Virtual Reality Therapy
Environments and Applications Catalogue
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Psious’ virtual environments

Psious makes therapy faster and more effective, increasing the patient’s motivation and the therapist’s reputation.

Virtual Reality manages to transport the patient to a far more real environment, making them live a more vivid, intense and immersive experience inside the safety and confidentiality of the consultation.

Inside the online Psious platform, one will be able to access all environments and available videos, which are classified by type of treatment and will allow the patient to progress in their therapy.

The therapeutic modules allow an entire immersion, complete control of the exposure parameters and the possibility to repeat scenes. Also, together with the biofeedback sensor, the professional will be able to monitor the psychological variables in a more objective way.

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Relaxation

Virtual Reality Environments

Jacobson Relaxation
Muscular relaxation exercise. The patient will go over a tension-relaxation balance, ordered in muscular groups: arms, neck, face, trunk and legs.

Under the sea
An environment that reproduces the sensation of being submerged under the sea and will let you experiment different relaxing feelings.

Island
A walk along a paradisiac island where the patient will relax with the sound of the sea or just by looking at a waterfall. Besides the walk, they can stop at any space to carry out an exercise.

Diaphragmatic respiration under the sea
Diaphragmatic respiration exercise with an auditory guide and visual support, which will determine the respiration pattern.

Diaphragmatic respiration on a prairie
Diaphragmatic respiration exercise with an auditory guide and visual support, which will determine the respiration pattern.

Videos and virtual environments that move the patient to a calm and peaceful place. There, he/she will be able to feel serenity by being under the sea, on an island, on a meadow, etc. and at the same time practice different relaxation exercises.

360 Videos
Mindfulness

Virtual environments made to train and practice exercises on focusing attention, emotional regulation and creation of positive states.

**Conscious walk**
Environments of a meadow with full attention exercises.
Duration: 15 minutes. Level: Beginner

**Body Scan**
Mental journey of the whole body. Based on a mindfulness exercise, it’s also possible to carry out Relaxation through induction inside the Jacobson relaxation program.
Duration: 5 minutes. Level: Beginner-intermediate (depending on the variable settings)

**Spring Summer**
Journey with full-attention exercises in two places that correspond to two different seasons: spring and summer.
Duration: 22 minutes. Level: Beginner.
**Fear of Flying**

It allows you to carry out as many flights as necessary so the patient gets used to the anxiety they experience when seeing the environment. At the same time, exposure to all situations that can cause fear will be able to be repeated.

It will start at the patient’s house, then on the way to the airport and it will end inside the airplane.

**At home**
Aimed at people who need anticipatory anxiety treatment. The patient will find him/herself at home. He/she is about to leave the house and will wait for the cab to arrive.

**Go to the airport**
The patient is sitting down inside the cab and is on his/her way to the terminal.

**Boarding gate**
The patient is waiting by the boarding gate waiting to be called. The hostess will ask him/her for the boarding card and walk through the jet way to get to the plane.

**Plane**
The patient will sit down in the plane. After the security instructions, the plane takes off, carries out the flight (with or without turbulences) and finally lands.

**Virtual Reality Environments**

- At home
- Go to the airport
- Boarding gate
- Plane
Fear of Driving

Virtual environments to confront the patient against driving situations through two different sceneries: A road and a city.

**Highway**
This environment allows you to drive on a highway with three lanes, curves, tunnels and bridges.

**City**
Driving through the city with traffic lights, traffic jams and lots of cars.
Agoraphobia

Virtual Reality Environments

Virtual environments to work on the fear of being in places or situations where it could be difficult or embarrassing to leave, or places where there might not be enough help if they suffer a panic attack or similar symptoms.

Square
A great square will transport us to an open space. The amount of people in the square can be controlled to carry out gradual exposure.

Metro
Interactive environment inside the subway which includes the access to the platform, the trip inside the train’s car and the exit to the outside. The amount of people or / and problems like a breakdown can be controlled.

360 Videos

Way to the mall
Bottom floor at an open mall
Elevator in a mall
Way to a closed mall

Videos

Busy market
Stroll by the port
Subway in rush hour
Rambla with a lot of people
Test Anxiety

This virtual environment has been designed to work on test anxiety in high school years.

High School

Environment that simulates a high school and allows to work on three key moments: Waiting before the exam, entering the classroom and doing the exam. It was made especially for teenagers with ages between 14 and 17.
**Claustrophobia**

Virtual Reality Environments

**Big elevator**
The patient finds him/herself inside the elevator. He/she can enter or leave the elevator as many times as he/she wants, this environment allows the presence or the absence of people, as well as the possibility of having a breakdown inside the elevator.

