University of Hertfordshire UH

TEF Gold Teaching Excellence Framework

Compassionate Pedagogy in Virtual Reality

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What is Compassion?

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

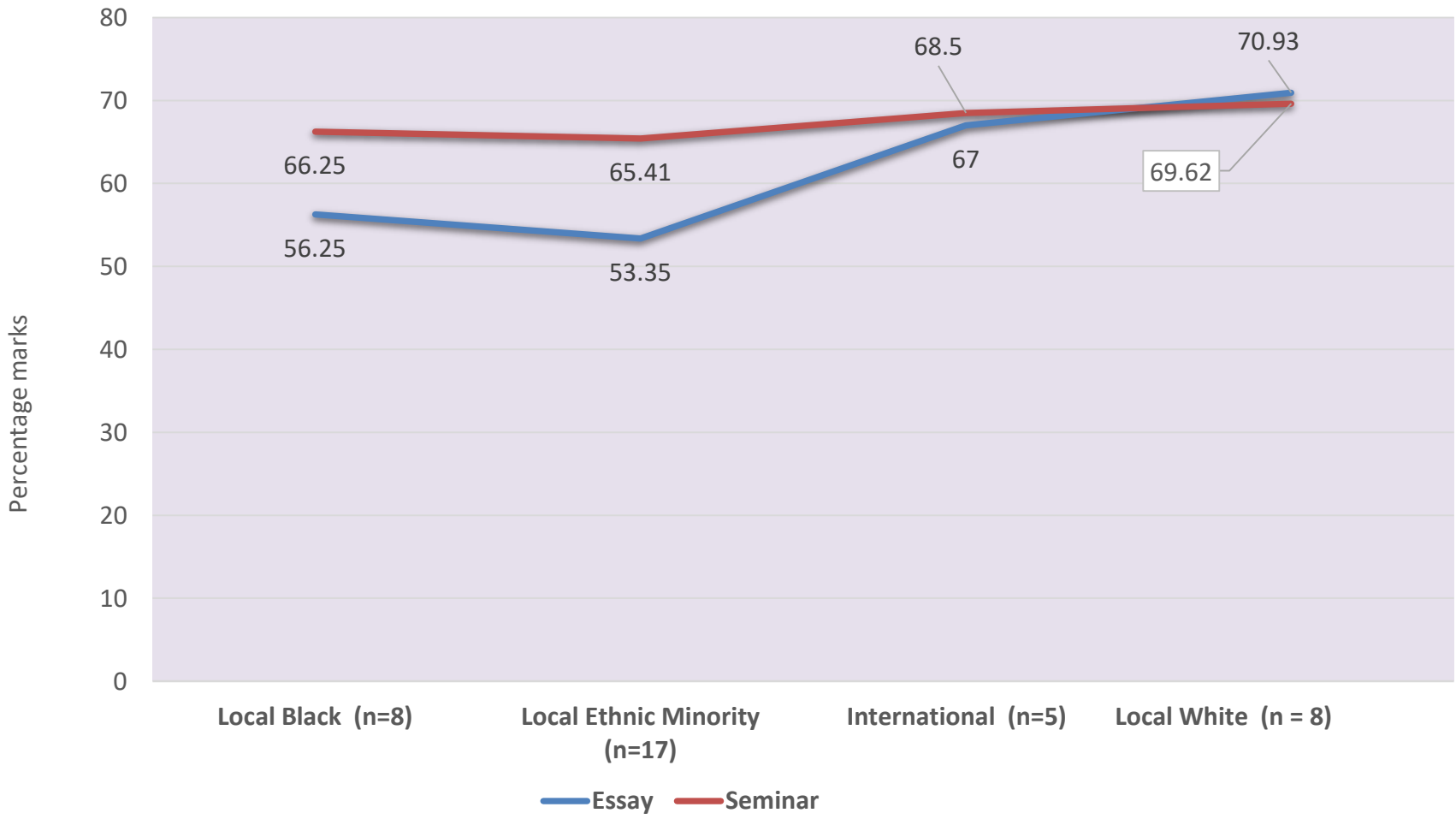
