## Empathy Tool Manual Virtual Reality Reduced Capability Simulator





## Welcome

### to the Virtual Reality Reduced Capability Simulator Empathy Tool Manual



Getting Started [1]

Manufacturer Manual [2]

Please carefully read this **Empathy Tool Manual** before using the assisted tools or simulators.

This manual is designed to help you understand the challenges faced by individuals with physical and mental limitations through the use of the VR Meta Quest 3 as an educational tool. Please note that you can access manufacturer's user manual via the QR codes above.

The Empathy Library is exhibited within the Material Resource Centre, Room V510, 5/F, Jockey Club Innovation Tower, The Hong Kong Polytechnic University.

Visit **http://empathylibrary.design** or scan the QR codes on the last page of this manual to access the digital version and for more resources.

#### Warning:

The VR Meta Quest 3 is an educational tool specifically designated for use in this Empathy Library to simulate impairments and disabilities to enhance empathy and understanding. While it can replicate certain physical and mental limitations, it does not fully replicate the experiences of individuals with disabilities. To ensure your safety and prevent accidents, injuries, or discomfort, exercise caution and avoid engaging in activities that exceed the simulator's capabilities.

#### **Disclaimer:**

The use of empathy tools does not equal the full experiences of having a disability. It is best to aim to engage with your target audience, using the tools to prepare better. The VR Meta Quest 3 and Empathy Tools Manuals are not substitutes for professional medical advice or diagnosis. Consult a qualified professional regarding diagnosis concerns. Use the tool responsibly, acknowledging its limitations and potential risks. The School of Design, the Material Resource Centre, and the creators of this simulator and manual are not liable for any injuries, damages, or misuse of the simulator.

#### **Citation:**

If you wish to cite this empathy tools manual, you may insert the reference as follows: Maximo, T; O'Brien, M; Chan, L.S.; Liu, X.; Zhan, W; Lee, W.K.A. (2024). *Empathy Tool Manual: Virtual Reality Reduced Capability Simulator*. School of Design, The Hong Kong Polytechnic University.

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## 1. Description of the Simulator

What disability or impairment does this simulate?



A **Virtual Reality Headset** is not like the other simulators in the Empathy Library. Several immersive experiences have been downloaded onto the headset for your use. Explore the digital library on the headset, and you will find a variety of experiences that provide insight and empathy into others' lives and their situations.

Before you put on the headset, make sure you select an appropriate activity space for use. It's best if you can find an area with fewer obstacles and ideally **two metres squared of open space**.



Image Source: https://www.dualshockers.com/meta-quest-3-how-to-create-new-boundaries/

Ho'd the power button down for **2 seconds to power** on and **5 seconds to power off.** Press briefly to wake the device.



**Slide left or right** to adjust the back strap for the most comfortable fit. To adjust the top strap, loosen it and adjust it for the most comfortable fit.





# 2. Use & Operation

### How to put it on?

While wearing the headset, **turn the wheel left or right** until your visuals are clear and comfortable.



4 The best first grip point is at the **11 o'clock position**, and the best final grip point is at the **2 o'clock position**.



If the fit and vision are not adjusted perfectly yet, don't worry; you can fix them while wearing the headset.

Put on the controller wristbands and hold one controller in each hand. If you look at your hands while wearing the headset, you should see if the controllers are in the correct hands. Use either of the triggers to point and select items on the user interface.

#### Make sure you have the controllers in the correct hands



6 Before you start one of the immersive experiences, you should be prompted to set up your virtual boundary, select **"Create new boundary"**, and then follow the on-screen instructions to set up your area.

#### Follow the prompts to set up your own boundary.



Image Source: https://www.uploadvr.com/meta-quest-visual-positioning-system-boundary-recall/

## 10 2. Use & Operation

How to put it on?

7 At the bottom of the user interface, you should see the **"Universal Menu" bar**. On the right, you should find the **library icon**. Once you select this, scroll and browse through the library content that has been specifically curated for the Empathy Library.

Scroll through all the apps in the "Main Library"



If you would like to improve the fit and focus of your headset, you can select the **"fit and focus" tutorial** in the main library.

#### Adjust the fit and focus.







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## 3. DOs & DON'Ts

How to embrace and avoid?

### DOs



**DO** use the disposable mask cover provided for hygiene.



**DO** be sure to select an appropriate area and space for using the VR headset.



**DO** be aware of your physical surroundings and potential hazards.



**DO** set up your virtual boundary before commencing one of the VR experiences.



**DO** be sure to take adequate breaks and rest between immersive experiences, especially if you feel any discomfort.



**DO** use the disposable mask covers to maintain proper hygiene for all users.



**DO** inform the MRC staff if you suspect any of the components are broken or faulty.



## DON'Ts

- **DON'T** use the VR headset if you suffer from epilepsy, psychiatric disorders, or have a heart condition.
- **DON'T** use if you have contagious conditions, such as infections or diseases, particularly of the eyes, skin, or scalp.
- **DON'T** use the VR headset outdoors, near hazardous objects, or in crowded spaces.
- **DON'T** engage in activities that may exceed the capabilities of the VR headset or pose a risk to your safety.
- **DON'T** use when impaired: under the influence of alcohol or drugs; hangover or upset stomach; fatigue, exhaustion or sleeplessness; emotional stress, anxiety headache, migraine, or earache.
- **DON'T** use the VR headset concurrently with other empathy tools.



Image Source: https://mixed-news.com/en/meta-quest-3-smart-guardian/

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## 4. Suggested Exercises & Scenarios

How to build empathy with the users?

## **Empathy Applications**

Scroll through the main library and select any of the applications that have been downloaded for you to experience; these will be the empathy exercises and scenarios.

Engage your skills in empathy while you enter various simulations:

- Understand what it is like to have impaired vision and rely on your other senses
- Empathise with people who live with a cognitive impairment
- Try using a wheelchair to play sport
- Enter a simulated experience of something living with schizophrenia
- You can even witness the lived experience of people of different race

#### Scroll through the "Main Library" and try out any of the apps





**Notes on Blindness:** an emotional journey into a world beyond sight



**Goliath: Playing with Reality:** an animated experience about schizophrenia, gaming and connection



**Imercyve: Living with an Intellectual Disability:** See what its like to live with diverse needs and feel uncomfortable in the face of simple, everyday scenarios

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## 4. Suggested Exercises & Scenarios

How to build empathy with the users?

## First time using VR?

If this is your first time using a VR headset, you can familiarise yourself with how to use the headset and controllers by trying out:

- First Steps
- First Encounters
- First Hand



Image Source: https://www.meta.com/quest/quest-3/



Image Source: https://www.meta.com/quest/quest-3/



Image Source: https://www.meta.com/quest/quest-3/

## YouTube VR

Apart from all the immersive applications and experiences that are preloaded on the headset, you can scroll down in the main library and click on "YouTube VR". Here, you will find many 360-degree videos that simulate a range of disabilities and will help you empathise with the experiences of others.



Scroll through the "Main Library" and click on "YouTube VR".



2 To access the "Accounts and Settings", select the green icon with the letter "e".





In the "Menu", select "Watch Later", and you will find many engaging 360 videos.



### Reference

- 1. Meta. (2024). *Getting started with Meta Quest 3*. https://www.meta.com/help/quest/articles/getting-started/getting-started-with-quest-3/
- 2. Meta. (n.d.). Health And Safety Warnings. https://www.meta.com/legal/quest/health-and-safety-warnings/

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## Empathy Tool Library

### **Digital Version**



### **Project Website**