**Magnetic Resonance Imaging (MRI)**
The patient is at the waiting room of a hospital, where he/she will take a MRI test. An ideal environment for the patient to train and to take the test successfully.

**Small elevator**
The patient is inside an elevator. The elevator can go to different floors and as soon as the patient has arrived to the desired floor, he/she can exit the elevator.

**Room**
Going down with an elevator to the cellar, the patient walks down a narrow corridor until he/she gets to a room where the distance between the walls in the room, etc.

Virtual reality environments for the treatment of fear of closed spaces: finding him/herself in a situation where the patient could fear the fact of being shut in, or places where escaping could be difficult.

These environments allow the standardization and the total control over the exposure settings. (Amount of people, elevator breakdown, distance between the walls in the room, etc.)

**Videos**

Elevator
Public Speaking

These environments allow you to choose the amount of people, the different audience attitudes or even incorporate distractors during the exposure.

**Audience**
The patient must give a conference in front of an audience. He/she will have to confront answering questions, clapping and being distracted.

**Auditory**
The patient must give a conference in a big auditory. He/she will have to confront people asking, clapping or distracting him/her.

**The office**
We’re in a meeting room with other people. It can simulate different things: An important meeting, a job interview, an exam, etc.

**Broadcast conference**
The patient will give a conference in a big auditory, the lights will be off and TV cameras will record him/her. The patient will have to confront people asking questions, clapping or other distractions.
Fear of Needles

Virtual environment for the treatment of fear of needles and blood, but also fear of going to hospital.

Waiting room
The patient is at a hospital’s waiting room waiting for the nurse to call him/her. Inside the room various blood draws are carried out.

Additional material
Real medical procedure videos which the patient sees in first person.
Fear of Darkness and Storms

This virtual reality environment has been developed especially for children, it will allow you to evaluate your patients that present fear of darkness and/or storms. In this environment the patient will be able to walk around the house adjusting different variables.

Fear of Darkness and Storms

This night-time virtual environment allows walking around a house with 5 rooms with different levels of darkness that have been adjusted previously. Weather conditions are also adjustable.

With the cotherapist activated, the environment will introduce Psicobot, a virtual assistant designed for the intervention with children.
Acrophobia

Virtual Reality Environments

New York
The patient is at the top of one of the tallest buildings in New York.

Barcelona
A virtual building in Barcelona will transport us to its rooftop.

Elevator
The patient is inside a glass elevator outside a building. The height can be gradually increased as they reach the top.

Videos

Ferris wheel in the city
Glass elevator inside
Glass elevator outside
Ferris wheel at a theme park

Two virtual buildings that allow you to carry out a gradual exposure to overcome fear of heights adjusting the height and proximity to the edge.
Fear of Animals

Virtual Reality Environments

Augmented Reality

Videos

Videos, virtual and real environments to treat the most common fears of animals: pigeons, dogs, bugs and cats.

Especially useful due to its high control over the exposure adjustments.

Room with spiders
Exposure to spiders inside a terrarium or walking on a table. The size of the spiders and the distance between them and the patient can be adjusted.

Room with cockroaches
Exposure to cockroaches inside a terrarium or walking on a table. The size of the cockroaches and the distance between them and the patient can be adjusted.

Spiders
Cockroaches

Calm dog
Rottweiler
Pigeons from a short distance
Cat
Generalized Anxiety

Psious has two virtual environments especially designed for GAD: Home and subway.

All five environments have been designed to develop anxiety reactions in the patient.

Virtual Reality Environments

Worrying about relatives
There's a strong thunderstorm and the patient is at home in his/her dining room, waiting for a relative to come back from home. He/she is watching the news on TV where they explain to take precautions when driving.

Worrying about babies
The patient is at home in his/her dining room watching a talk show about baby care, and at the same time hears his/her baby cry through the baby monitor.

Worrying about children
The patient is at home in his/her dining room watching a program on whether to leave your children with other people or not. Suddenly they call from school asking the patient to call back immediately.

Worrying about illnesses
The patient is at home in his/her dining room watching a program on illnesses like cancer, blood pressure or heart attacks.

Worrying about work
The patient is in the subway to go to work. There's a breakdown and they have to stay still a few minutes. The patient hears a conversation about getting late to work.
Social Anxiety

Virtual environments for the treatment of social anxiety.

Group in a bar
In this environment, the patient is sitting down at a table in a bar with other colleagues and they are having an informal conversation.