and

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

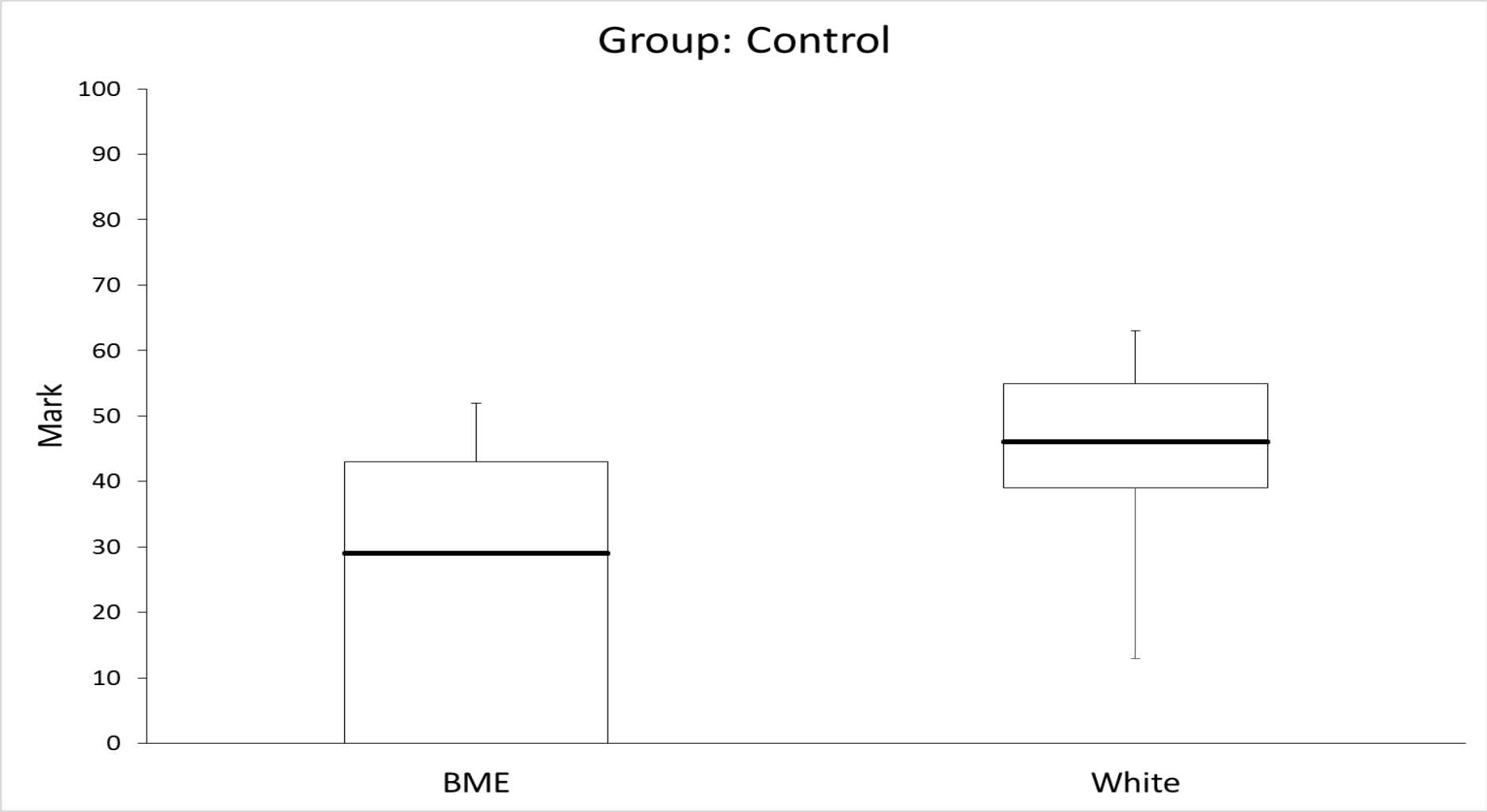
Compassion reorganises the brain

- 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* focussed 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

