

**NHS**

Greater Manchester  
Mental Health  
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# Developing and Implementing a Virtual Reality Protocol for Offender Personality Disorder Clients

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# Evolve Intensive Intervention and Risk Management Service (IIRMS)

## Who are we?

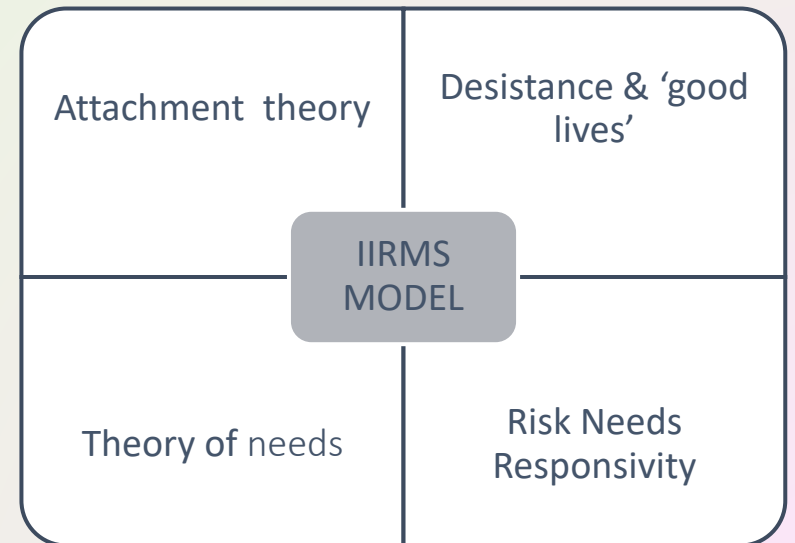
- National Offender Personality Disorder Pathway in Greater Manchester/North West
- Probation and NHS partnership

## Aims

- Improve social inclusion and psychological well-being, increase hope, skills development, reduce patterns of re-offending, improved survival in the community

## Direct Work with clients

- Psychological informed support based on a relational model



# What are we going to talk about today

- Why we decided to use Virtual Reality?
- Protocol Development
- Protocol Implementation
- Demonstration
- Next Steps



# WHY WE DECIDED TO USE VIRTUAL REALITY?

## **Main aims**

- Serves as a learning opportunity for service users which could enrich current interventions offered.
- Could contribute to the use of an innovative intervention within the OPD population.

## **Aims for Service Users**

- Provide a safe intervention for relaxation and lower perceived stress.
- Use an immersive setting that allows a service user to “switch off.”
- Improve psychological well-being.



- Develop **virtual environments** for healthcare professionals
  - Environments: empirically supported tools of psychological evaluation and intervention
  - Allow to work through exposure, systematic desensitization, diaphragmatic breathing, muscle relaxation, visualization/imagery and mindfulness techniques
  - Each environment has a specific manual

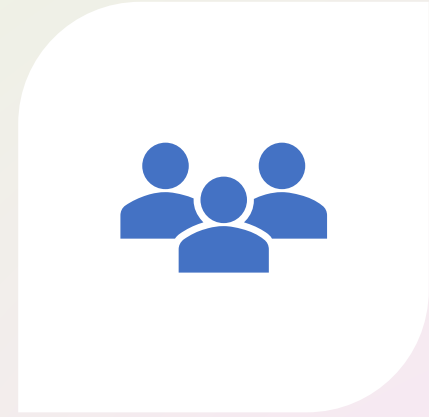
# PROTOCOL DEVELOPMENT



RESEARCH EVIDENCE



CLINICAL GUIDE



STAFF SESSIONS

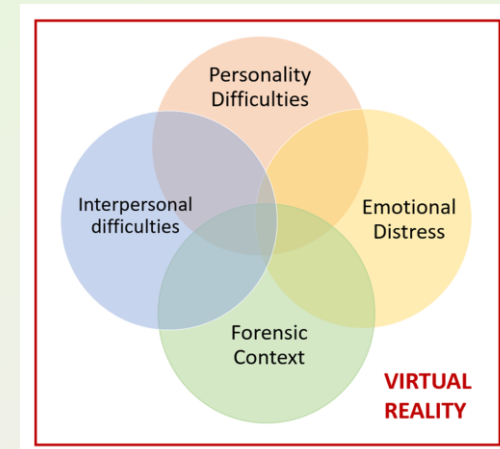
# Research Evidence

## Literature Review

- 35 articles focusing on VR were identified
- 4 referred to those with a diagnosis of Borderline Personality Disorder, 3 of which were experimental studies.
- Current research focused on diagnostic and risk assessments and short therapeutic interventions for aggression, violence, cognitive skills and maladaptive social behaviour.

