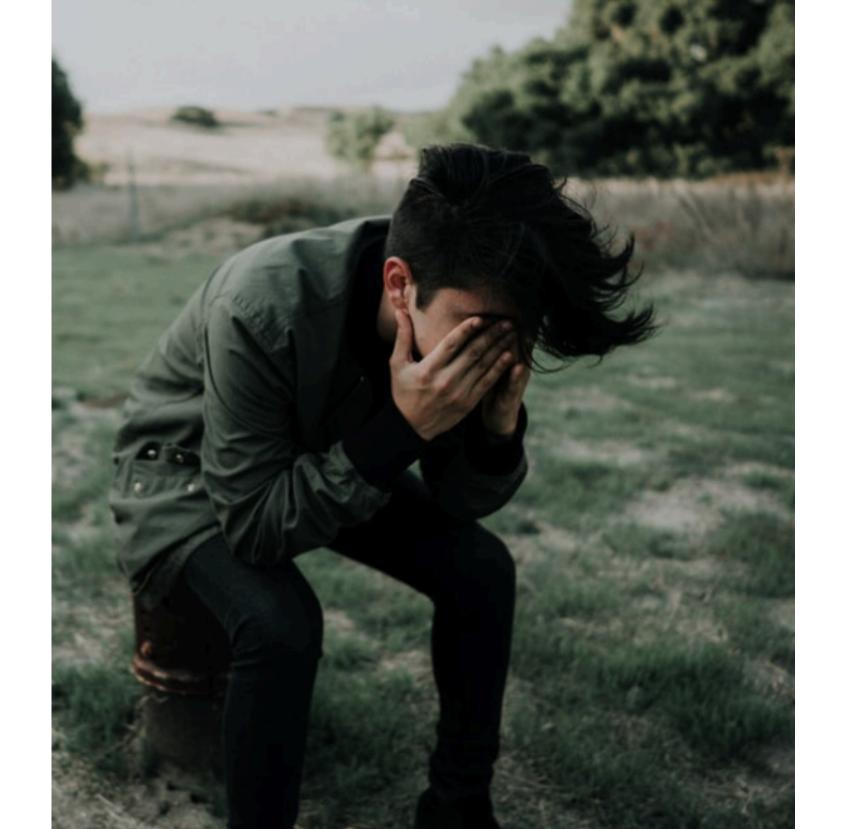


Anhedonia

Lack of motivation



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## The mechanism of depression onset & maintenance

#### Something difficult happens Primary cause

(that reduces positive reinforcement / increases negative reinforcement / increases punishment)



Sadness, lack of energy Interrupted routine

## Secondary

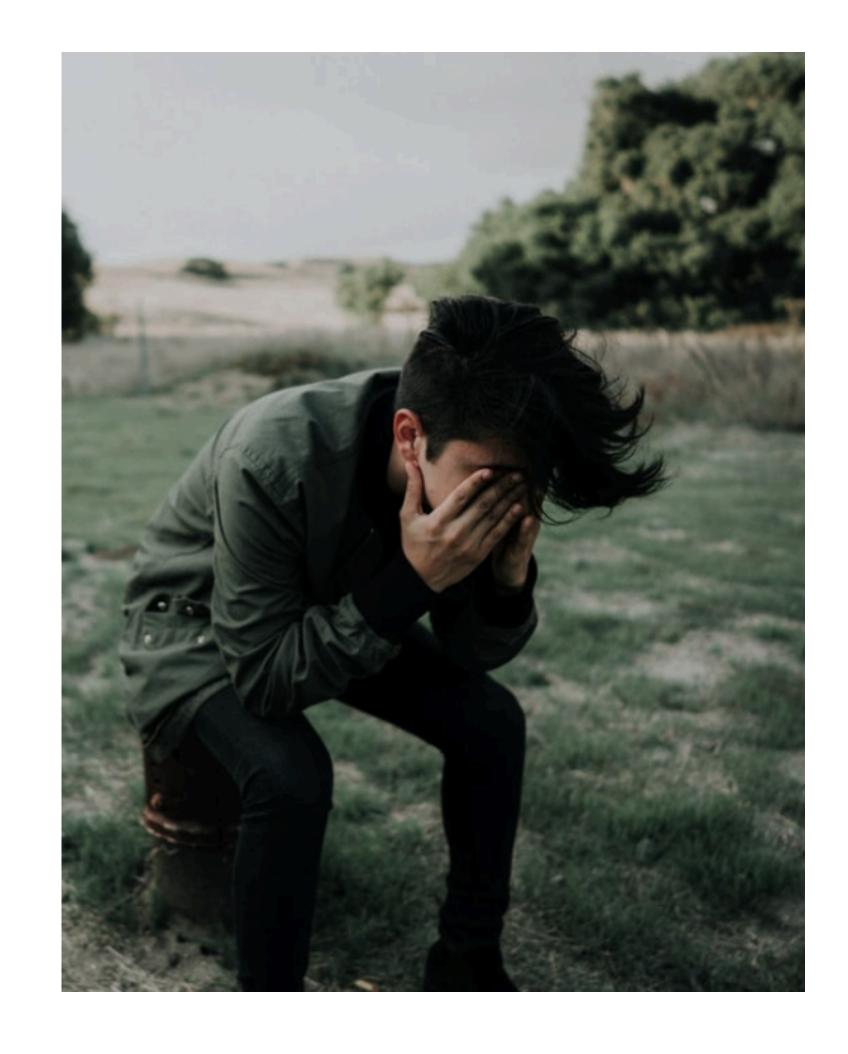
**cause** Lower activity



(also reduces positive reinforcement / increases negative reinforcement / increases punishment)

Anhedonia

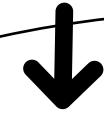
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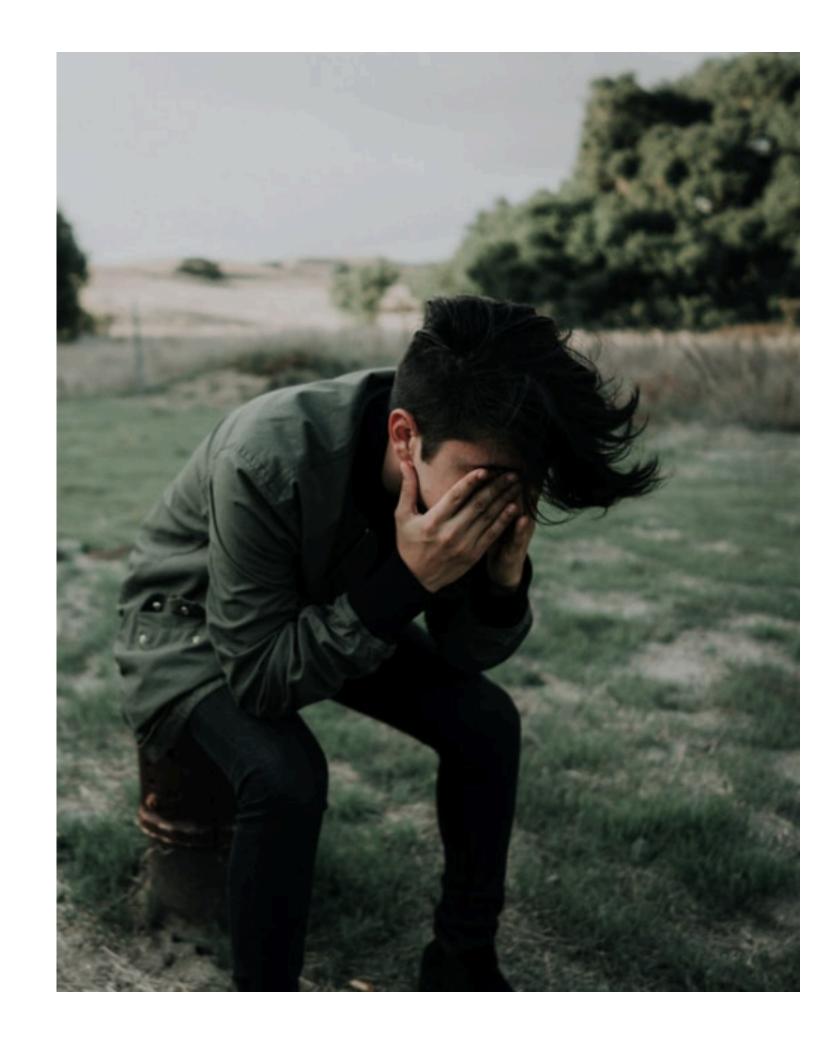




Anhedonia

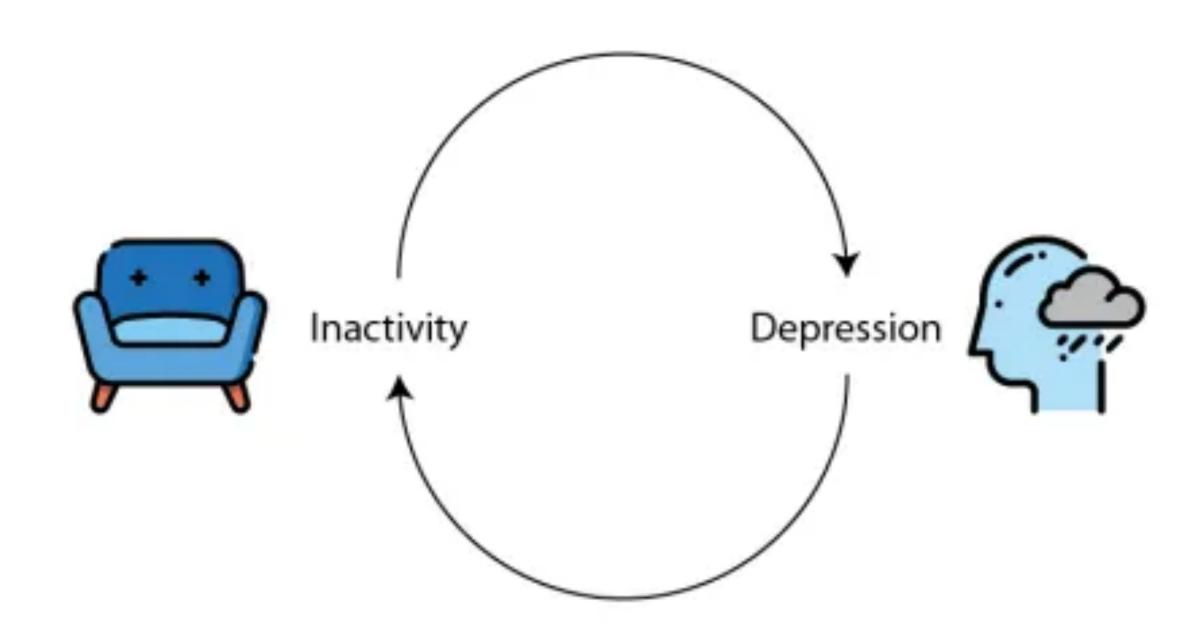
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#### John has recently gone through a breakup.