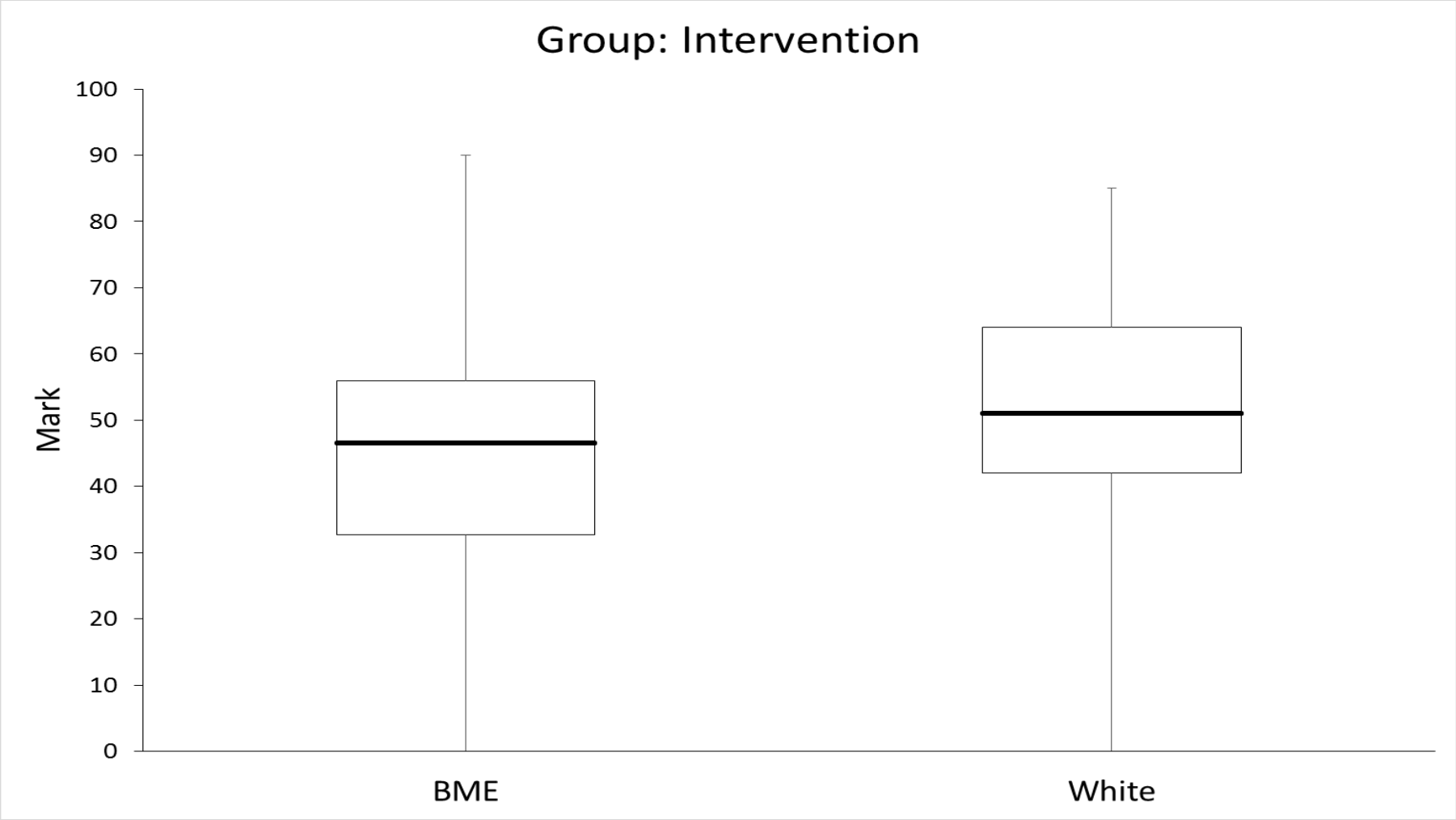
"…on their piece of work, I would listen to how they achieved this… how valued their input is. I also made sure I was showing gratitude." (S185)