## Gap in the Literature

- Very little known about how VR can be used with individuals experiencing personality difficulties.
- Currently no research or precedents for the use of VR in a community probation setting.



# Clinical Guidance



Introduce the client to VR



Explore the goal and purpose of the sessions (e.g., mindfulness, relaxation, guided breathing)



Explore the VR environments together and select a few of interest



Agree on a method of communication with the practitioner whilst in the session



Explore go-to relaxation technique if feeling distressed



# Staff Sessions

Trial 1	Trial 2
Felt immersed	Relaxed but felt suspicious about whether anything will come (U)
Could switch off and relax	Perceived the environment to look real
Wanted to stand up and move around	Felt curious and would have hoped to walk around
Needed clarification to focus on distress level	Equipment felt like wearing goggles and a snorkel
Distracted by walking during breathing exercise (SB)	

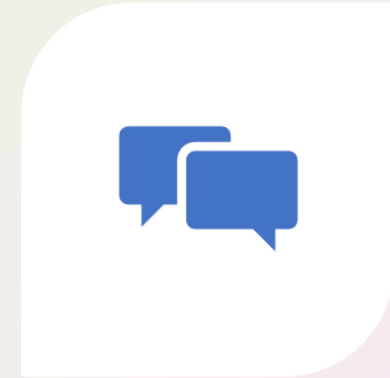
# PROTOCOL IMPLEMENTATION



INCLUSION/EXCLUSION  
CRITERIA



STRUCTURE



DEBRIEF

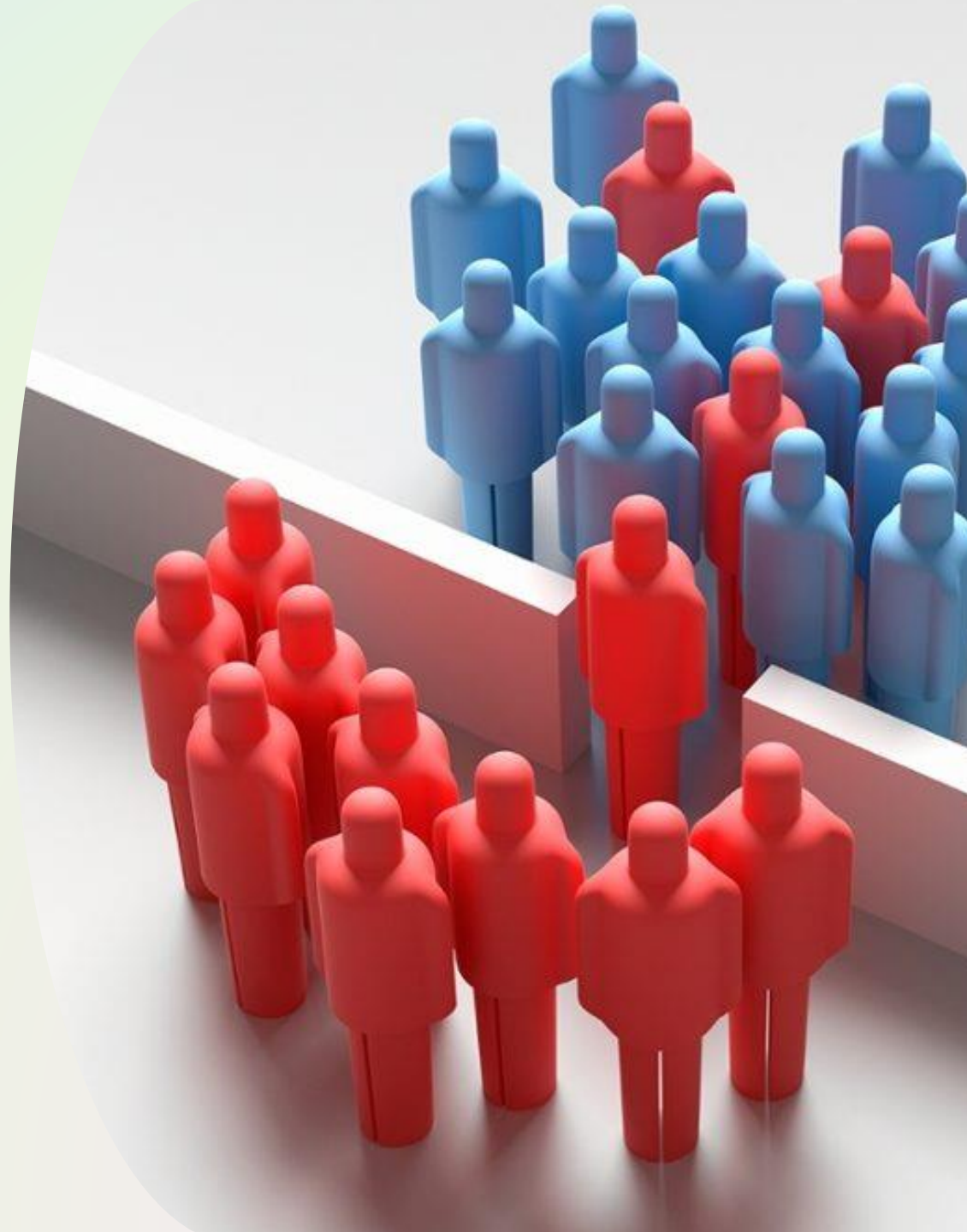
# Inclusion/Exclusion Criteria

- **INCLUSION**

- Currently working with Evolve
- Low levels of stress
- Low mood


- **EXCLUSION**

- Epilepsy
- Visual or heart conditions
- Pregnant or elderly
- Other psychiatric conditions
  
- Under the influence of substances
- Sleep deprivation



# Structure

- Session Preparation (practitioners)
  - Equipment and materials prep
  - Practitioner checklist
- Introduction (15')
  - Consent form
  - Information form
  - Goals of the session