#### **Primary cause**

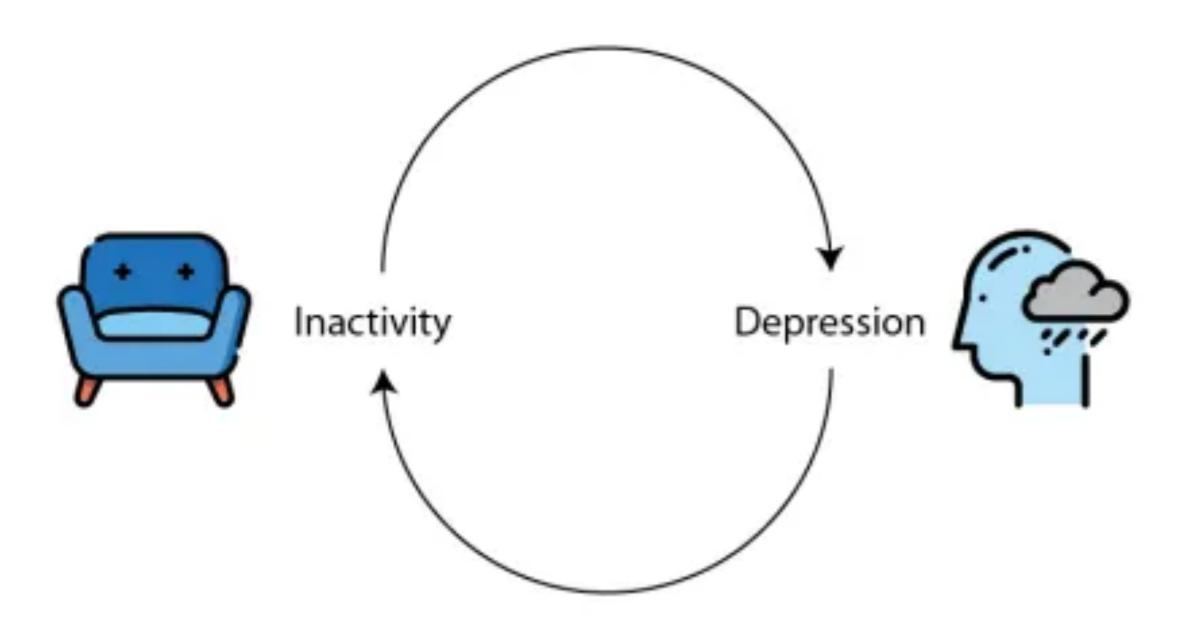


**Secondary cause** 

John has become a lot more inactive.

#### **Primary cause**

John has recently gone through a breakup. He misses all the pleasant activities he used to do with his girlfriend, like going to the park or dancing together. He started avoiding places that remind him of her as well as mutual friends to avoid the pain. The grief he's experiencing makes him feel like his investment in the relationship has been wasted.

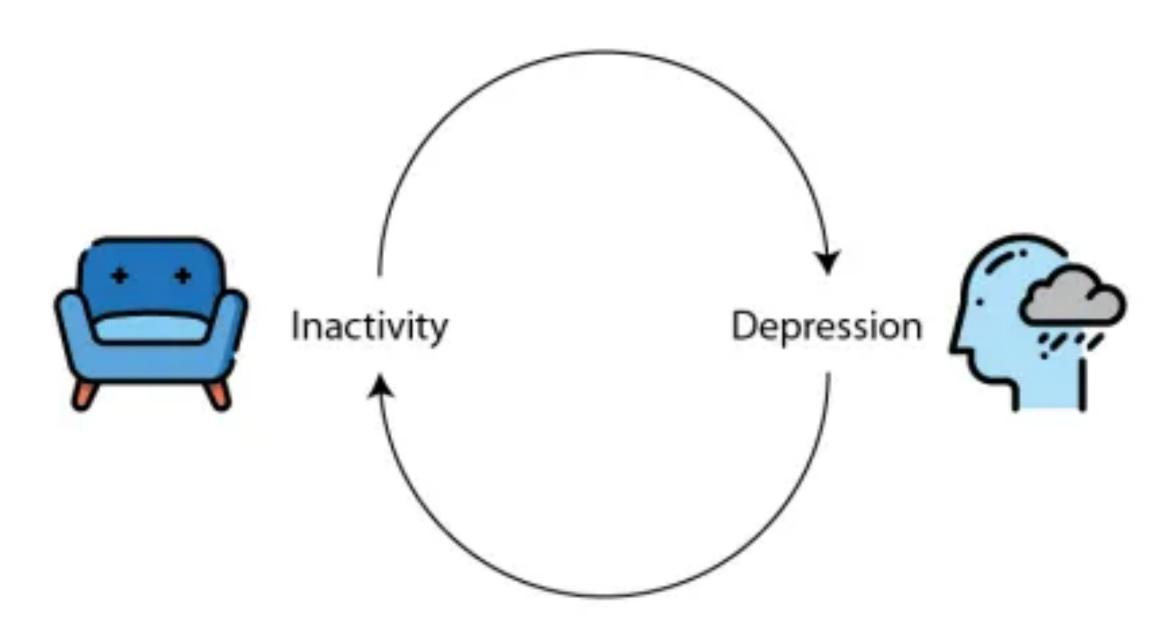


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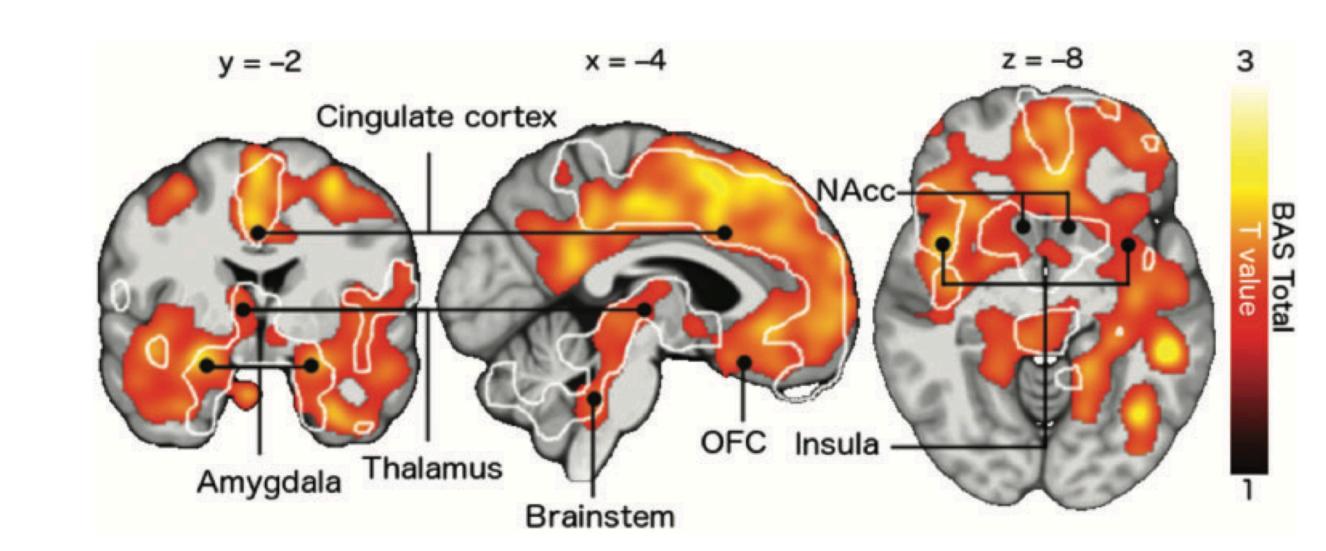
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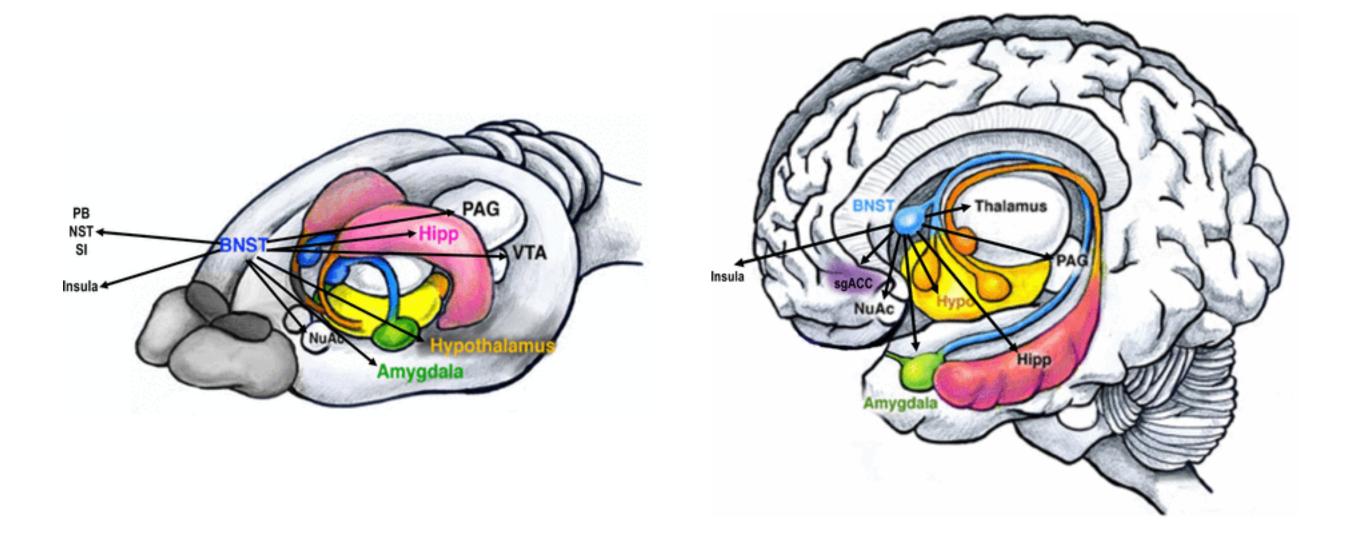
John has become a lot more inactive. He stopped going to the gym and doesn't put as much effort into his work, because he doesn't feel motivated. He started playing computer games and sleeping more to escape negative feelings. His boss is starting to get upset with him for making mistakes.

### Neuroscience of BA?

#### BIS & BAS

- Behavioural inhibition and activation (approach) systems
- •Gray (1987) two major neurobiological systems responding to reward and punishment
- Carver and White (1994) BIS/BAS scale development
- Relate to personality factors like neuroticism and extraversion





### BIS & BAS

Gray (1987) two major neurobehavioural systems responding to reward and punishment

Carver and White (1994) BIS/BAS scale development

#### 1. BIS

If I think something unpleasant is going to happen I usually get pretty "worked up."

I worry about making mistakes.

Criticism or scolding hurts me quite a bit.