"….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

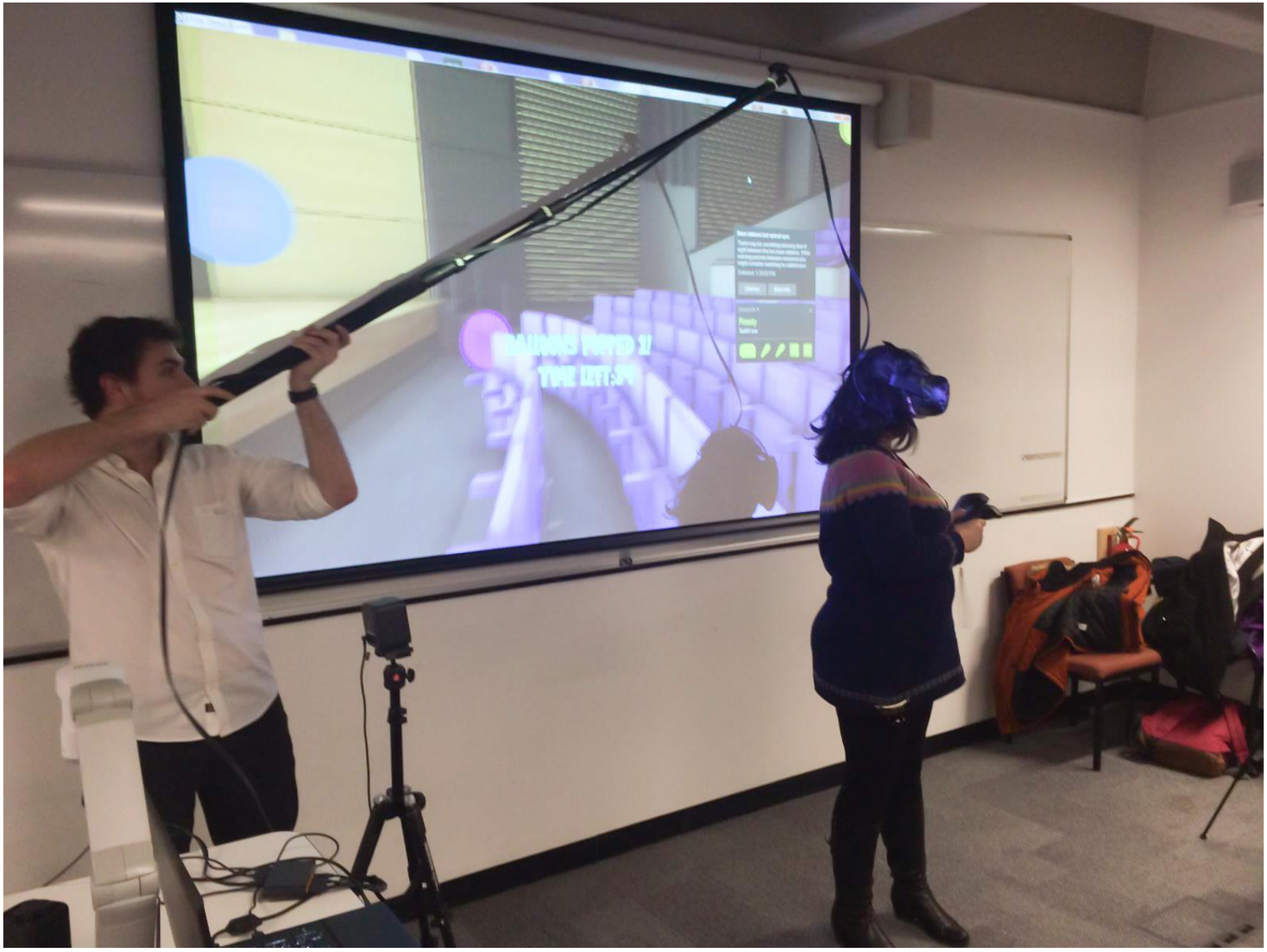
- Immersive VR
  - A bit of a catch-all term, it includes:
  - Cave Systems
  - Head Mounted Displays (HMDs)
  - Other implementations, usually abstractions of the above

- Head Mounted Immersive VR*
  - A screen on your head!
  - It’s what everyone’s talking about!

