

## Compassionate Pedagogy in Virtual Reality

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### What is Compassion?

# Noticing/anticipating disadvantaging of others and/or their social or physical distress

and

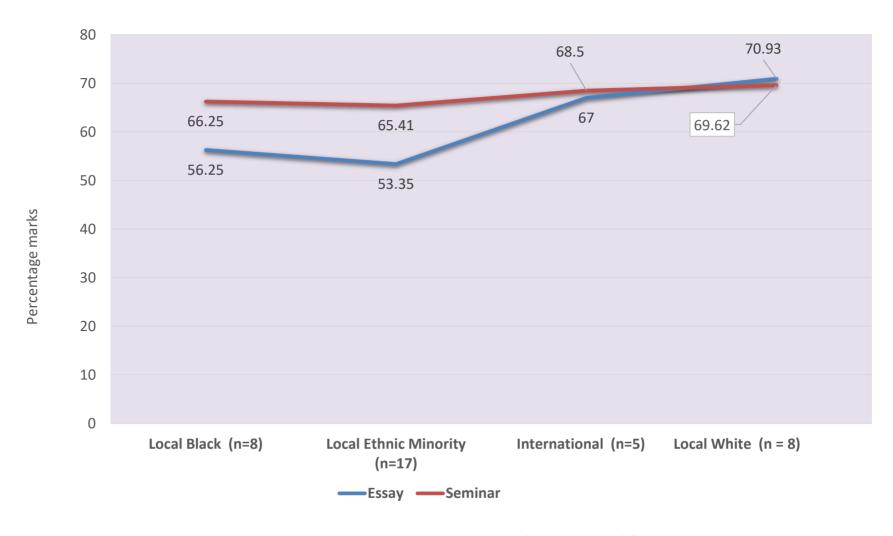
Doing something to reduce or prevent that.

Video on assessing and embedding compassion:

https://www.youtube.com/watch?v=3jFVTCuSCOg

### **Academic Outcomes**

The same sample of students (n=38) completed both assignments on a single UG Business module



Mean percentage marks awarded per student 'category' for critical thinking

## Compassion reorganises the brain

- S28: "When I go into seminars I find any other Muslim people there.... Most of the others, I'm probably not gonna talk to them to be honest.
- So I was thinking, 'Oh my God. What if no-one talks to me?' But as soon as I got into a group I was fine, I was fine. ... I did the research so I was really lucky [sic]. We just got into the discussion and took it from there. It flowed really well."

S28 Local ethnic minority female, stage three, mid module focus group transcript, p5, lines 133-135

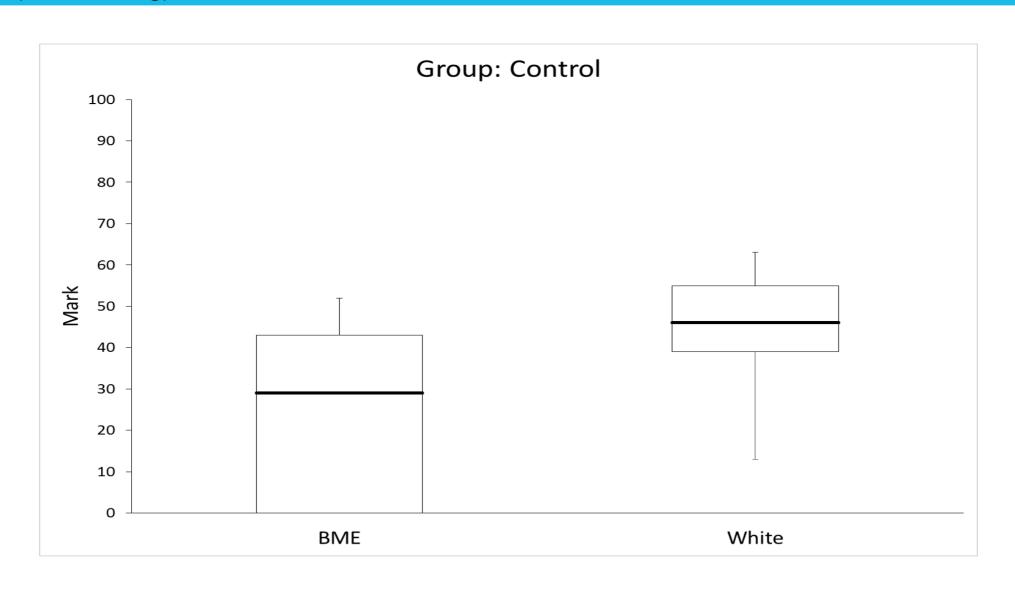
## Compassion reorganises the brain

• S29: I felt not as one person but I felt as a person within an entity and the entity was my group. ... I felt that I was part of the group and I didn't feel like an individual at that point. It didn't make me feel like I'm focused on it. It made me feel like we're *all* focused on it.