I feel pretty worried or upset when I think or know somebody is angry at me.

Even if something bad is about to happen to me, I rarely experience fear or nervousness.

I feel worried when I think I have done poorly at something.

·I have very few fears compared to my friends.

#### 2. BAS Reward Responsiveness

When I get something I want, I feel excited and energized.

When I'm doing well at something, I love to keep at it.

When good things happen to me, it affects me strongly.

It would excite me to win a contest.

When I see an opportunity for something I like, I get excited right away.

#### 3. BAS Drive

When I want something, I usually go all-out to get it.

I go out of my way to get things I want.

If I see a chance to get something I want, I move on it right away. When I go after something I use a "no holds barred" approach.

#### 4. BAS Fun Seeking

I will often do things for no other reason than that they might be fun. I crave excitement and new sensations.

I'm always willing to try something new if I think it will be fun.

I often act on the spur of the moment.

## Behavioural activation (approach) system

reward

absence of punishment (= relief)

 hypoactive in depression - decreased approach towards rewarding behaviour



Sensitivity to reward scale

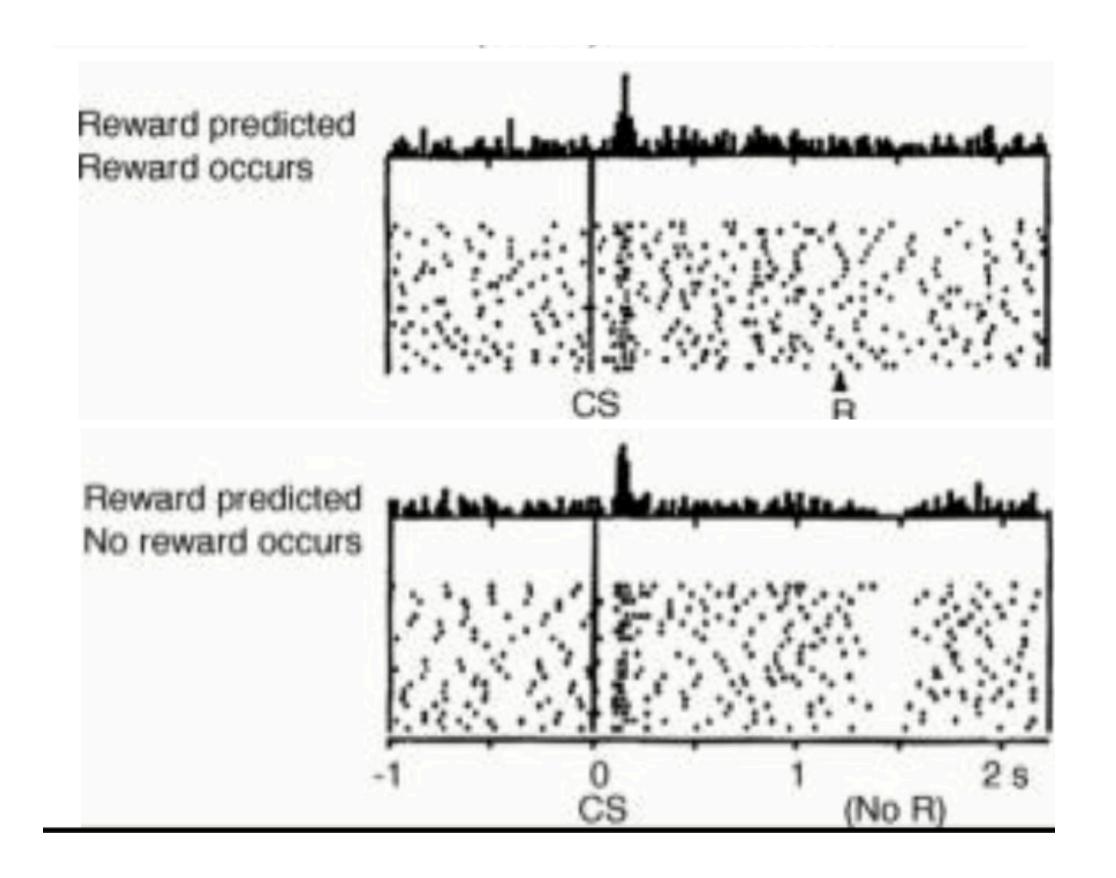
## Behavioural inhibition system

punishment (innate & learnt)



- absence of expected reward (= disappointment, frustration)
- can be triggered by novelty (hyponeophagia in rodents)
- inhibits behaviour that may lead to negative outcomes
- hyperactive in depression

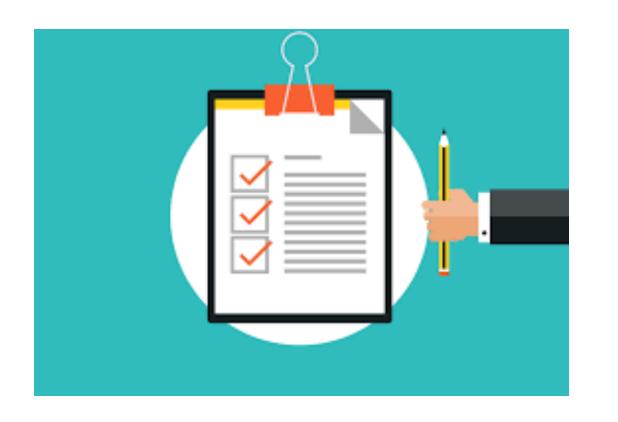
#### Sensitivity to punishment scale



Schultz, Dayan, Montague Science, 1997



## Pinto-Meza et al. (2006)



- Participants with current MD, participants recovered from MD and healthy controls
- Current and recovered MD showed hyperactive BIS and hypoactive BAS
- Possible personality / physiological vulnerability marker that can be objectively measured
- May explain the mechanism of BA treatment

# Back to the topic of implementation & dissemination...





• B-G: younger and older age groups



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- H-J: non-western cultures, cultural, religious and sexual minority groups



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- L-M: groups with low socioeconomic status and low income countries



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- N-S: patients with physical illness or addiction comorbidity



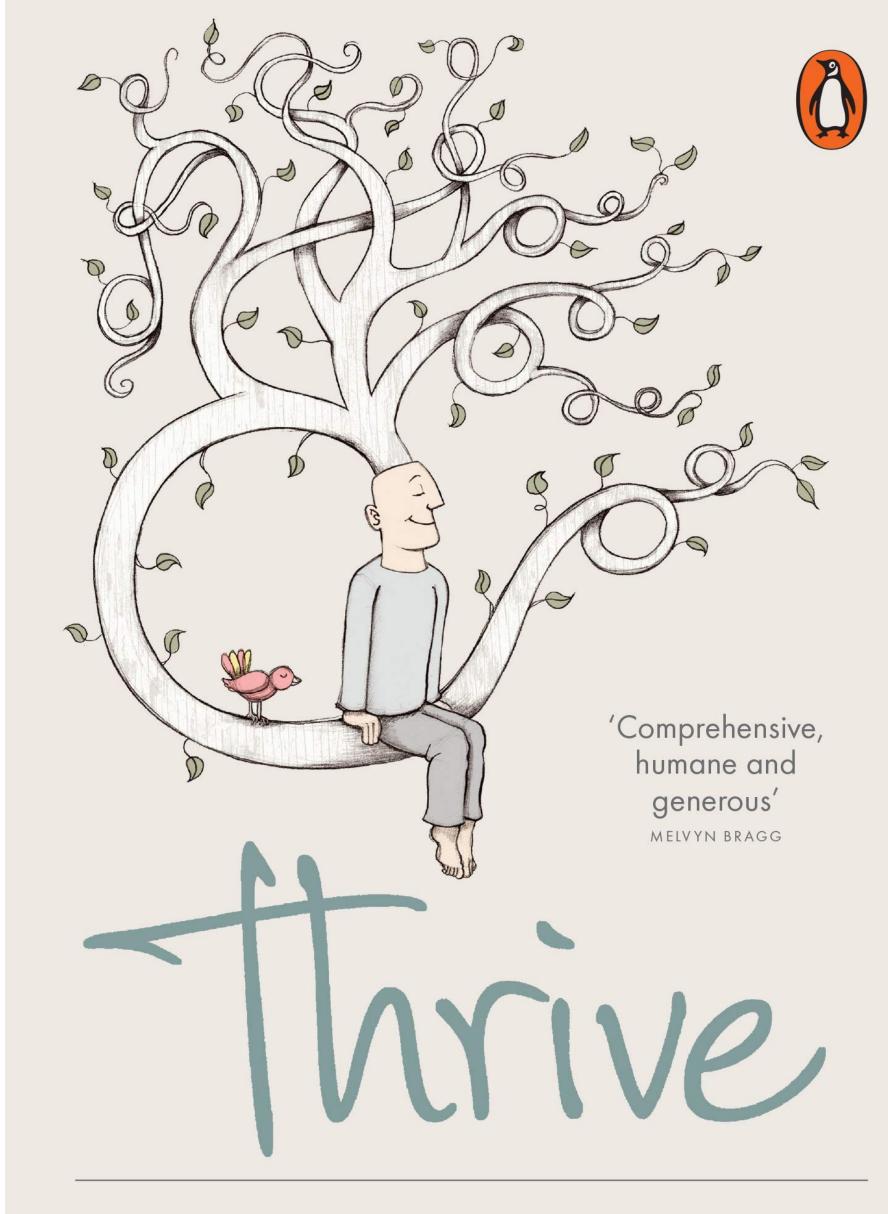
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- N-S: patients with physical illness or addiction comorbidity
- Š-V: current Czech mental healthcare system

# Implementation and dissemination - important factors



## Political influence

- Robust clinical & economic evidence
- Lobbying Lord Layard writing and speaking to ministers for years + coalition of mental health charities "We Need To Talk"
- Strategic political timing & consistency with broader government policy around social care and evidence-based treatment provision