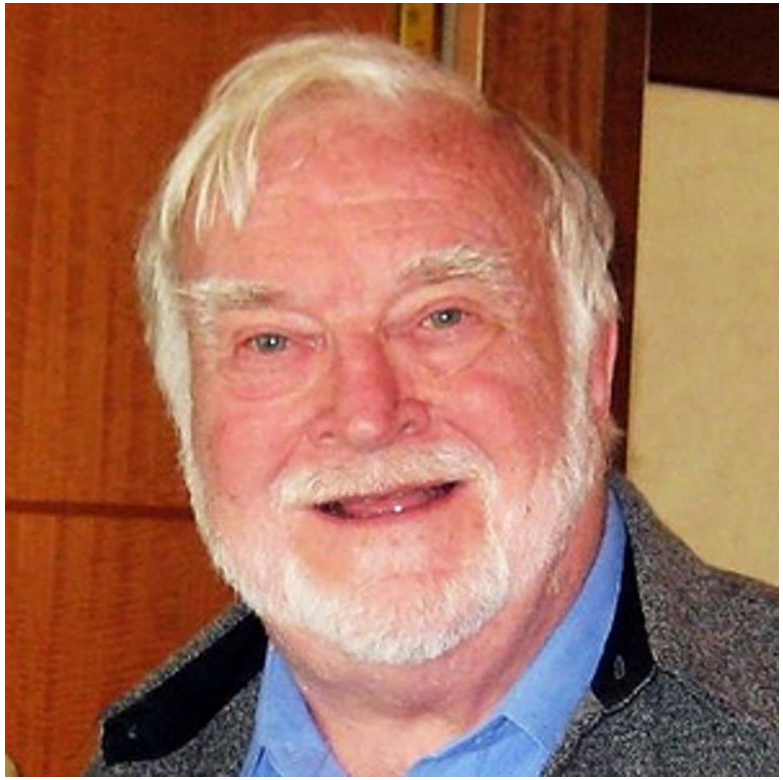
The Equipment – Vive Pro Headsets

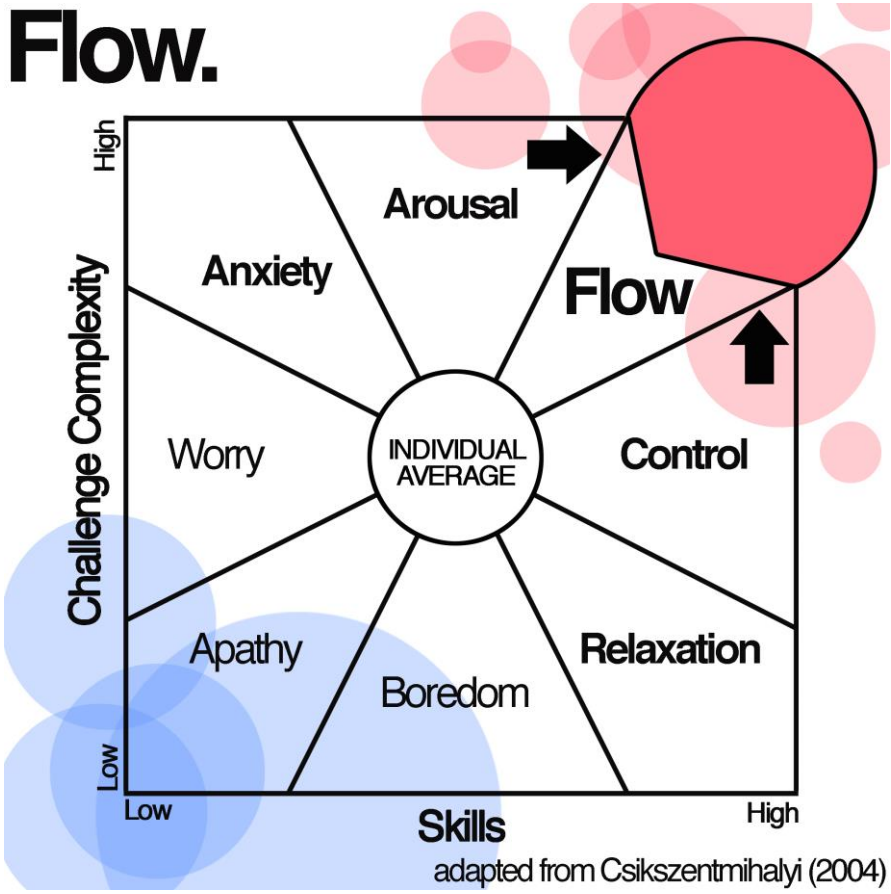
Remote participation – Three users in different physical locations

Considerations
Safety!