S29 Local ethnic minority male, stage three, post assessment focus group 3 transcript, p15, Lines 491-494

### **Academic Outcomes**

Computer science undergraduate module (27 students) Doolan et al (forthcoming)



## How compassion reorganises the brain

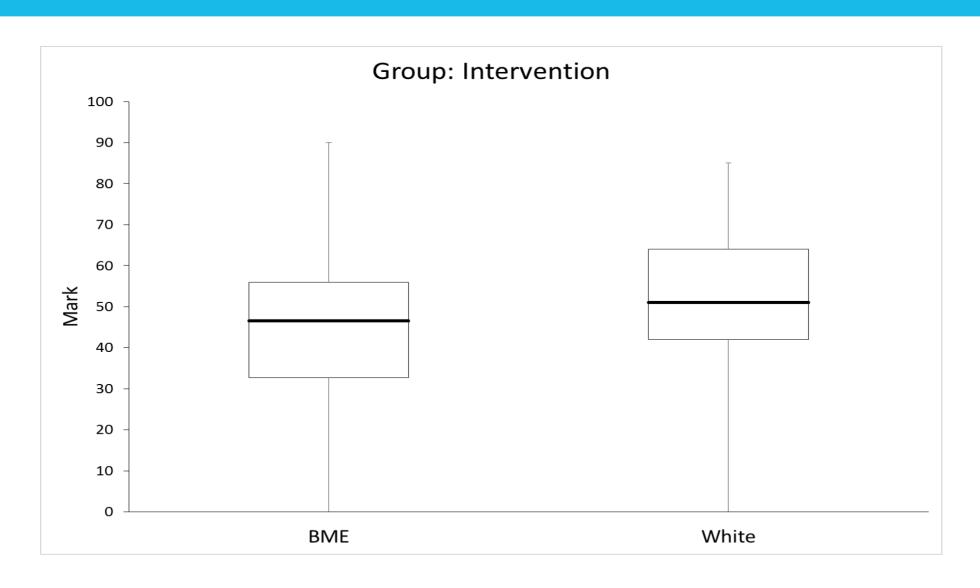
"...on their piece of work, I would listen to how they achieved this... how valued their input is. I also made sure I was showing gratitude." (S185)

"....during discussions I always made sure to leave spaces for other people." (S100)

"I was worried being the oldest person and the only non-native English person... ....having ten years of working experience with people from different cultures and backgrounds, I never found it as smooth as this time. Outside of university, we're still hanging out together." (S110)

### **Academic Outcomes**

Academic Results: After Compassionate micro skills taught for group work (228 students)



### Aims

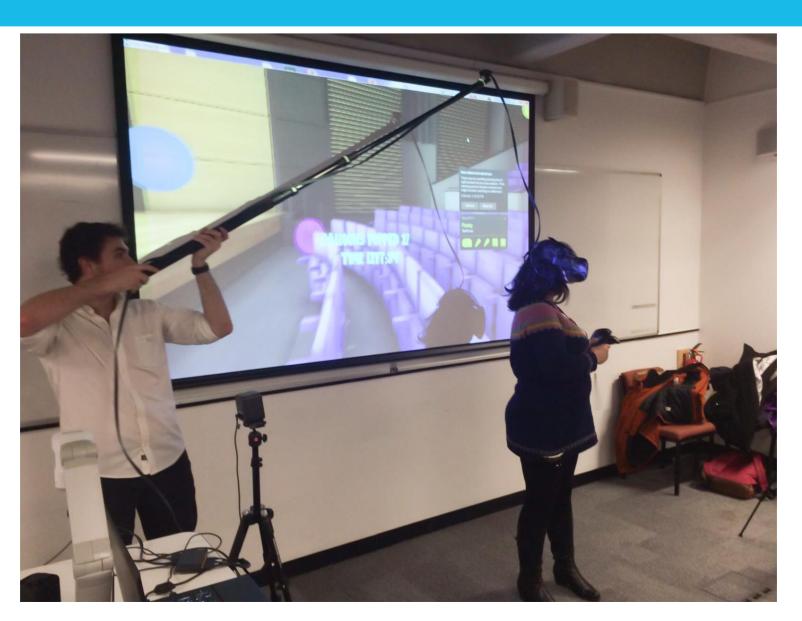
Our project involves developing a Virtual Reality simulation that helps stimulate a growing awareness of the critical role of compassion for enhancing group learning, decision making and problem-solving in socially cohesive ways, wherever teamwork occurs.