THE POWER OF PSYCHOLOGICAL THERAPY

RICHARD LAYARD · DAVID M. CLARK

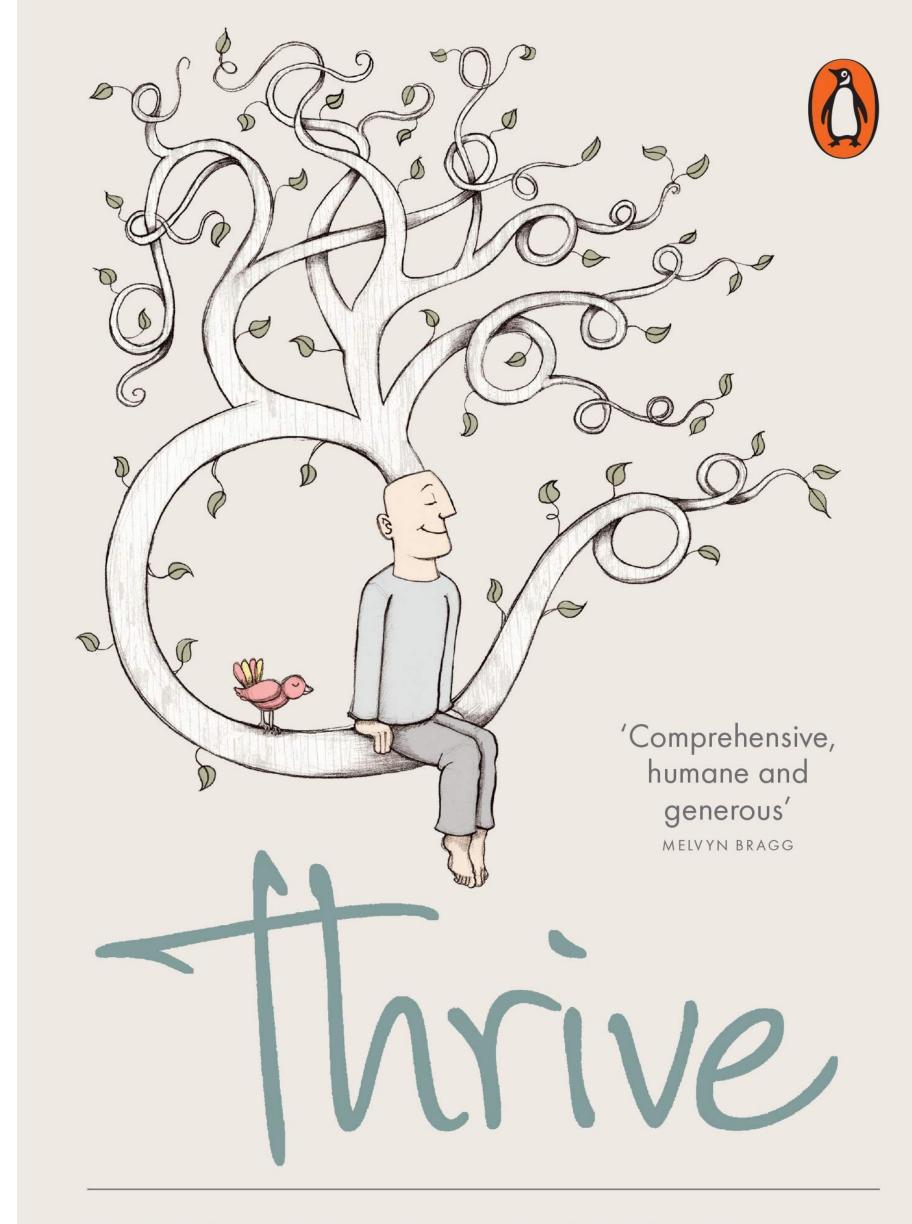
**Department of Health.** (2008). *Improving Access to Psychological Therapies implementation plan: national guidelines for regional delivery*. London: Department of Health. Available at:

http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH\_083150 (accessed 5 August 2009).

Improving Access to Psychological Therapies (IAPT). (2008). Commissioning IAPT for the whole community. London: IAPT. Available at: http://www.iapt.nhs.uk/2009/02/commissioning-for-whole-community/ (accessed 5 August 2009).

**Layard R.**, et al. (2006). The Depression Report: A New Deal for Depression and Anxiety Disorders. London: London School of Economics. Available at: http://cep.lse.ac.uk/textonly/research/mentalhealth/DEPRESSION\_REPORT\_LAYARD.pdf (accessed 5 August 2009).

Sainsbury Centre for Mental Health. (2007). *Mental Health at Work: Developing the Business Case*, Policy Paper 8. London: Sainsbury Centre for Mental Health Available at: <a href="http://www.scmh.org.uk/publications/MH\_at\_work.aspx?ID=575">http://www.scmh.org.uk/publications/MH\_at\_work.aspx?ID=575</a> (accessed 5 August 2009).



THE POWER OF PSYCHOLOGICAL THERAPY

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## Change management

- Involving service users and carers in key decision making
- Creating a legislative framework
- Creating a management framework
- Effective leadership & its consensus (politics, healthcare, professional bodies)
- Measuring change to supply evidence of efficacy
- Long-term technical and financial sustainability



A transformation in mental health care since 1948



For the past seven decades, the NHS has transformed mental health services to ensure that more people are receiving the right care in the community and to minimise the amount of time people need to spend in hospital.

## Change management

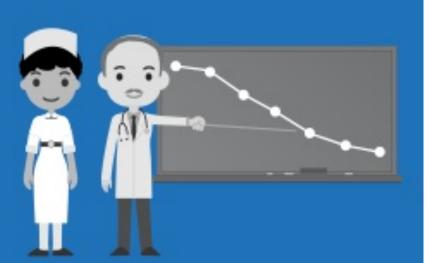
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Take the long term view!



A transformation in mental health care since 1948



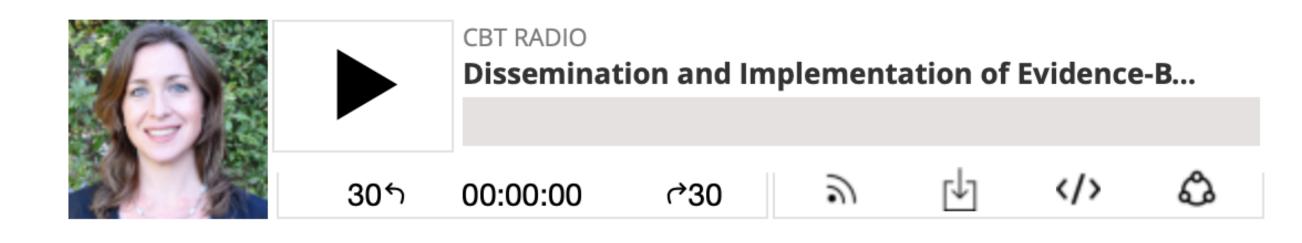
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## Change management

- Crucial to understand individual situation and needs of each target group
- Developing new systems collaboratively to make a change rather than just telling people what to do
- Inner context: leadership, organisational culture, individual attitudes
- Outer context: policy, insurance, public attitudes
- Ongoing support rather than one-time training is ideal



#### Dissemination and Implementation of Evidence-Based Practices



## **CBT Radio**

# Developing new types of education





#### PWP career development

**Psychological Wellbeing Practitioners** (PWPs) play a crucial role in Improving Access to Psychological Therapies (IAPT) services and providing evidence based psychological interventions to patients with depression and anxiety. PWP trainees start at Band 4 and progress to Band 5 once qualified. PWPs have a range of clinical, organisational and leadership skills which can be developed in specialist roles up to Band 8a:



#### **Long Term Conditions**

Working with patients who have long term conditions



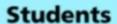
#### Supervision Providing case man

Providing case management and clinical skills supervision to other PWPs



Management and leadership

Various responsibilities including line management, performance management, strategy & recruitment



Perinatal

Setting up pathways and delivering interventions in colleges and universities

Partnership working with midwives





#### Clinical advisor

To regional and national clinical networks and PWP Specialist Interest Groups



Providing PWP treatment interventions in prisons



#### Research

In service or academic institutions

**Teaching** 



Being a Trainee
Psychological
Wellbeing
Practitioner

@mypsychcareercoach



### Apply your mind to mental health

The Think Ahead programme is a new route into social work, for graduates and career-changers remarkable enough to make a real difference to people with mental health problems.

Find out more about the programme

www.england.nhs.uk







- Client and healthcare workers awareness & preference
- Not viewing LI interventions as "second choice"
- Media outreach
- Strong partnership with charities & community groups
- Creating a new language?



# Prince William visits men's mental health charities in London





7

Onto the all important nappy change. "It's never straightforward," says The Duke of Cambridge.

@WorkingWithMen1 new dads are given practical session to help get them ready for fatherhood.





### GP awareness

I work as a GP and feel powerless to treat patients with mental illness Anonymous

73% of those seeking psychological help turn to their GPs (OECD, 2011)

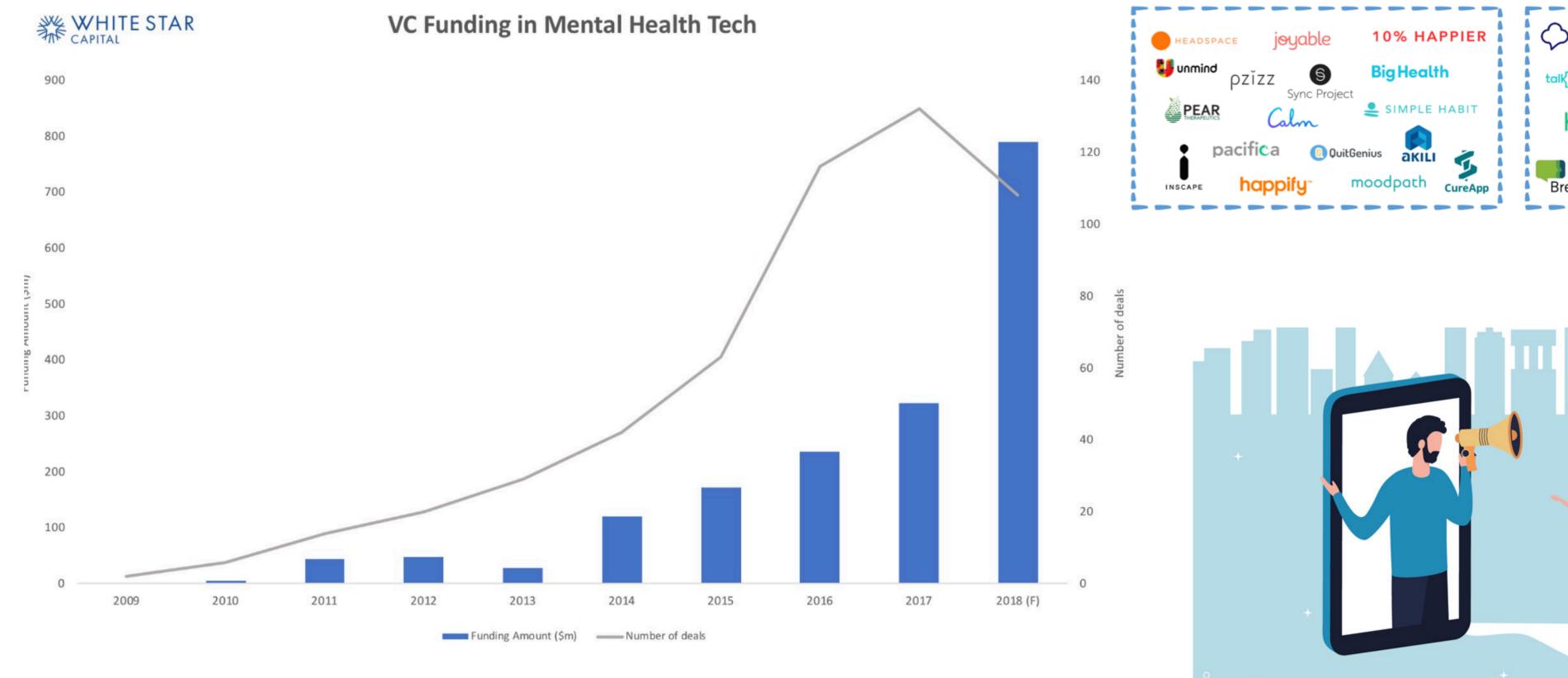
Wulsin et al. (2002)

