

# Integrating Virtual Reality in an Institutional Healthcare Education Research Online Conference

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**Background:** In response to Covid-19, traditional online communications platforms were rapidly deployed to ensure continued presentation of peer-reviewed scholarship and professional networking. However, teleconferencing fatigue emerged<sup>1</sup> and alternatives to two-dimensional interfaces were evaluated.<sup>2</sup> The use of virtual reality (VR) for online poster presentations was implemented at a three-day institutional healthcare education research (IHER) conference to enhance social interactions and better emulate in-person presentations.<sup>3</sup>

**Purpose:** To examine the impact of a virtual reality poster presentation on an institutional online conference in healthcare education research.

## Design

- In 2021, 181 participants attended IHER conference
  - New VR speed poster presentation platform
  - 3D avatar-based Virbela software
- 20 participants attended VR session (Fig 1)
  - Four-item survey on 7-pt scale (1=SA, 7=SD)
  - IBM® SPSS® 26.0 used for analysis
- A password-protected private meeting space
  - Phase-shifting seating configurations
  - Protected private volume areas
  - Three digital presentation boards
  - 3D-spatialized audio
- The customizable avatars had built-in functions (Fig 2)



Chat



Interacting with  
Presentation Boards



Gesturing

## Outcomes

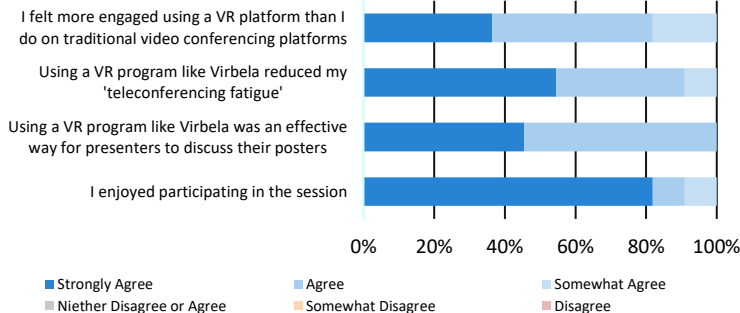


Fig 1: VR Participant Survey Responses

- The VR session was rated to ...
  - Be an effective poster presentation platform (median=6.0)
  - Reduce teleconferencing fatigue (median=6.0)
  - Be more engaging than Zoom (median=6.0)
- Satisfaction was significantly correlated ( $p<0.050$ ) with ...
  - Effectiveness ( $\rho=0.5$ )
  - Reducing fatigue ( $\rho=0.7$ )



Fig 2: Speed Poster Virtual Reality Session

## Strengths and Limitations

- The VR presentations were executed with no logistical problems and generated effective discussion
- One-on-one conversations were easier to have in the VR platform than in Zoom

Website: <https://www.mcw.edu/IHER2021>