- VR Environment (15-20')
- Debrief (15')



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# VR ENVIRONMENT SCENARIOS

Name	UNDERWATER IN THE OCEAN	IMAGERY FOR RELAXATION
Description	This environment simulates the sensation of being submerged under the sea.	The client walks along a beautiful island where they can relax to the sound of the sea and the sight of a waterfall.
Setting	Underwater	Beach, Platform, Waterfall, Mountain
Environment Type	Animated	Semi-realistic
Duration	5 min 15 seconds	13min
Guided Environment	No	No
Moving environment	No	Yes
Guided add-ons	Yes	Yes
YouTube link	<a href="https://youtu.be/mxQzoNj961k">https://youtu.be/mxQzoNj961k</a>	<a href="https://youtu.be/BKGIqnXrmJ0">https://youtu.be/BKGIqnXrmJ0</a>

# Demonstration

# NEXT STEPS

- Work towards increasing use and offer of VR scenarios.
- Continue to develop on robust evaluation methods.
- Conduct an in-depth research project on benefits of VR for Offender Personality Disorder Pathway clients.
- Continue to extend the use of VR as a safe approach for our service users to build and develop on mindfulness and relaxation skills.

**“ The world seems too big sometimes for me, my hyper vigilance can take over”**

But when experiencing VR

**“ Once the sounds came in and the birds, it was nice’**

Any questions?

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- Freeman, D., Reeve, S., Robinson, A., Ehlers, A., Clark, D., Spanlang, B., & Slater, M. (2017). Virtual reality in the assessment, understanding, and treatment of mental health disorders. *Psychological Medicine*, 47(14), 2393–2400. <https://doi.org/10.1017/s003329171700040x>