- Many panic disorder patients get misdiagnosed with a physical health condition at emergency services
- A screening measure and 5min structured interview increased panic disorder diagnosis and relevant referral



# Private investment







### Continuation of care

#### Ali et al. (2017)

- Longitudinal cohort of over 400 patients
- 50% participants found to relapse within 1 year, particularly if they had residual symptoms at the end of treatment
- Recommend that patients are treated until residual symptoms are gone and follow-up care is provided

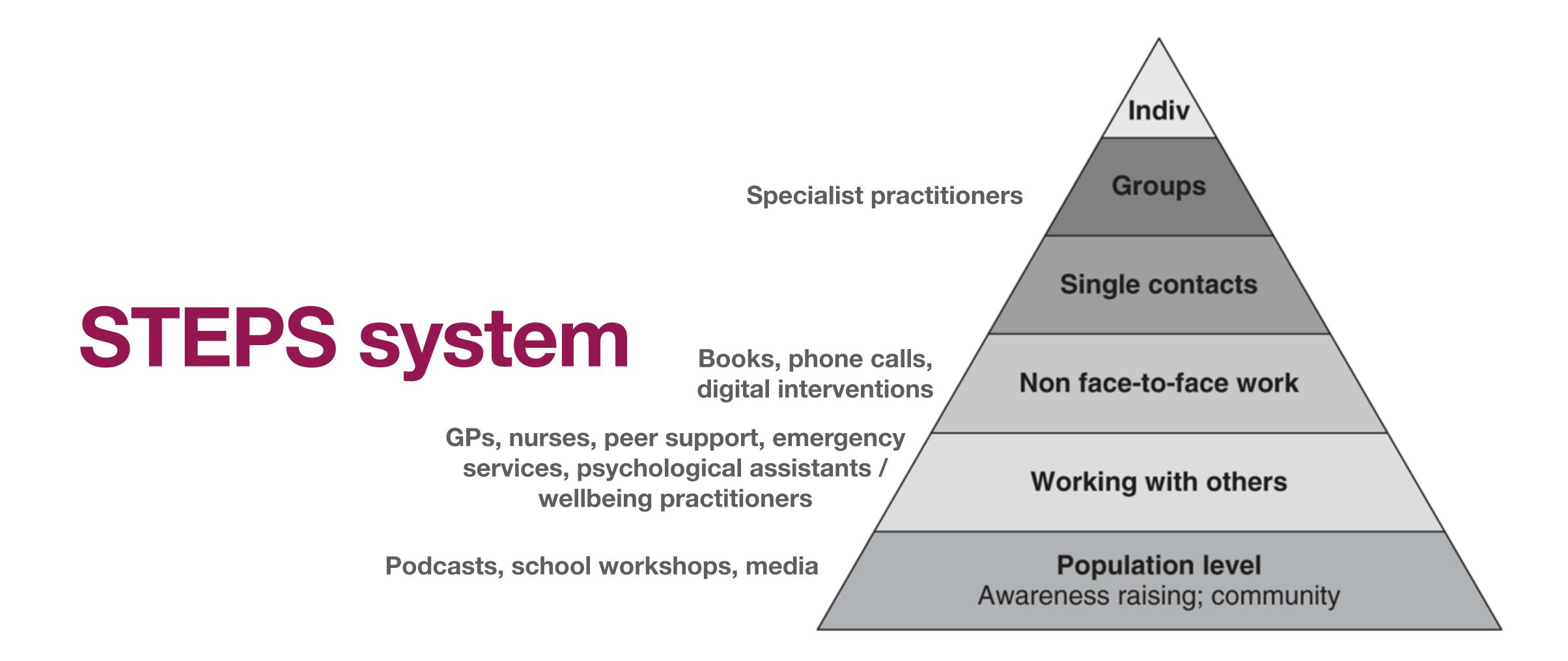


Behaviour Research and Therapy Volume 94, July 2017, Pages 1-8



How durable is the effect of low intensity CBT for depression and anxiety? Remission and relapse in a longitudinal cohort study

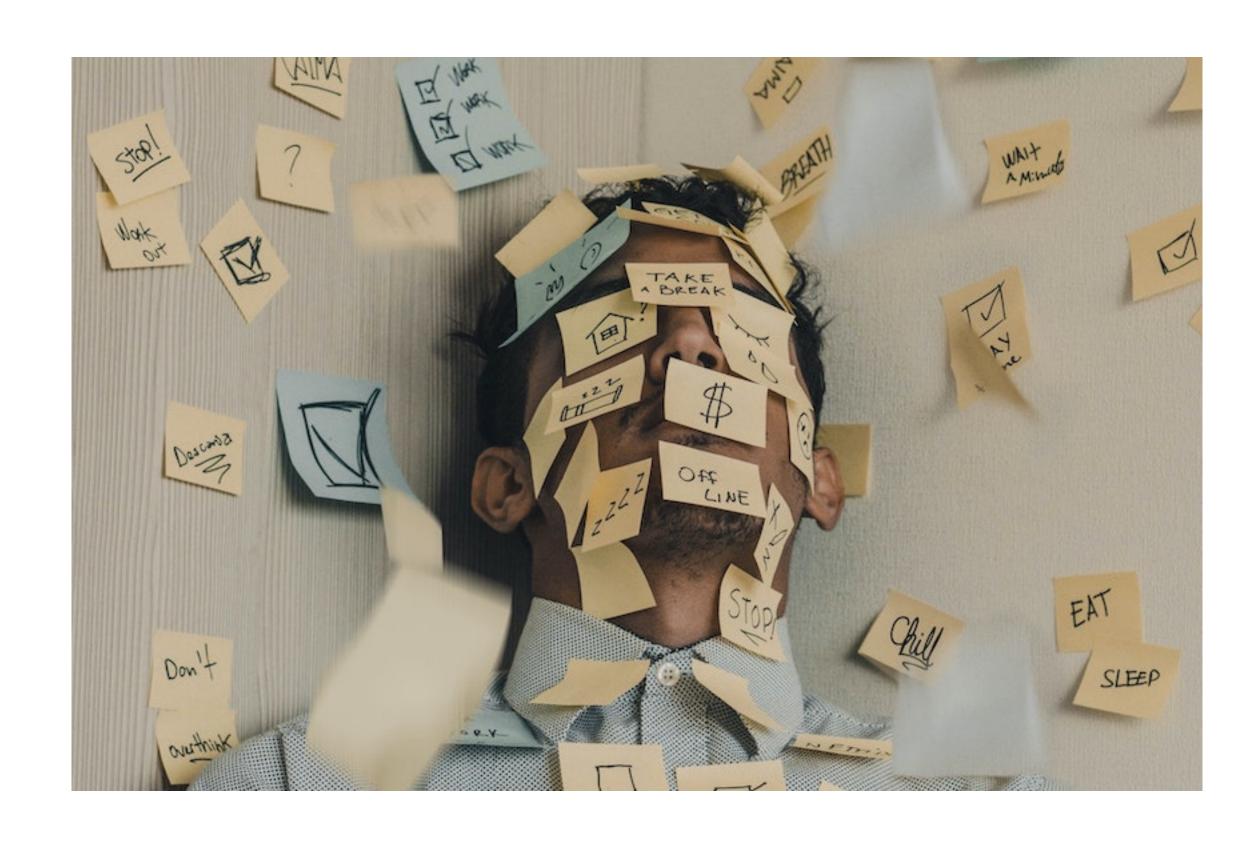
"We suggest taking the long view, recognising that problems like depression often have to be managed as recurrent long-term conditions."

