Using Virtual Worlds & VR/AR for Telehealth

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About Me

- Work in both the academic and private sectors

- Previous Tech & Media Industry Experience

Overview

- 1. Discuss and explain how 3D spaces can bridge the gap between distant participants by bringing them together into a shared space for collaboration, conversation and brainstorming.

- 2. Define the risks and rewards of behavioral health initiatives and practices within 3D spaces.

- 3. Share case studies of how behavioral health practitioners are using virtual worlds and VR to reach rural and/or remote clients, as well as how self-care initiatives can effectively find expanded audiences within anonymous (but social) 3D spaces.

The Need for Telehealth as a Workforce Extender

- Many local and rural communities do not have access to credible behavioral health resources or support groups

- Lack of proximity to good practitioners may be a deterrent to seeking or maintaining needed help

- In some small communities, there may be a stigma against seeking help due to perceived or real lack of privacy and/or discretion

- Some individuals may not feel "safe" or they may not feel that they are ready to commit to going to therapy in person

- Specialized forms of therapy may not be readily accessible locally

- Easy access anywhere to:

  - "In-game/inworld" counseling

  - Effective therapeutic exercises and simulations

  - Social support & recovery groups

  - Expert lectures, annual conferences and other behavioral health-themed social events

- Offers a strong "telepresence" and embodiment phenomena for participants

- Strong player-avatar identification and emotional involvement

Background on Virtual Worlds

- Use voice and text chat

- Individuals represented by a 3D persona that they choose ("avatar")

- Comprised of user-created 3D social spaces/environments

- Enables a strong sense of embodiment and telepresence

- Home to several health-related and group therapy 3D experiences

- The largest virtual world is Second Life

SINCE 2003

57 MILLION ACCOUNTS
have been created in Second Life

TOTAL TIME: 482,000 YEARS
users have spent in Second Life

2018

350,000 NEW REGISTRATIONS
on average are created monthly from about 200 countries around the world

$68 MILLION
paid to creators in 2017

5 MILLION VIRTUAL GOODS
created by users for sale in the marketplace

Pros

- **Anonymous** – Ability to get help without the constraints of your "real world" identity

- **Accessible** – Easy to access help without leaving your home

- **Creative** – Allows for individual expression in a way that might be complicated by "in person" sessions; can change gender, ethnicity, human vs. non-human, etc.; Also, the creativity removes some of the stigma and anxiety surrounding treatment

- **Cost** – Free and/or low cost counseling and support groups

- **Safe** - Testing ground to "try" therapy before seeking additional outside help

- **Social** – Virtual worlds add a sense of social presence that can be used to support multiple user formats and group discussions

Concerns

- Who is your practitioner? Are they qualified and licensed?

- Role-playing as armchair therapists = game for some people with serious consequences

- No oversight, guidelines or verification process to confirm credentials

- Is your session private? In some virtual world spaces, others can eavesdrop if they are in close proximity. What happens to the transcripts of your session – ripe for HIPAA abuse

- Will patients and/or insurance companies pay for virtual world initiatives?

- Requires access to a mid-range computer and some tech knowledge

- Requires broadband access (which is often lacking in rural areas)

Case Studies

- **Virtual Mental Health**

  - A behavioral health resource center founded by a licensed psychotherapist and educator

  - Provides a non-threatening space for reading, learning and group meetings

- **New Ways Counseling**

  - "Netherlands-based licensed and certified psychotherapist"

  - Holds "inworld" sessions for a low fee

 - Includes "Sunshine Therapy Garden" as a 3D place for "meditation, relaxation and healing"

Virtual Worlds as a Creative Outlet for Healing

- Participants/Patients can use virtual worlds as a creative and healing outlet from the safety of their home to:

