BrainPark: Creating Healthy Habits, Brains and Lifestyles

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Addictions & obsessive compulsive disorder
80% of people don’t receive help
The current model
Neuroscience offers an opportunity
BrainPark
Using neuroscience to create healthy habits, brains, and lifestyles
Transdiagnostic neurocognitive assessment

Addictions & OCD

Motivations

Individuals with similar motivations

Fear

Reward

Control

Innovative digital assessment tools
A transdiagnostic dimensional approach towards a neuropsychological assessment for addiction: an international Delphi consensus study

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BrainPAC

1) BART
Are you a risk taker?

3) SST
How strong is your impulse control?

2) DDT
How well can you delay gratification?

4) VMAC
How sensitive are you to rewards?
Lifestyle & technology interventions - physical

Physical exercise

VO2 max assessment

Personalised intensity prescription
Lifestyle & technology interventions – mental

Meditation

Cognitive training

Therapeutic virtual reality
BEAT: Brain Exercise Addiction Trial

120 adults aged 18 – 55 years
Chronic heavy cannabis consumers

Randomised into two exercise groups

12-weeks, 3 x per week personalised high intensity exercise
60 people
Measure brain and mental health + cannabis use after 12-wk program

12-weeks, 3 x per week personalised low intensity exercise
60 people
Measure brain and mental health + cannabis use 6-months later

Measure brain and mental health + cannabis use after 12-wk program
Virtual Reality Exposure and Response Prevention for OCD
Implementing therapeutic VR into clinical practice

**Aims**

i) investigate the knowledge, attitudes and perspectives of clinical and non-clinical staff in private psychiatry around therapeutic virtual reality

ii) map these to TDF > COM-B > BCT’s to create implementation action plan

**Setting**

Healthscope Australian private psychiatry hospitals

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Online survey ($N = 81$)

- **Age**: $42 \pm 11.9$ years
- **Female**: (72%)
- **Clinical**: (66%)

Qualitative interviews ($N = 19$)

- **Clinical** ($n = 14$)
- **Management** ($n = 5$)
Partnering to make change

Community

YMCA

The Melbourne Clinic

OCD

Addictions

Turning Point

Tools