

Virtual Reality Augmenting Behavioral Health Services for People with Intellectual and Developmental Disabilities



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Presenting for NY Alliance





<https://drive.google.com/file/d/13g8kNVex2IK04ZNj19LwDG2cbsMQIIDA/view>

Why Virtual Reality Therapy for People with ID/DD?



- Immersive virtual environments
- Helps clients visualize
- Adaptable to each person
- Interactive with the therapist in session
- Less stressful than *in vivo* exposure therapies
- Can support other clinical modalities and interventions
- Biofeedback through skin conductance and heat mapping



[What is a disability?](#)

https://www.youtube.com/watch?v=K6WmGhY8Q4I&feature=emb_logo

Prevalence of Mental Illness for people with ID/DD

- 2012 Census: 1.2 Americans live with a disability (that is less than half of 1% of the US population)
- Psychiatric Disorders appear to be *more common* in people with ID/DD than in the general population.
 - Overall prevalence rates: 15%-30%
- Early studies focused on clinic or institutional populations
- In Society: 2.6% ID have a SUD, general population 9.4%
- Sexual abuse incidents are almost **four times as common** in institutional settings as in the community
- Over **70%** of people with disabilities reported they had been victims of abuse.
- Some disability types had a higher incidence of abuse than others. For example, **74.8%** (mental health conditions); **67.1%** (speech disability); **66.5%** (autism); **62.5%** (an intellectual or developmental disability); **55.2%** (mobility disability).
- For people with disabilities, **87.2%** reported verbal-emotional abuse, **50.6%** physical abuse, **41.6%** sexual abuse, **37.3%** neglect, and **31.5%** financial abuse.
- More than **90%** of people with disabilities who were victims of abuse said they had experienced such abuse on multiple occasions. Some **57%** of these victims said they had been victims of abuse on more than 20 occasions, with **46%** saying it had happened too many times for them to even count.

What types of presenting problems can VRT help with?

- Anxiety Based Disorders
- Depression and Mood Based Disorders
- Panic Disorders
- Substance Use Disorders
- Public Speaking
- Sleep Hygiene
- And more!



- Relaxation and Mindfulness
- Exposure: Crowds, Darkness, Medical Appointments, Vaccines, Flying, Driving, Animals
- Attention Training
- Social Skills
- Memory
- Diaphragmatic Breathing
- Progressive Muscle Relaxation
- Imagery

How effective is it?



- <https://drive.google.com/file/d/12CYD4tNoFyvCZA5xPIYfVVUoq4tAtvoj/view>

Boost your mental wellbeing with virtual reality



(a)



FAQs about Virtual Reality (VR)

Is VR more effective than traditional techniques?

More than a decade of controlled studies have shown the effectiveness and efficiency of VR-based therapies intervention on mental disorders, especially anxiety and specific phobias. Its level of clinical effectiveness is higher than the traditional imagination exposure technique. It is also as effective as in vivo exposure. (Opris et al., 2012; Meyerbröker et al., 2010; Parsons et al., 2008; Emmelkamp et al., 2002). However, using VR does not mean completely forgoing other approaches. Quite the contrary, Both VR technology and cognitive behavioral therapy (CBT) can enhance the effects of standard intervention.

Can I expect quick results with VR?

Results obtained from any line of therapy will differ from one case to the next. Depending on the condition that you have, you may need more or less VR therapy sessions. Your therapist will help determine the number of sessions. In comparison with the traditional imaginative techniques, VR delivers quicker results because not everybody has the same imagination capacity. Also, VR reduces logistic time and costs associated with in vivo exposure. This means that you don't need to step out of your therapist' office to be exposed to the stimuli of which you are afraid. (Maldonado, 2002).

Is VR like playing a video game?

Yes and no. On one hand, like video games, VR finds stronger appeal in people who engage their imagination to the furthest extent possible during sessions. Using your imagination can help foster a sense of immersion. VR has been shown to workwell with children for just this reason. On the other hand, though, VR is different from video games in that its unique technological capacity helps enhance the sense of presence. In other words, when you use this technology, your ability to distinguish between the virtual world and reality could become negligible (Jose Gutiérrez Maldonado, 2002).

Can VR be a Substitute for Real-Life Experiences?

Various studies have shown that VR can promote a sense of presence and trigger bodily responses similar to in vivo exposure (Morina, N. et al., 2015). These reactions will help your therapist to work through them in sessions without the need for you to be placed in or exposed to an actual, high-risk scenario.

Why Virtual Reality?