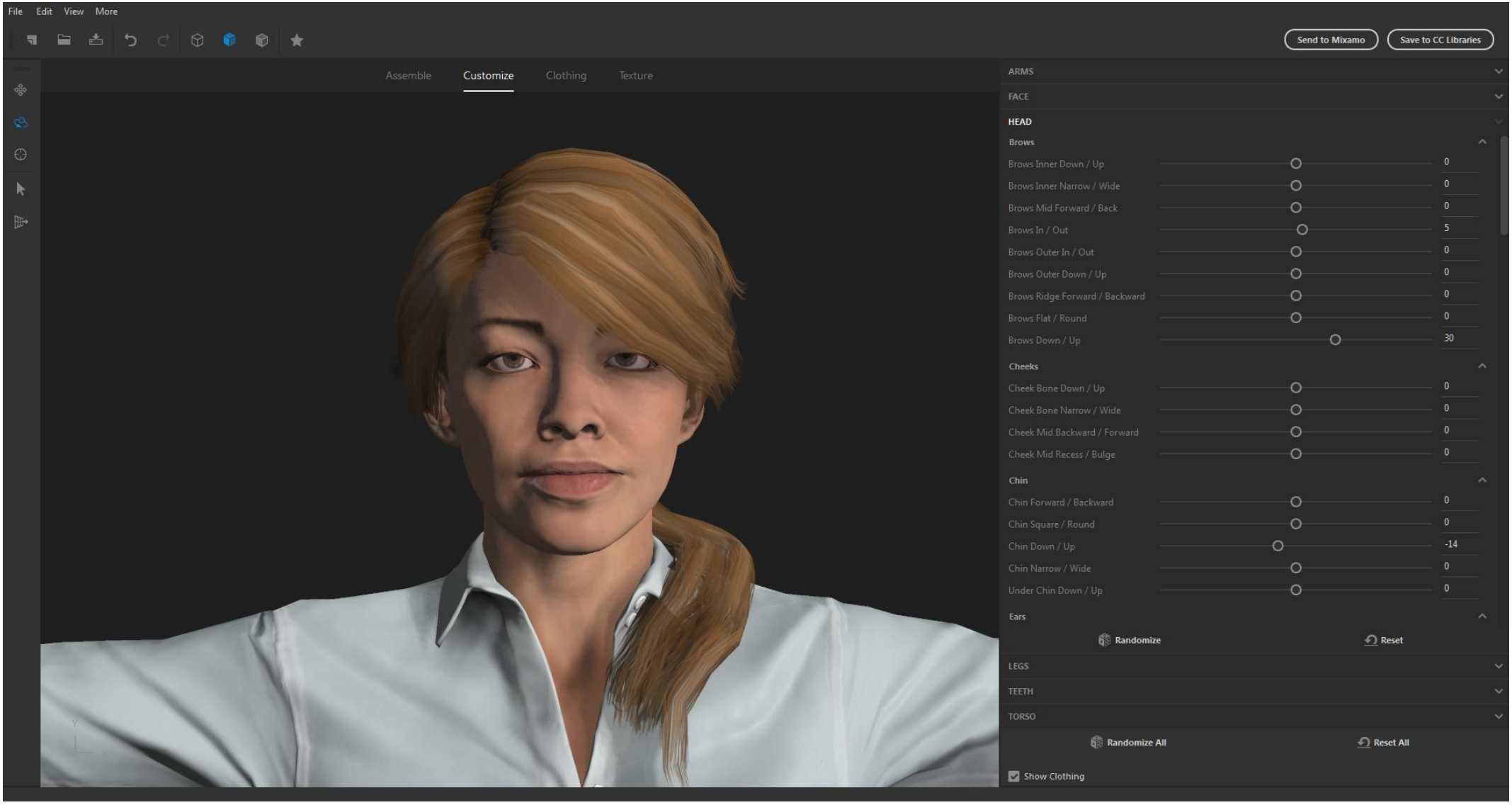
Immersive Fidelity
What are the secret ingredients?