    - Work through issues in a non-threatening, anonymous environment

    - Connect with others who share their struggles

    - Explore their identity without fear of "real world" consequences
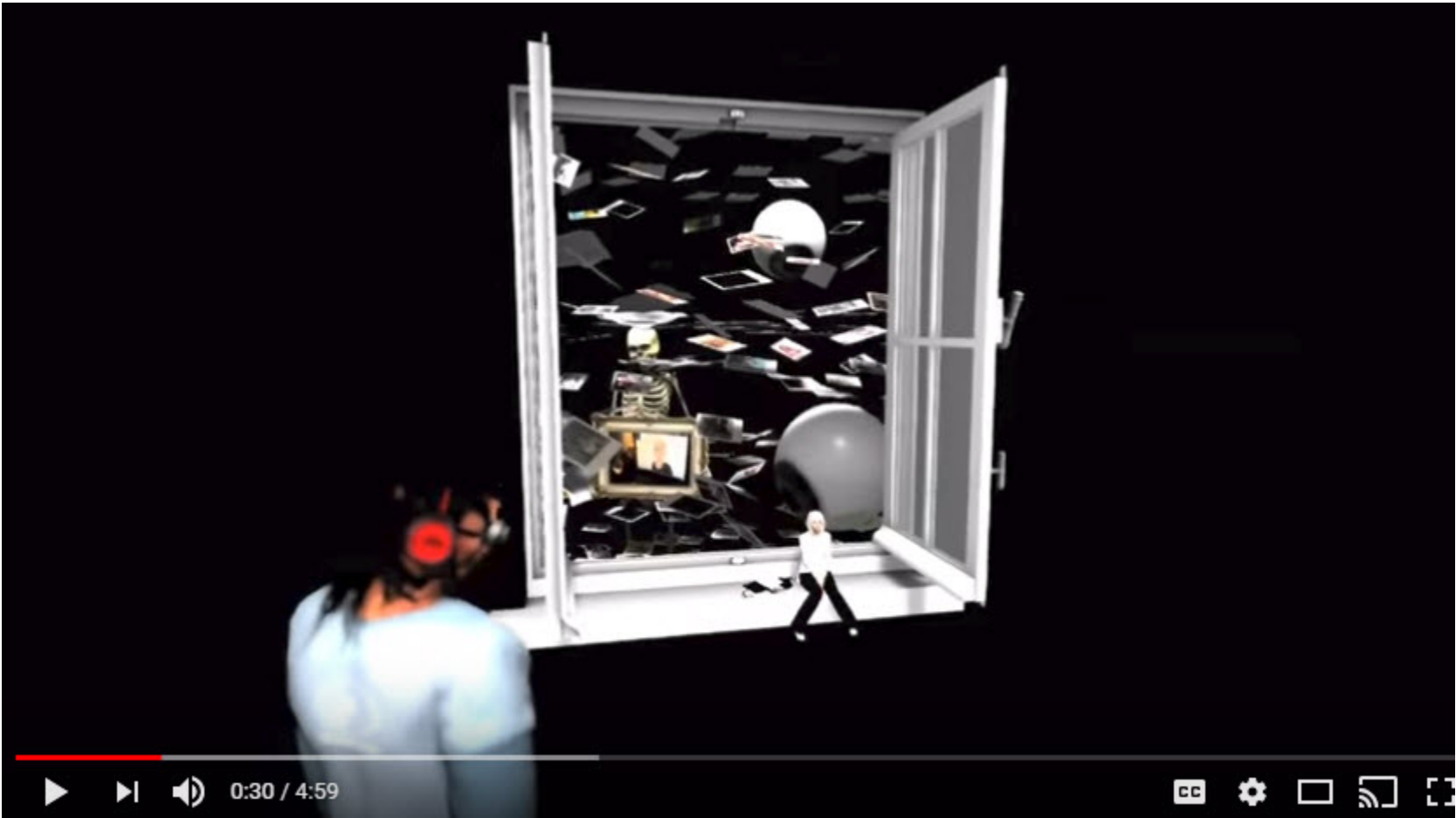
Becoming Jamie
Shock & Joy

Best Practices in Virtual World/VR/AR Telehealth

- ***FOR CONSUMERS***

  - Do your research - Ask for "physical world" credentials and double-check them out outside the virtual environments to ensure that they are legitimate

  - Ask about their Code of Ethics

- ***FOR PRACTITIONERS***

  - Be transparent about your qualifications

  - Use privacy controls!

What's Next? Virtual Reality & Augmented Reality

- There are significant investments and development in the emerging Virtual Reality and Augmented Reality markets

- These offer even more opportunities for connecting clients to behavioral healthcare in both social and solo 3D environments

Virtual Reality Overview

- Entire physical world replaced with a closed "virtual reality" environment with sealed headset

- About 36 million Virtual Reality users in 2018

- Most VR users are mobile-phone based

- Major tech companies are investing in this sector

  - Google = Daydream

  - Facebook = Oculus

  - Amazon = Sumerian

  - HTC = Vive

- Users skew heavily male

- Fast-evolving format for health-related AI initiatives – many of which are experimental and geared toward exposure therapy

Augmented Reality (AR) Overview

- A variation of VR wherein the user sees the real world augmented by virtual elements

- Dedicated platforms are emerging

  - Microsoft HoloLens

  - Magic Leap Lightwear

- Mobile AR apps are mainstream

  - Pokemon Go

  - Google Translate

  - SnapChat filters

- Reduced distinction between game and "real life" imagery may amplify "Game Transfer Phenomena"
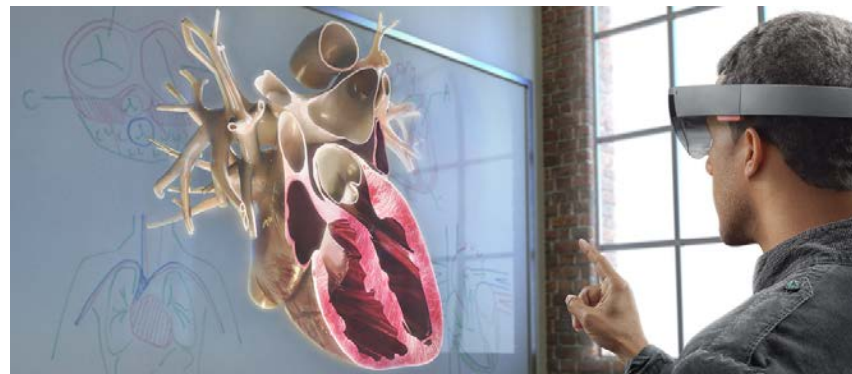
Questions?

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