We believe VR will accelerate the internalisation of psychosocial processes involved with compassionate behavior.

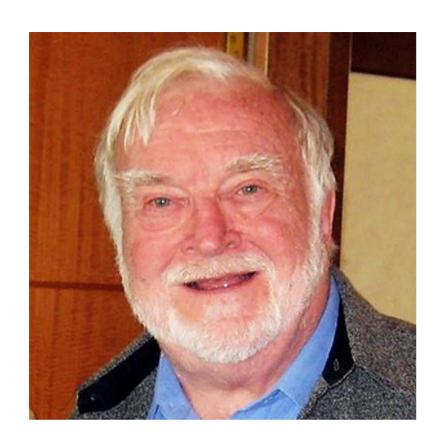
# What do we mean by Virtual Reality? Decoding the literature by interface mediums

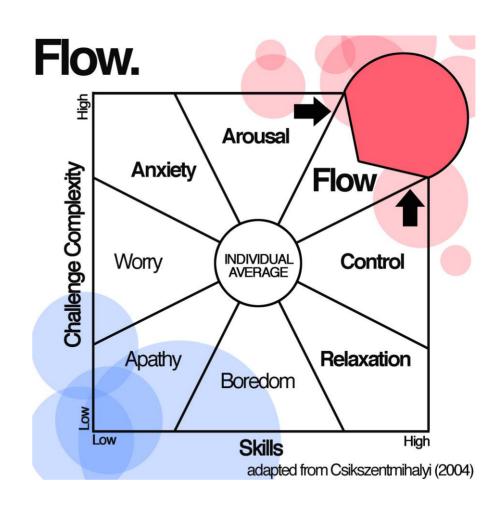
- Desktop VR
  - Keyboard and Mouse
- Immersive VR
  - A bit of a catch-all term, it includes:
  - Cave Systems
  - Head Mounted Displays (HMDs)
  - Other implementations, usually abstractions of the above
- Head Mounted Immersive VR\*
  - A screen on your head!
  - It's what everyone's talking about!

# Considerations Safety!



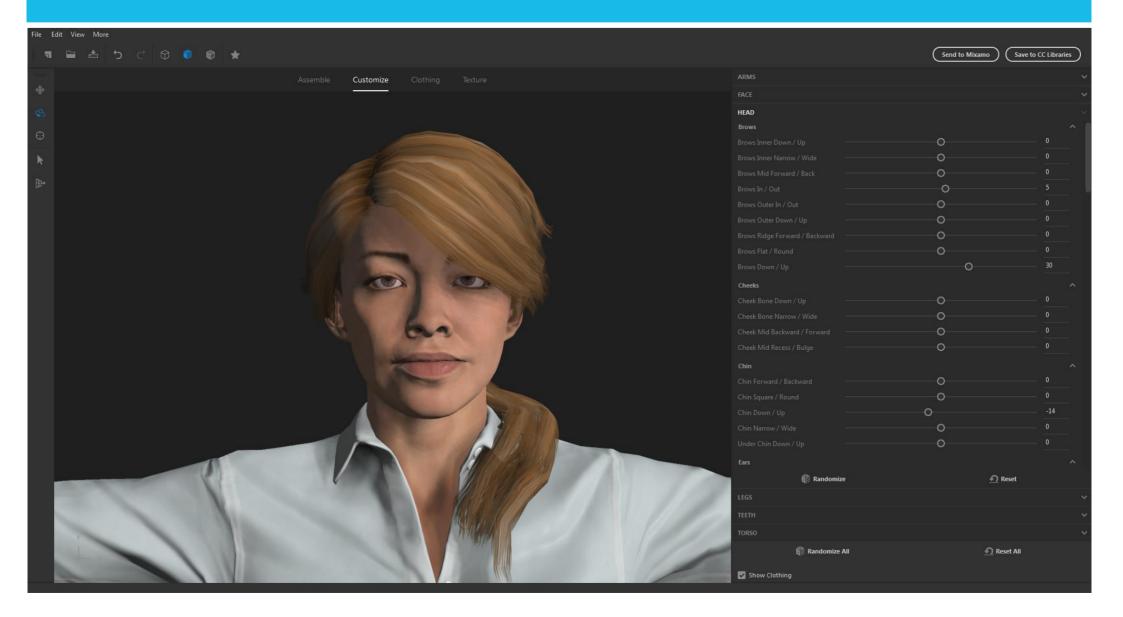
## Immersive Fidelity What are the secret ingredients?