Virtual Reality Environments
PTSD

Post-traumatic stress disorder

MVA (motor vehicle accident)-related PTSD

All of the Fear of Driving Environments:
Allows the recreation of a car ride both as driver and/or passenger.

PTSD due to sexual assault, fear of staying alone with men

It’s possible to set up the environment so that the patient shares the elevator ride with a group of men (or just one). It’s possible to set the darkness of the scene to the maximum. This, along with the presence of many men in the scene, allows the recreation and exposure of a situation perceived as threatening.

PTSD due to house burglary/assault

House (at night):
This scene allows exposing the patient to a context typically related to a situation of house burglary/assault.
Obsessive-compulsive disorder

Physical aggression
In this environment, some avatars ("people") will be having a conversation close to the patient, which may trigger the thoughts of aggression.

Hygiene
This environment can be used to expose the patient to a dirty place. The patient can stop in the middle of the hallway and you may ask him to look and touch.

Impulse or urge to jump from heights
This environment is ideal to expose the patient to a situation that triggers obsessive thoughts of jumping or pushing someone from the top of a building.

Reckless/lethal driving OCD
These environments are useful for the training of the control over the dangerous compulsions patients can commit when driving with this type of OCD.
ADHD
Attention Deficit and Hyperactivity Disorder

Mindfulness
These environments can help to improve attention and decrease hyperactivity, respectively.

Relaxation
It is possible to configure this environment so that the insects remain outside the terrarium, which helps in attention improving tasks, since the stimuli are eye-catching and intermittent.

Distraction
Environment for the distraction of patients suffering from chronic and acute pain.

Mood Disorders

Major Depression and Dysthymia

Mindfulness
Some of the Mindfulness and Relaxation environments:
When used appropriately, these environments can help to increase activation levels and optimism.
Insomnia

You can treat Insomnia with different environments that the platform offers:

**All of the Relaxation environments:**
Useful to soothe the nerves and quiet the mind, which prepares the body to fall asleep.

**All of the controlled breathing environments:**
In these environments, it is important to have an exhalation intensity higher than inhalation, which will promote hypercapnia and helps to fall asleep.

**All Relaxation and Mindfulness Environments:**
The visual elements of these environments help to allow the practice and refocus of the attention, which in turns helps to handle the intrusive thoughts better.
Social and Communication Skills Training

Office:
It can be useful for simulating work meetings, and the practice of assertiveness techniques. For example, you can simulate that the patient has to say to a coworker what aspects to improve in his/her work.

Office:
It may be helpful for social and communications skills training, useful for a future job interview, for example. It’s more realistic if the configuration is set so only one other person is in the room.

Feelings of persecution, paranoia

Bar
By doing the cognitive therapy during the exposure to social situations the patient can learn and interpret the situation as a non-threatening one. In order to use Psious in psychotic patients, you would need to receive a specific training.

Metro
By doing the cognitive therapy during the exposure to social situations the patient can learn and interpret the situation as a non-threatening one. In order to use Psious in psychotic patients, you would need to receive a specific training.
Alcohol Addiction

Bar:
This environment is useful to work on the anxiety generated by being exposed to situations that can generate craving (i.e. the bar and seeing how others drink beer).

Hypochondria Health Anxiety

Worrying about illness (from Generalized Anxiety):
Trains the patient in tolerating this type of situation.

Waiting Room (from Fear of needles):
This environment allows the exposure to a situation typically feared by hypochondriacs: waiting the diagnosis/medical intervention.

Waiting Room (of the MRI environment):
Similar to the previous environment, this reproduces a situation where the patient is waiting for a diagnosis/medical intervention.
Sports Training

All Relaxation and Mindfulness environments:
Can be used to enhance concentration, which is useful in the practice of sports.

Pain Reduction Oncologic Patients

All of the Relaxation and Mindfulness environments:
Virtual reality has been shown to have an analgesic effect because it’s a good distractor. Also, the mindfulness environments may help to focus the attention on the virtual stimuli instead of the pain.

Waiting Room from the Fear of Needles or MRI environment:
These environments are useful to work on the anticipatory anxiety that can occur before chemotherapy sessions.
Specific Phobias

Situational phobia to the sea/water

Under the sea:
Allows exposure to an underwater environment with its fauna/flora and characteristic sounds.

Island:
Several spaces in this environment can be used for the exposure to situations that involve getting into the water (the beach— to face the sea, the platform— to get ready to jump into the water, etc.).

Situational phobia to storms
In this environment, both the rain and storm environment may be applied. Depending of the item of the hierarchy you are working on, activate the rain (lower hierarchy-easier) or storm variable (higher hierarchy-more difficult).

Virtual Reality Environments