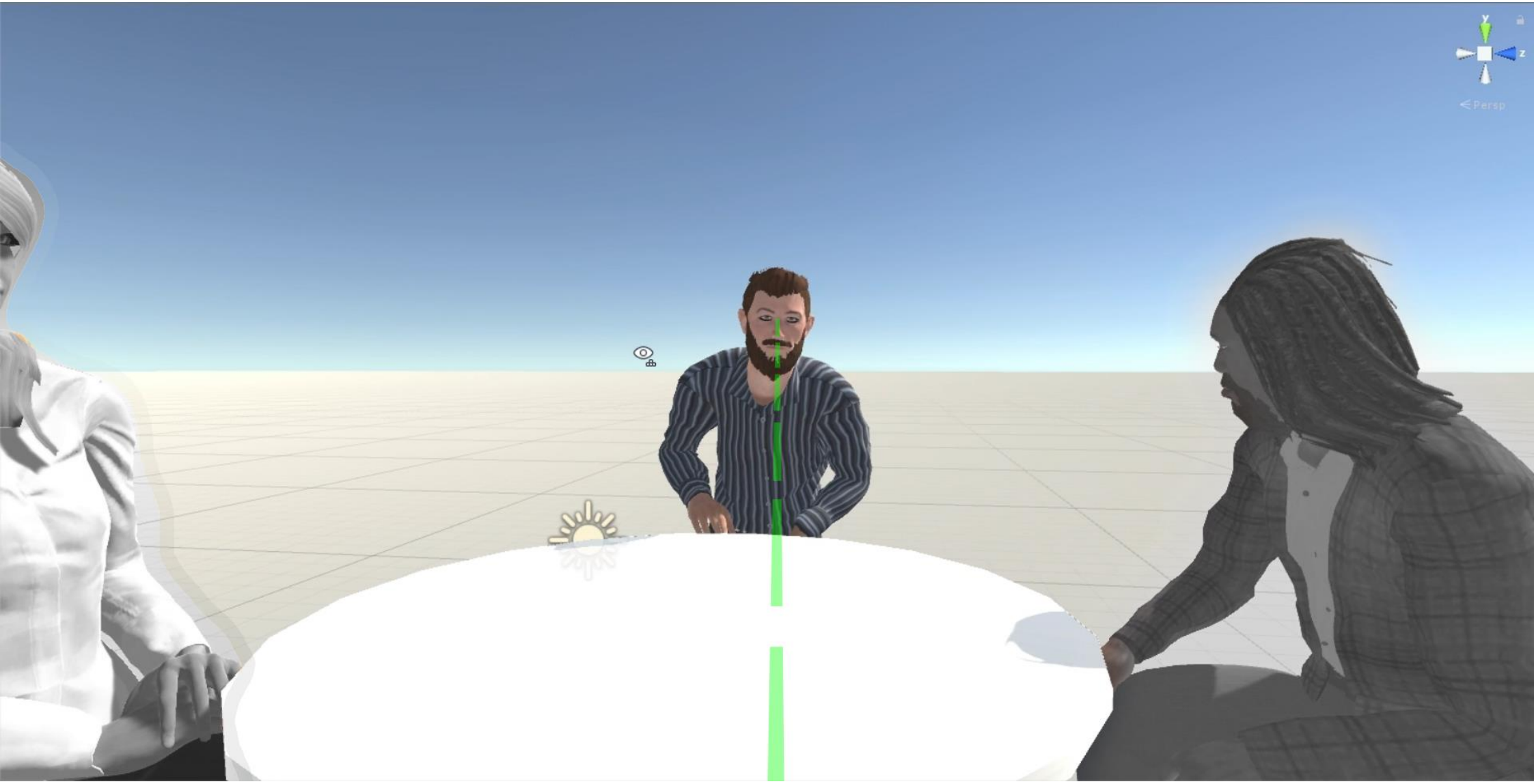


Flow, the Psychology of Optimal Experience (Mihaly Csikszentmihalyi, 1990)

