



RecoveryVR

VR REHAB FOR STROKE PATIENTS

with application for all Neurological Injury



9 mins

someone has a stroke



47%

regional access to a
stroke unit



INSTANT, ENGAGING AND UNSUPERVISED

- **Portable VR headset and controllers**
- **Professional therapy available anytime, anywhere**
- **Programs for all movement and cognitive abilities**



MULTIPLE APPLICATIONS

COMPLEX
REGIONAL PAIN

MULTIPLE
SCLEROSIS

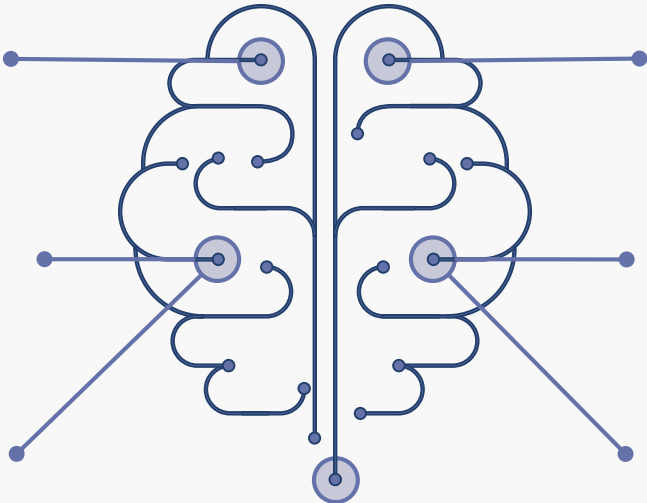
SPINAL CORD
INJURY

PARKINSONS

PHANTOM LIMB

CEREBRAL
PALSY

FALL
PREVENTION





What is it?

Quote

**'I WAS SO IMMERSSED
I FORGOT ABOUT MY DISABILITY'**

BRIAN, Stroke Patient of 8 years

PILOT TRIAL

Patient Engagement

VR Rehabilitation

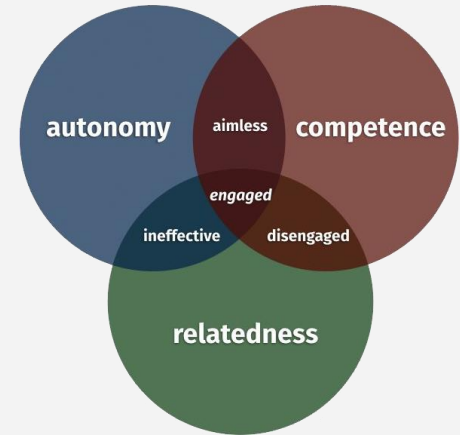
- Korea University, Seoul
- Universiti Kebangsaan, Malaysia
- Stroke Outcome Research Canada (SORCan*) Working Group
- University of Southern California
- Istituto Auxologico Italiano
- Offenburg University, Germany
- University of Waterloo, Canada
- Center for Neurological Sciences, Philippines
- University of Illinois, USA



**UNIVERSITY OF
CANBERRA**

Identifying Factors that Enhance
Therapeutic Power in Virtual
Reality-Based Upper Limb
Occupational Therapy
Interventions for People
Recovering from Stroke

Self-Determination Theory





RecoveryVR

How does it work?

A REHABILITATION SYSTEM

- Best-practice Therapy
- Survivor Stories
- Motivational Speaking
- Clinical Education



EDUCATION

- Motor Imagery
- Outdoor Exercise
- Goal-oriented Games
- Speech & Brain Training



TRAINING

- Movement Tests
- Patient Metrics
- Live Monitoring
- Data Collection



FEEDBACK

COACHED IMAGERY



ACTIVITIES OF DAILY LIFE



MOTOR IMAGERY

Motor imagery is a mental process by which an individual rehearses or simulates a given action in his/her mind without actually performing the movement.