Many people with mental conditions tend to prefer VR interventions because in vivo exposure can be too intense (García-Palacios et al., 2007). VR gives your therapist more control of the environment to which you are exposed, so that the level of exposure adjusts to and fits your needs and the intervention process. Also, VR therapy respects your confidentiality, being that you won't need to leave your therapist's office like in cases of real-life exposure.



Conducting Sessions

- Start with an introduction. Set the tone and intention for the session
- Conduct a deep breathing activity before introducing the environment
- End with a calming intervention. This could be relaxation on VR or in session with the therapist
- VRT should be no more than 20 minutes
- Rest of session is to debrief, work through the tough part, recognize successful areas and plan the next session
- Consider utilizing with other therapies

Step-by-step how a VR session works

1

Your therapist will prepare the VR headset, headphones and electrodermal response sensor.



2

The velcro sensors in the electrodermal response sensor will be positioned on your left hand's index and middle fingers.



3

When you put on the headset, you'll see a code appear. When you do, let your therapist know. This code will help your therapist pair the VR headset with the platform.



4

You'll now see a field. Please wait for your therapist to prepare the following scene.



5

At this point, your virtual session has begun and your therapist will begin to guide you through the VR scene. During the session, your therapist may ask you to define your level of anxiety using a scale from 1 to 10.



6

VR will transport you to a virtual environment. Part of its success is attributable to your ability to let yourself go and be both immersed and present in the experience. If you do that, you'll have a more vivid VR session that generates emotions and thoughts and helps your therapist support you.



A few best practices:

- Research genetic disorders you may be unfamiliar with!
- Consider *impairment* and *impact* on the person
- When you can, consider collateral data from support systems. This may include baseline behavior and observed changes in behavior.
- Plan for additional sessions or longer intake
- Explain the process; check in for comprehension
- Explain the apparatus and what to expect
- Consider socially desirable responses
- Consider the environment, lay out of your office, sensory needs of the client; consider processing time
- Repeat, review each session
- Give permission to correct you and model phrasing

Setting up your Counseling Space

- Reduce noise and stimulation as much as possible
- Give physical space
- Explain the process and check for comprehension
 - Use first, then statements
- Check in how the person keeps track of appointments. Don't assume they will write down (e.g. how will you remember our next session?)
- Do you ask to close the door?
- Space the chairs and coffee table
- Do you have visuals?



How can this augment other therapeutic interventions

- Learn how feelings are experienced in the body
- Process through immediate reactions
- Build coping skills and learn to trust their reactions
- Gain practice applying them
- Homework between sessions
- Utilize with other visuals, social stories, decisional webs, power cards, etc!

Practice Mindfulness with Virtual Reality



Outcomes



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Description 

Mindful ex 1 --Attentional Focus for 5 minutes. Chatting at a Bar (Social Anxiety)--Friendly setting, asking about the current conversation, interest in such topics, and how to add to it or change the subject. Exposure to awkward silence.

Conclusions 

"Helped a little with conversation starting but was generic." Emily started thinking about her work and CDA after the mindfulness session, rated neutral. When beginning, Emily was slightly stressed over conversations and worried they will fight / argue.

Date

09:55 17/11/21

Duration

00:24:16

 Delete report



Time range: 00:05:43 - 00:05:43



Time range: 00:00:44 - 00:02:18



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Time range: 00:00:44 - 00:02:18



Time range: 00:02:18 - 00:04:55

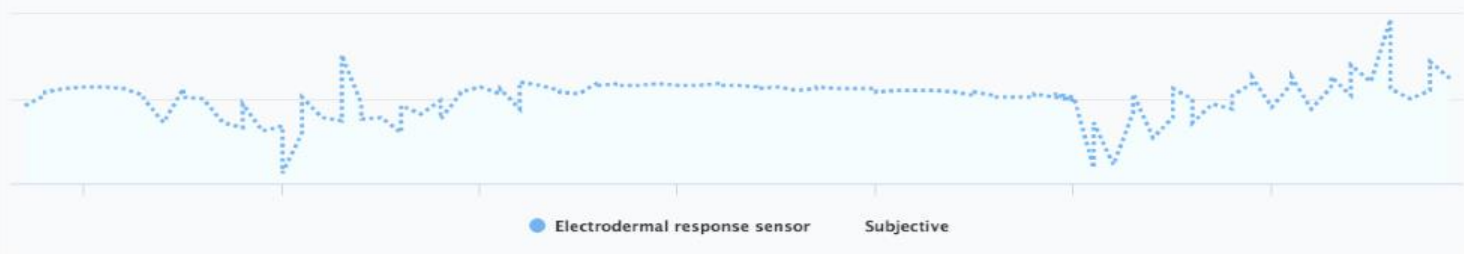


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ED Wednesday, November 3, 2021 10:31 AM