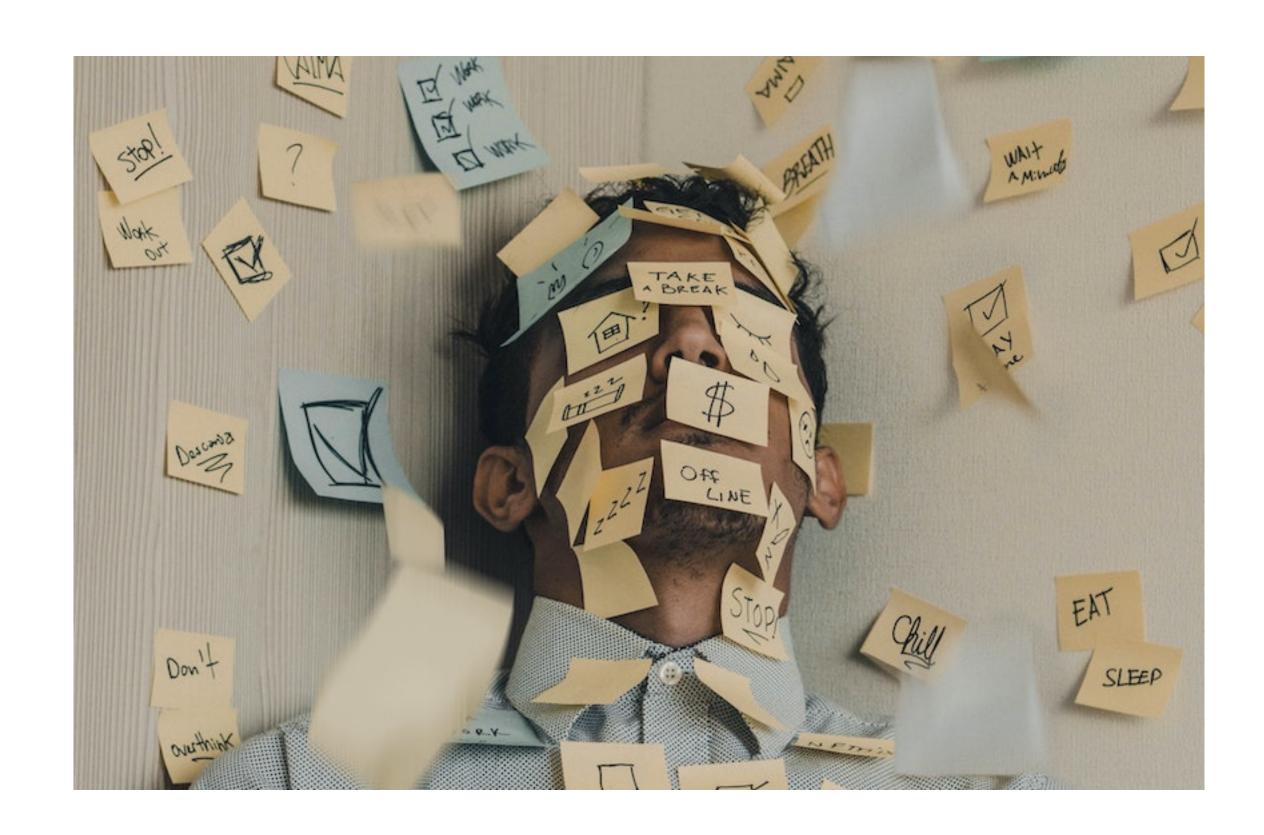


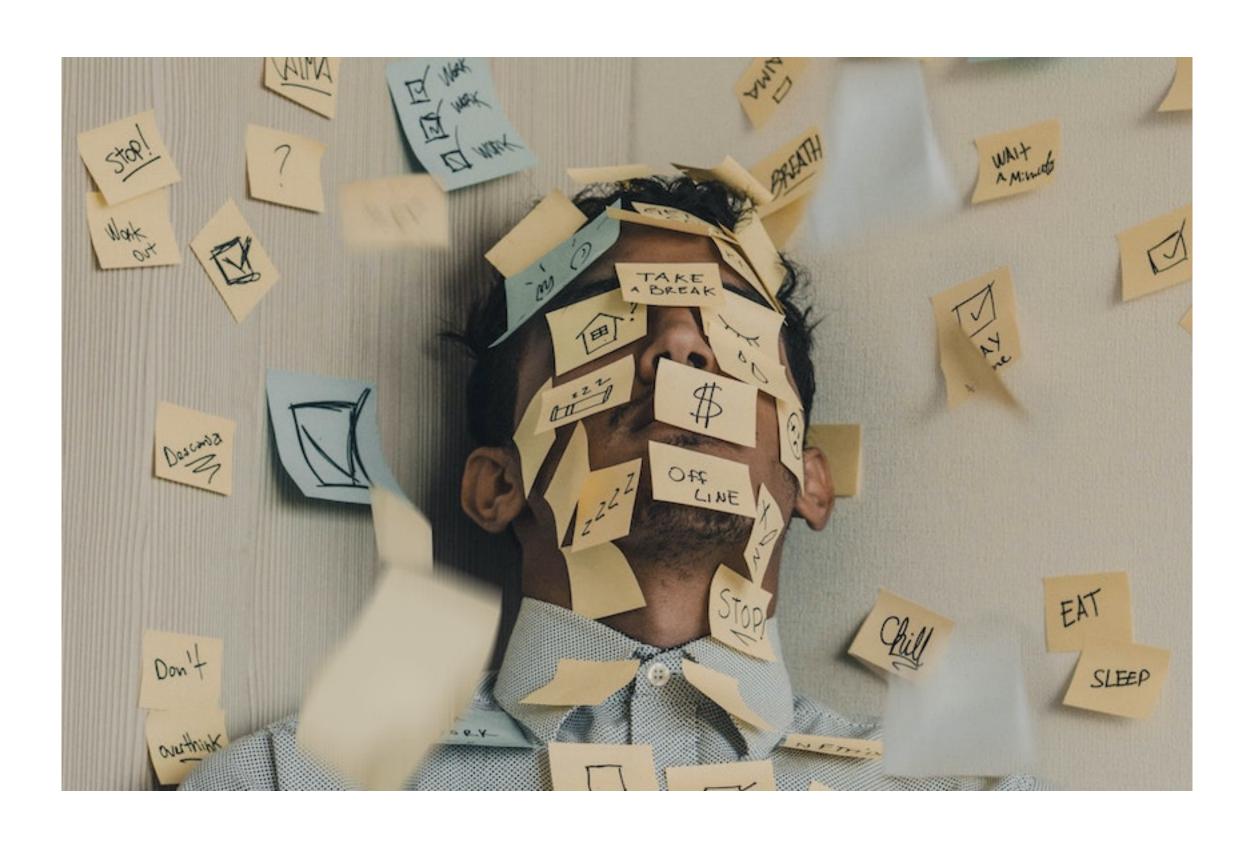
### Network



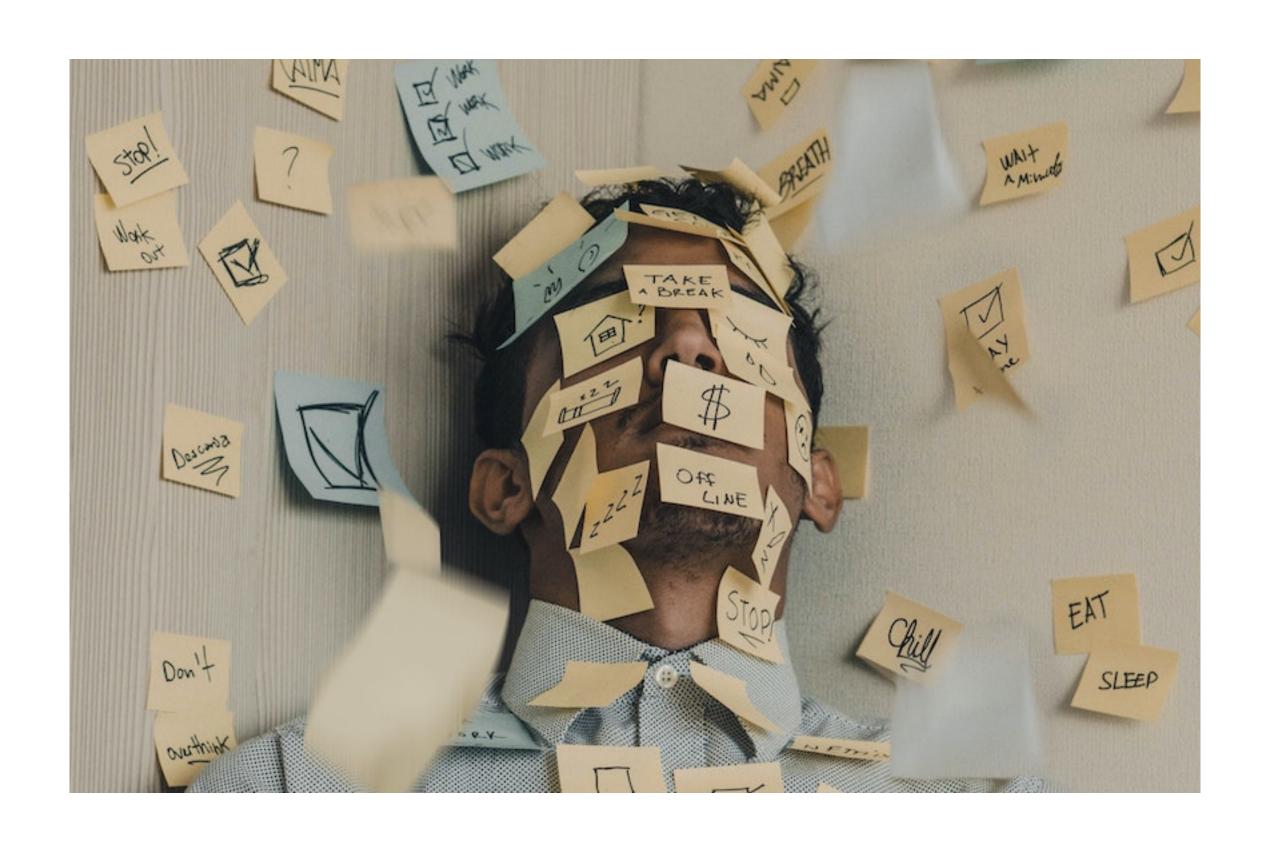
## Overwhelmed?





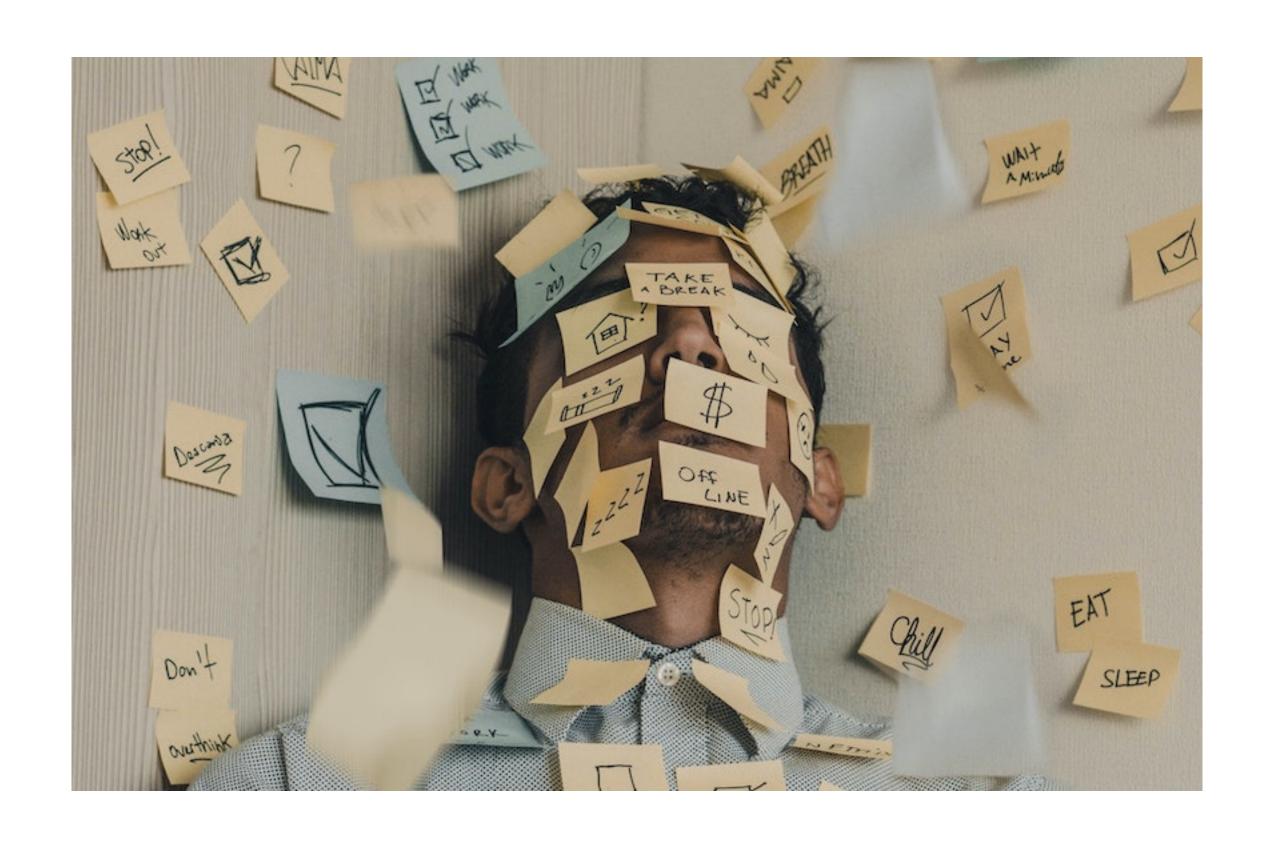


Economic measurements?