Embodiment
Visual and immersive fidelity

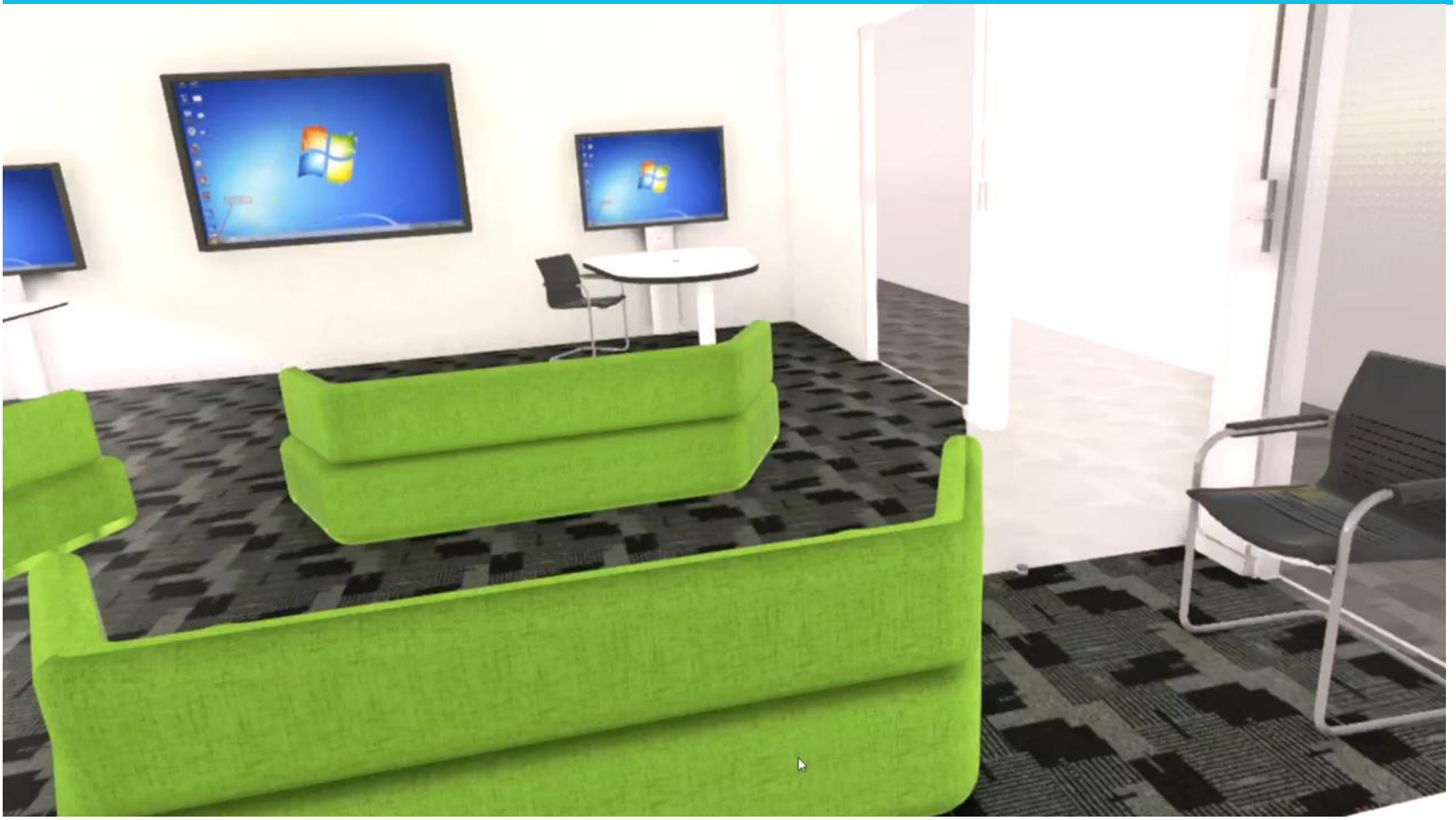


Preliminary Visual Cues



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

In motion…



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	}	Loss of self-consciousness
Spatial Immersion		Intense and focussed concentration
Roleplay Immersion	}	Merging of action & awareness
Scope for exploration		Sense of personal agency

(Andrew Marunchak 2018)

Please contact us!

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