ANXIETY LEVEL



Patient

Emily Durkin

Description

Mindfulness start 1 min

Conclusions

Timeline

Heatmaps

Filter by:

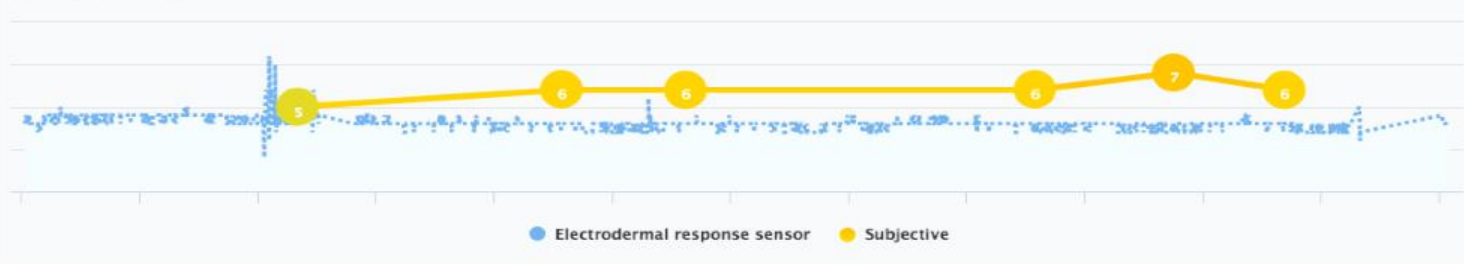
Event type	Esense	Time
Start environment Swimming with dolphins		00:00



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ED VR Session 1: Wednesday, November 17, 2021 9:55 AM

ANXIETY LEVEL



Patient

Emily Durkin

Description

Mindful ex 1 --Attentional Focus for 5 minutes. Chatting at a Bar (Social Anxiety)--Friendly setting, asking about the current conversation, interest in such topics, and how to add to it or change the subject. Exposure to awkward silence.

Timeline

Heatmaps

Filter by: All ▾

Event type	Esense	Time
Start environment Attentional focus		00:00
Audio guide Female	0.419	00:37

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Date

09:55 17/11/21

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00:24:16

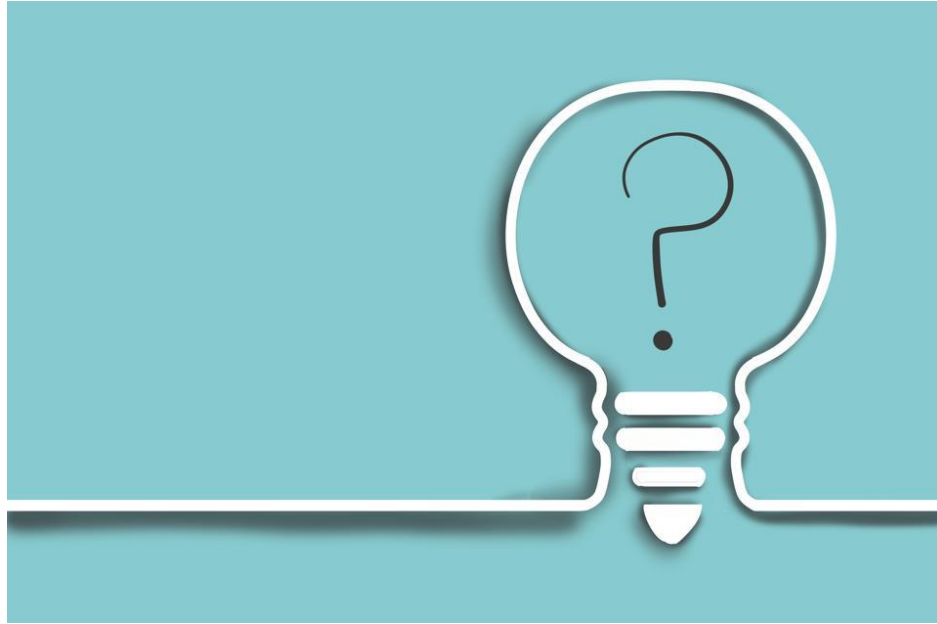
Delete report

Filter by: All

Event type	Esense	Time
Looking at leaves falling	0.419	02:44
Value of subjective anxiety 5	0.418	04:45
Pause	0.419	04:55
Environment finished Attentional focus	0.419	05:06
Start environment Chatting at the bar	0.419	05:38
Play	0.418	06:22
There is talk about the travels	0.418	06:26
What are they talking about?	0.418	07:36
Is this a topic you'd like to join in on?	0.417	08:05



Thoughts, Questions, Thank you!



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-
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