Flow, the Psychology of Optimal Experience (Mihaly Csikszentmihalyi, 1990)

## Embodiment Visual and immersive fidelity

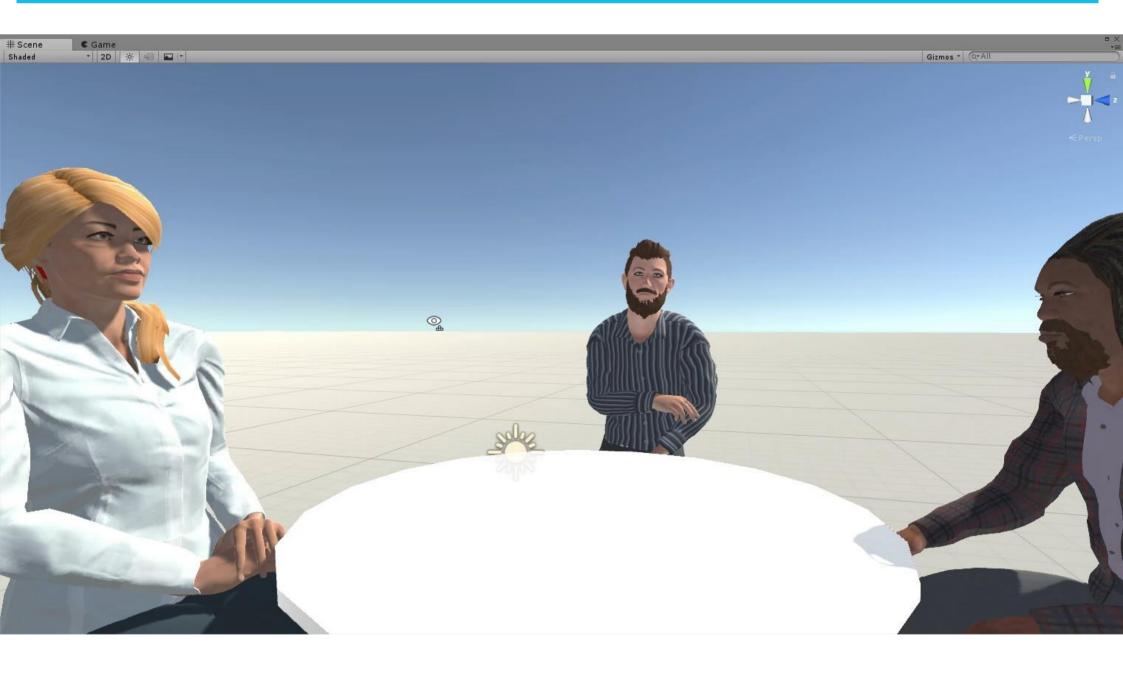


## **Preliminary Visual Cues**



Monopolizer excluding participants, what can you do to bring them back into the conversation

## In motion...



## Why Virtual Reality and not Augmented Reality?

### **VR Pros**

- VR gives us much more control over the environment and depiction of users
- VR Headsets are currently more advanced than their AR counterparts
- It's much easier to network users in different locations using VR

### **AR Pros**

- AR gives you much more detail (video feed vs 3D content)
- Less acclimatization required (it shows a video feed of what is in front)

## Immersive Fidelity Translating flow to virtual reality 2/2

Translating VR variables to Flow

First Person Immersion

**Spatial Immersion** 

Loss of self-consciousness

Intense and focussed concentration

**Roleplay Immersion** 

Scope for exploration

Merging of action & awareness

Sense of personal agency

(Andrew Marunchak 2018)

### Please contact us!

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