Economic measurements?

Media campaigns?

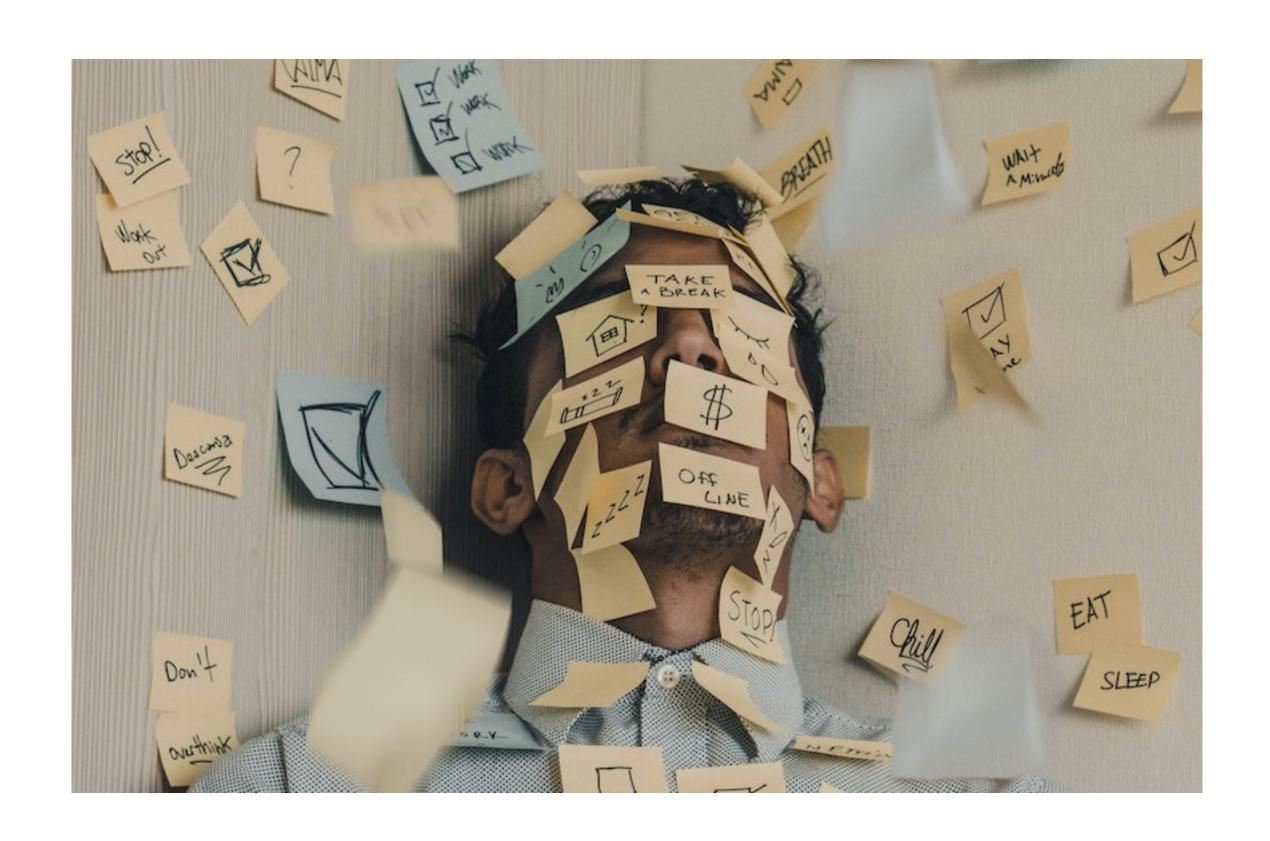


Economic measurements?

Media campaigns?

Public awareness campaigns?

# Lobby politicians?



Economic measurements?

Media campaigns?

Public awareness campaigns?

Lobby politicians?

Train teachers in BA?

Ott Don't SLEEP

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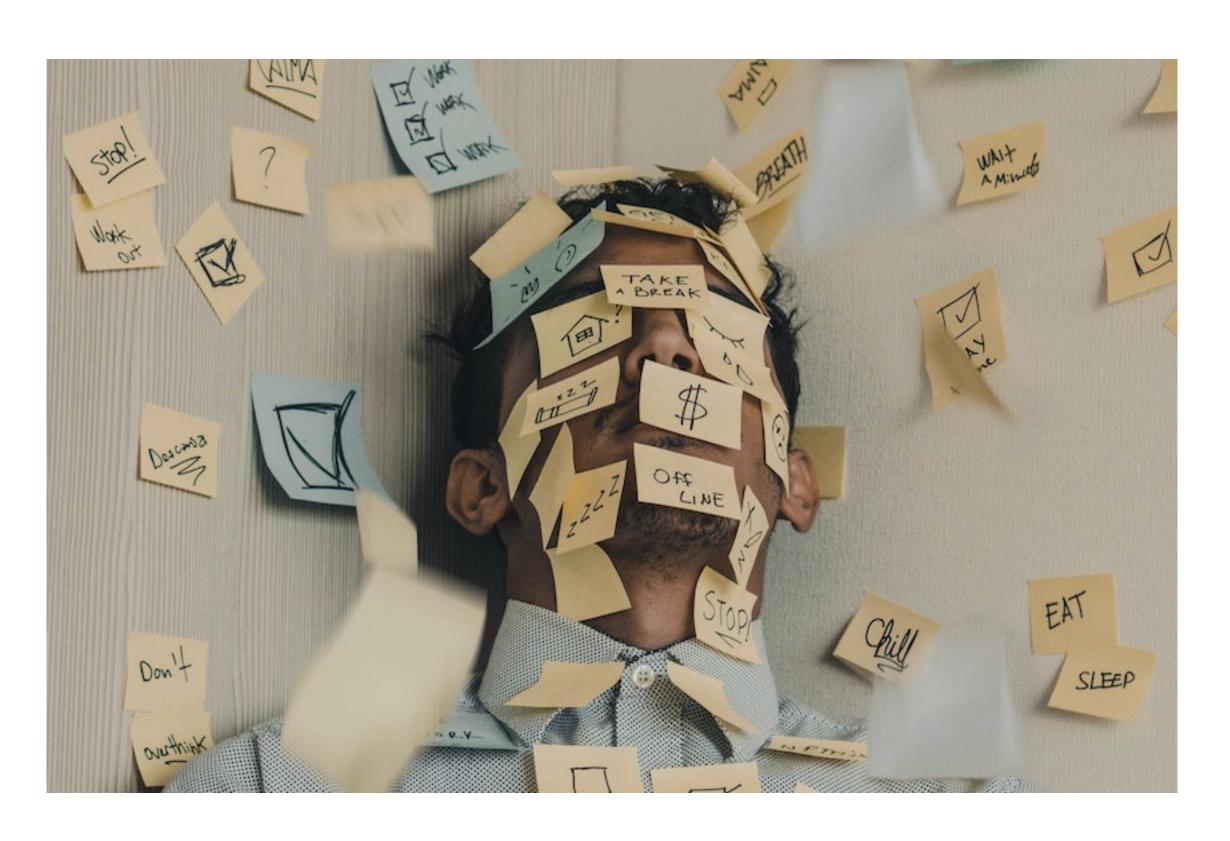
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Public awareness campaigns?

Create a BA center in Afganistan?

Economic measurements?

Lobby politicians?

Train teachers in BA?

WAIT Ott Don't SLEEP

Media campaigns?

Build software for easier continuation of care?

Public awareness campaigns?

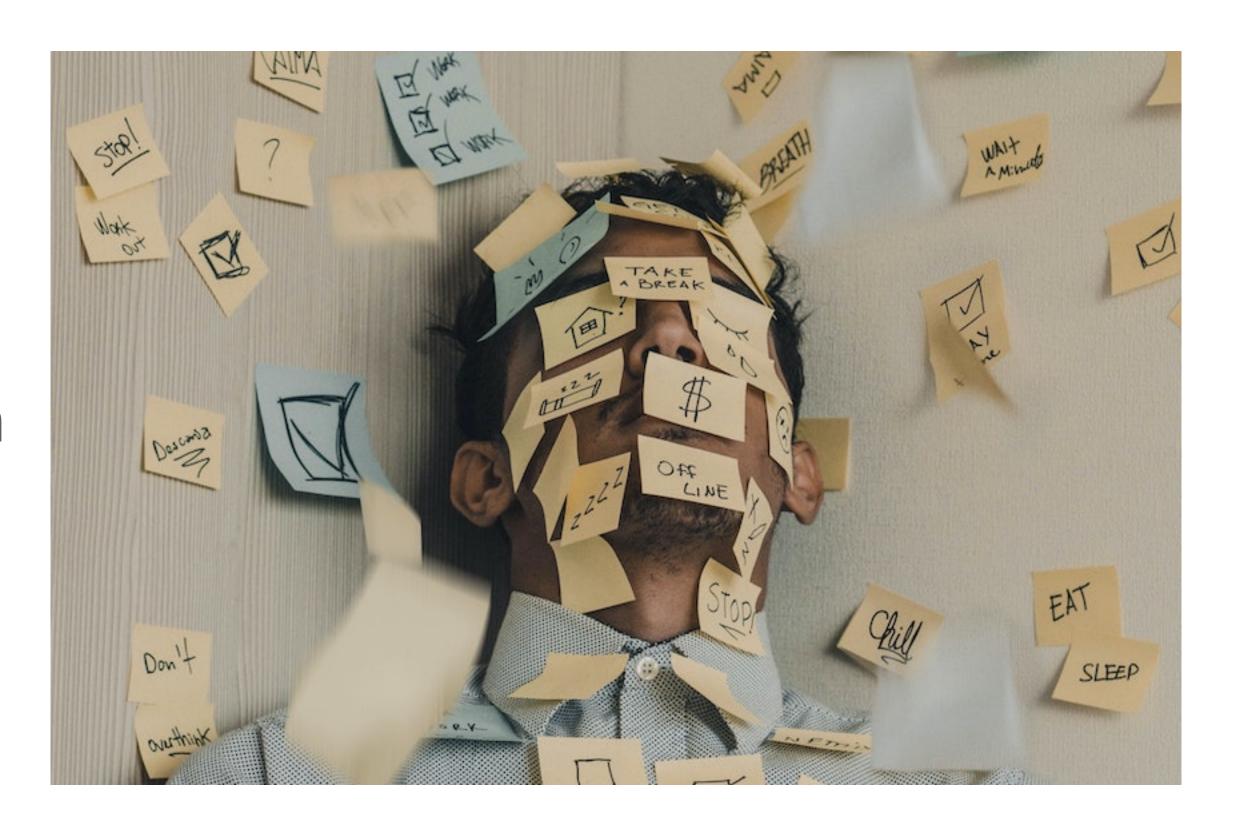
Create a BA center in Afganistan?