(Dickstein and Deutsch, 2007; Ge et al., 2014; Sharma et al., 2006)

UPPER BODY

Select Examples

BALANCE

Balance Board



Fruit Catch



OUTDOOR EXERCISE

Cycling



Rowing



GOAL-ORIENTED GAMES

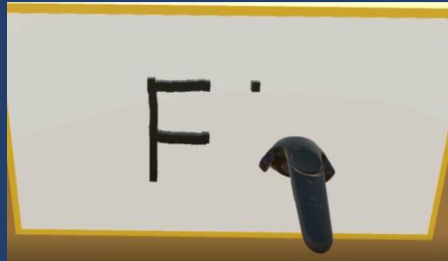
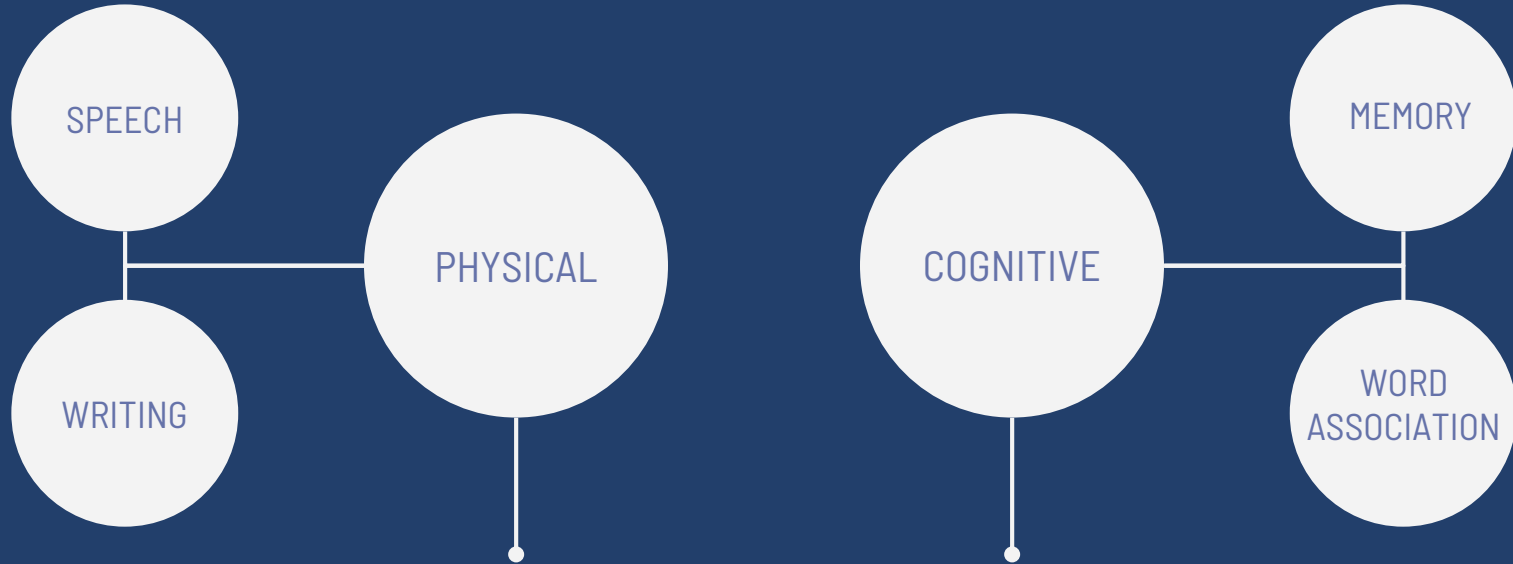
Apple Barrel



World Builder



SPEECH AND COMPREHENSION



IMMERSIVE VIDEOS

EDUCATION

GENERAL INFO

**PROFESSIONAL
THERAPY**

ONE-ON-ONE PHYSICAL
TRAINING

MOTIVATION

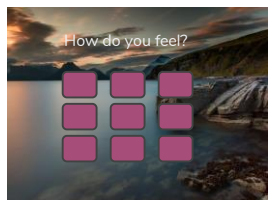
SURVIVOR STORIES

MINDFULNESS

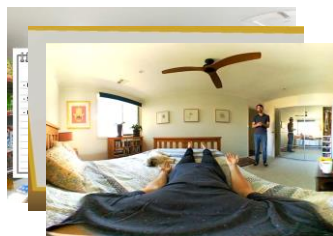
BEAUTIFUL LOCATIONS,
GUIDED MEDITATION



FEEDBACK LOOP



VR UI Input



VR Session



Web/Mobile Monitoring
and Doctor Feedback



Adapted VR Session





How to get involved?

Become an INNOVATION PARTNER

- Headsets at cost price in exchange for feedback
- Only 5 slots available
- Find me after the presentation
- Contact me at christian@recoveryvr.com.au





RecoveryVR

THANK YOU

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