



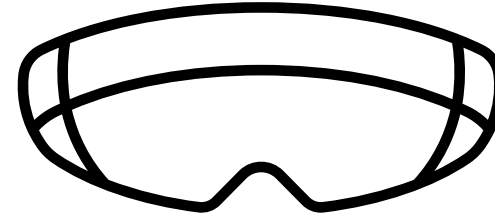
# Emerging Trends in Psychology & Immersive Realities

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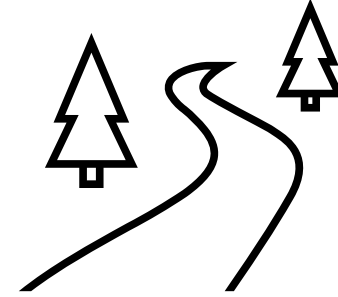
# Immersive Tools and Psychology



Choices made in virtual contexts provide insight into psychological functioning and influence Affect Behaviour and Cognition in both online and offline contexts.

- **Presence and Embodiment:**
  - Immersion affects emotional reactions - physiological effects of virtual world analogous to the real-world impacts in the brain
  - Can minimise uncertainty and perceived risk
- **Identity:** Avatars allow for experimentation; altering of self perception / creating dissonance & disinhibition
- **Social Relations:** Can satisfy needs and build competence; safe spaces for social practice & empathy / isolation and escapism
- **Health:** Those who experience adverse events, trauma, or isolation may use online environments to cope / important as a therapeutic tool for mental health and well-being

# VR Therapeutic Potential



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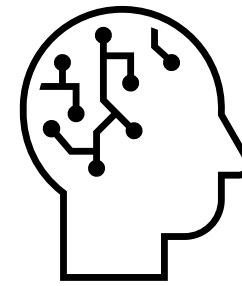
VR can have great benefits in elevating existing therapies and allowing for new solutions to issues such as anxiety disorders and chronic pain management as well as in the assessment and treatment of psychosis, addictions, and autism.

- **Engagement & Distraction:**

Immersion in VR more effective than traditional distraction methods as absorption (e.g., relaxation, meditation, nature, or games) reduces sensory pain processing. Also VR apps can guide coping skills like breathing and self-talk to manage pain.

- **Exposure therapy:**

Confronting feared stimuli to reduce anxiety through habituation are safely enabled through VR by providing controlled virtual environments simulating real-life anxiety-provoking scenarios like public speaking, flying, or heights/spiders for practice.



# What Comes Next?

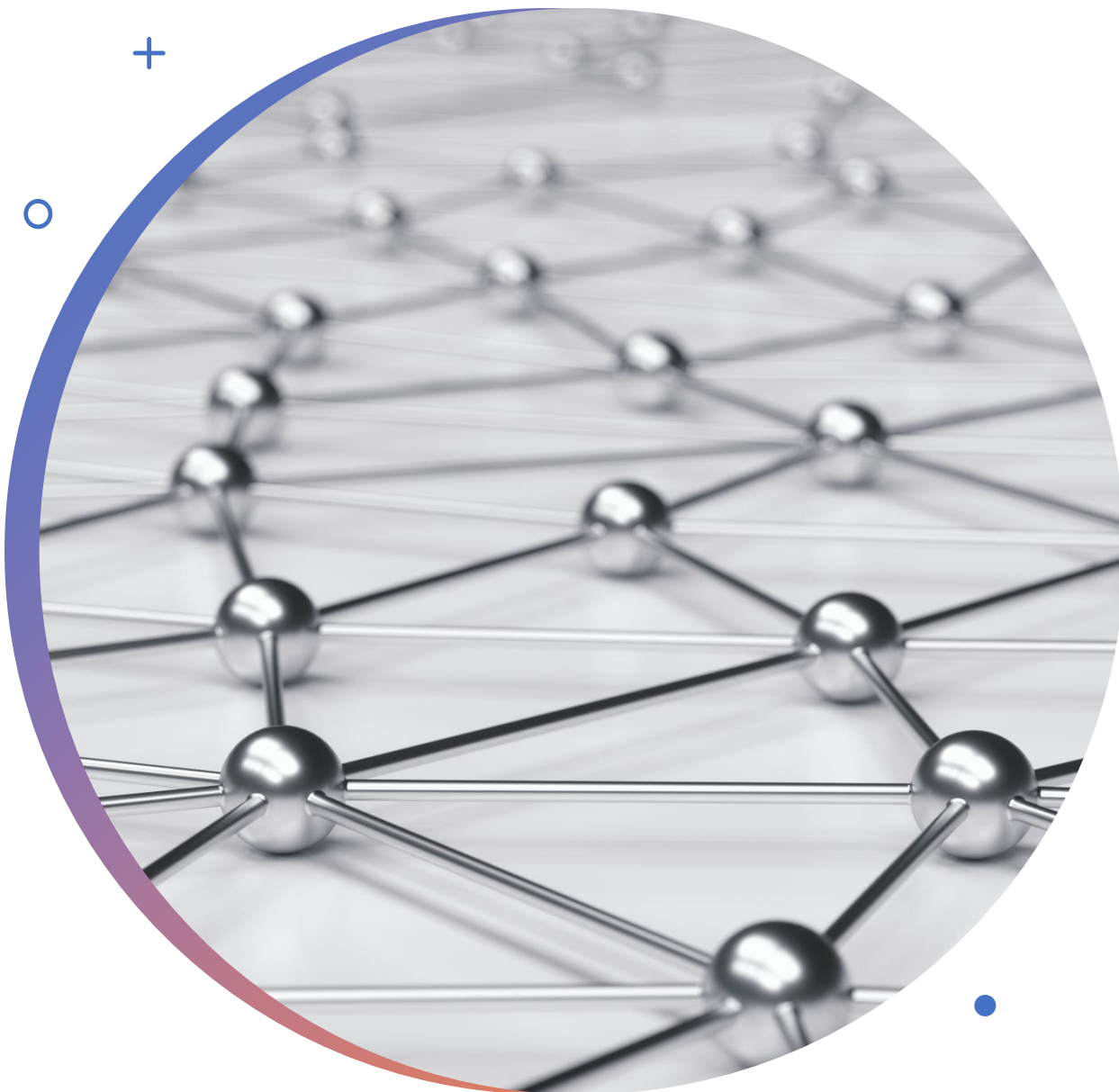
There is a clear need to increase resources and expertise to properly regulate emerging VR & AR technologies and allow adequate standards and oversight systems to be defined and implemented.

## Major Issues

- **Privacy & Data:** Potential threats posed by exploited or misused data collected en masse via VR/AR technologies – also greater personalisation potentialities in manipulation.
- **Access & Equity:** Current applications of VR/AR expanded while ensuring representation and access especially to the most marginalised.
- **Ethics and Balancing Risks:** Inherent tensions between risks and opportunities in the uptake of technologies that are only more complicated by immersion.

## Recommended Next Steps

- **Focus on User Experience and Well-Being:** Need to better understand the impacts of VR/AR on ABC as well as individual and collective wellness.
- **Increased resources:** To support ongoing work as technology evolves through expanded immersion via haptics, interconnectivity and interoperability.
- **Holistic examinations of broader societal issues:** Collaboration on research & policy, leveraging funding, and multidisciplinary teams to ensure technology is human-centered and positively serves everyone into the future.



# Thank You

*« We must navigate the intricate interplay of technology and humanity, shaping a future where the virtual realm enhances, rather than diminishes, the richness of the human experience » - Riva (2024)*

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