Economic measurements?

Establish a new masters course?

**Train GPs?** 

Train teachers in BA?



Media campaigns?

Build software for easier continuation of care?

Public awareness campaigns?

Create a BA center in Afganistan?

Economic measurements?

#### THE WHITE HOUSE

#### **National Cancer Act (1971)**

WASHINGTON

January 11, 1972

WINNER OF THE PULITZER PRIZE

THE

EMPEROR

OF ALL

MALADIES



A BIOGRAPHY OF CANCER

SIDDHARTHA MUKHERJEE

'A tale of hopes, dreams and pincer-sharp disappointment.

Cancer has a master storyteller' Independent

Dear Mrs. Lasker:

Your presence on December 23, 1971, was particularly meaningful to all of us gathered for the signing into law of S. 1828, the National Cancer Act of 1971. As you well know, the enactment of this legislation culminated a year-long effort to





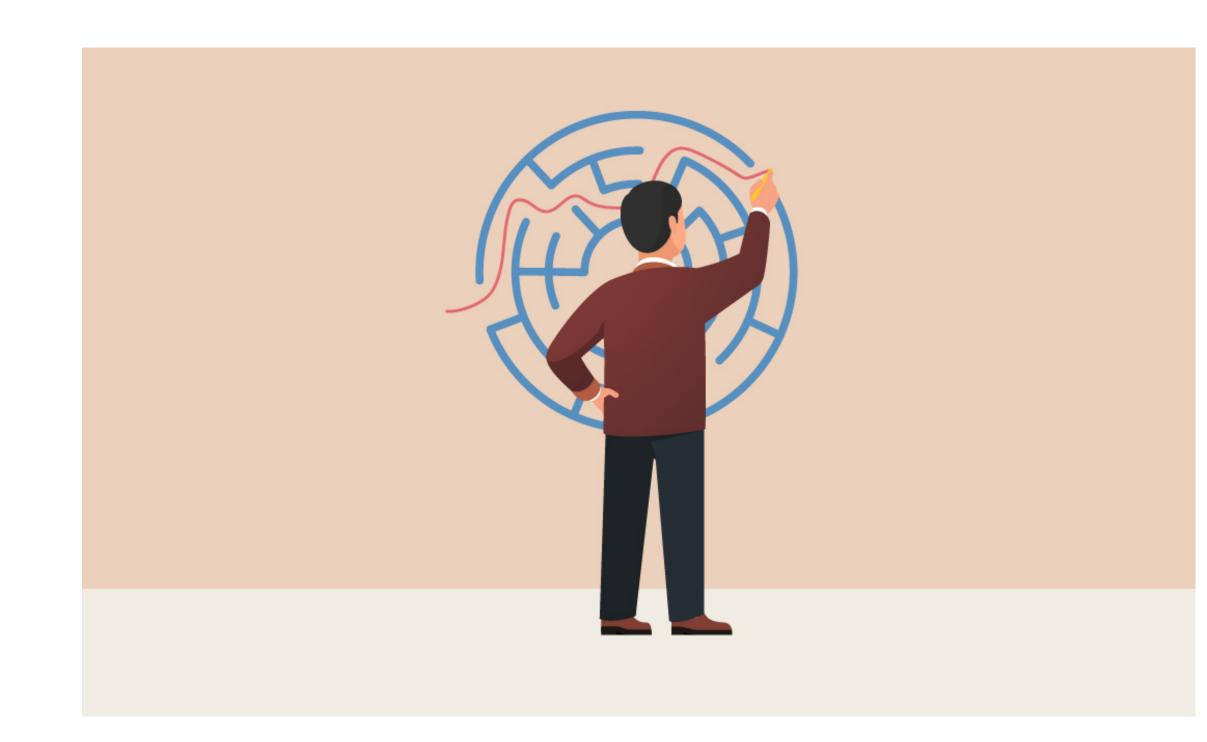
The Jimmy Fund





### Problem solving

- 1. Explain problem solving
- 2. Identify main problems
- 3. Generate potential solutions
- 4. Evaluate pros and cons
- 5. Select the solution that seems best
- 6. Make a specific plan: what, where, when, with whom
- 7. Attempt the solution
- 8. Review & problem solve

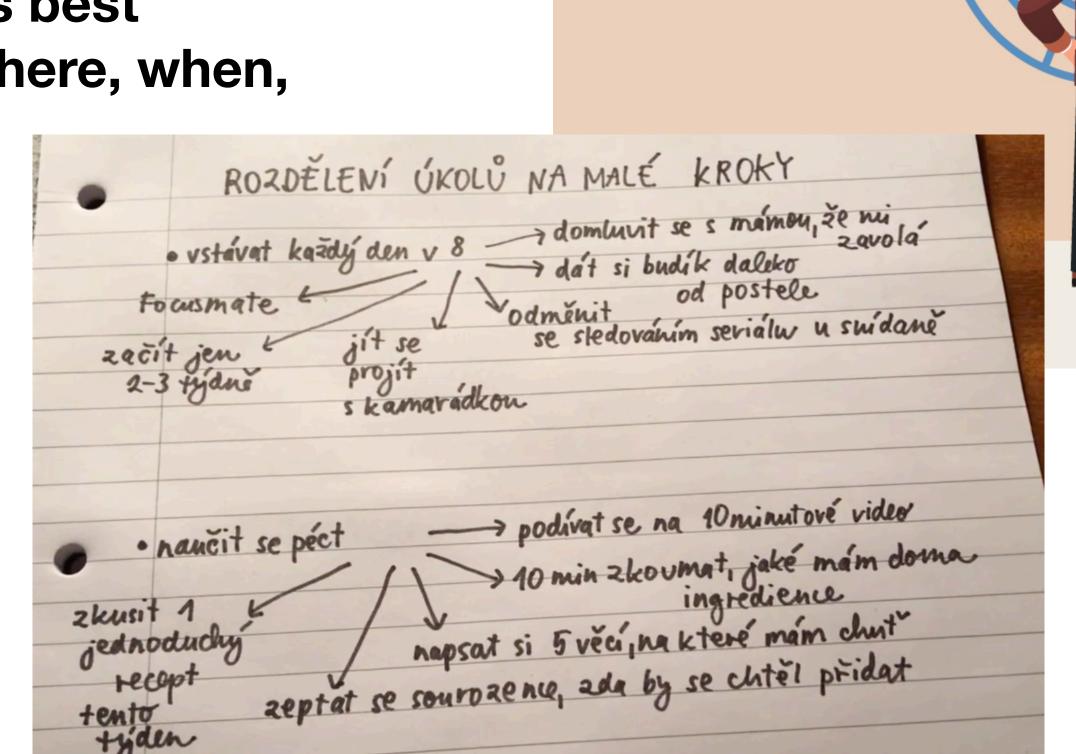


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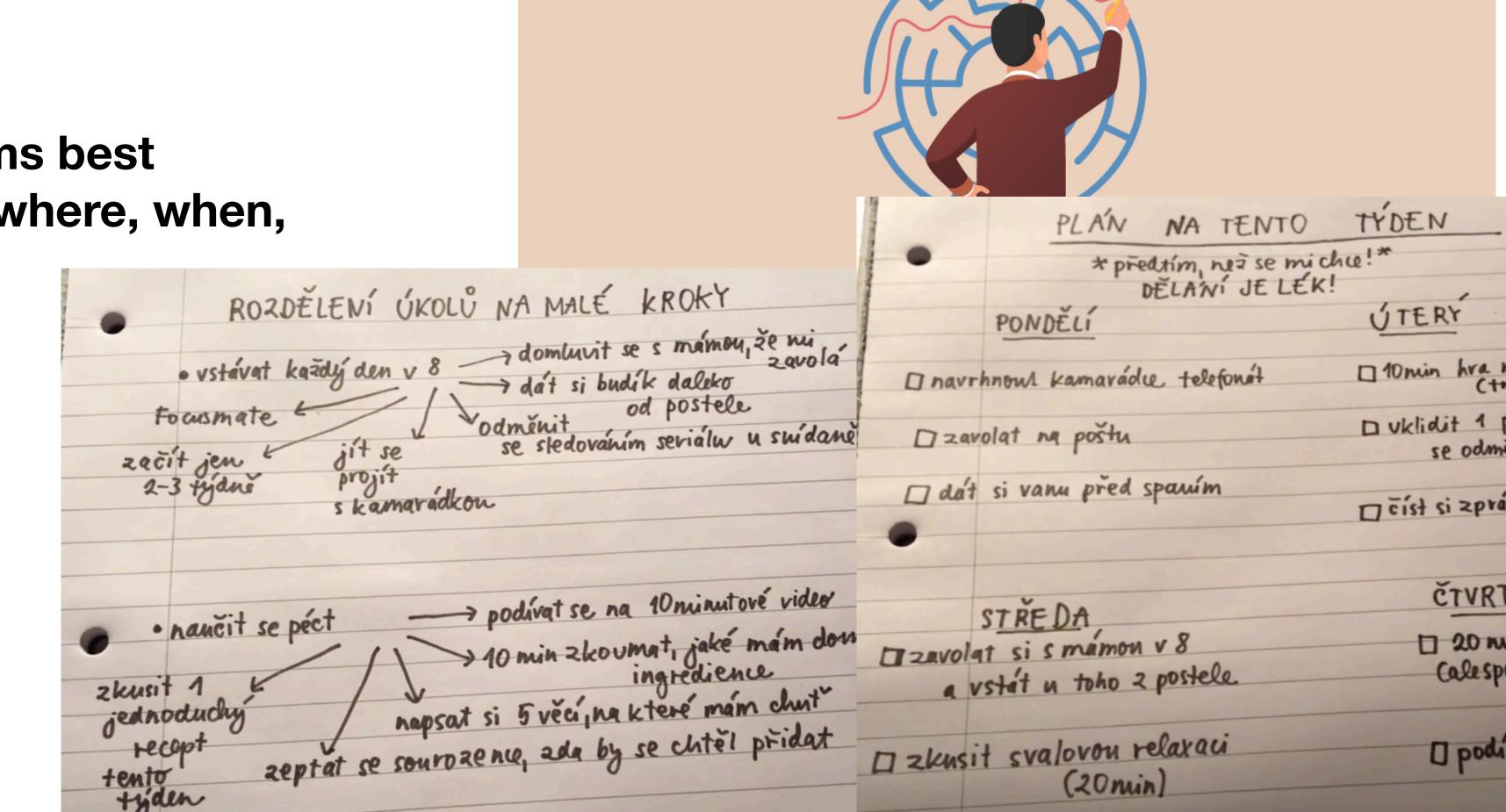


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# Thank you for your attention!

Don't forget filling in your anonymous feedback:

https://forms.gle/xDaPaTfGyHb4FDre7

