

Amelia by XRHealth Clinical Case

**Labile Attention And
Focusing Problems
in generalized anxiety and depression**



**Health care professional with expertise in VR:
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Patient

Joan, 58-year-old male with a primary education.

Good family relationship, married for 30 years with two daughters (24 and 20 years old).

Pre-retired forest ranger (for the past 2 years). Works with his wife in an orchard (when he started the treatment he could not do it because of fatigue).

Mentions the trigger factor which affected his mood were family problems. After the first session, family problems, economic problems and the feeling of loss that leads to stress were identified.

Reference diagnosis.

There is no relevant medical history, although he has experienced some **depressive symptoms** previously (not as severe as the current one). In addition, he reports a decline in his state of health.

Psychiatric history of depression in family members.

He refers to a lack of joy for life, flattened state, loss of illusion for life → relates it to the medication he was taking.

Suicidal ideation without planning (pessimism, hopelessness, sadness).

Evident patterns of EVITATION (locus of internal control): he stops working in the garden, loss of social relationships, rumination and guilt.

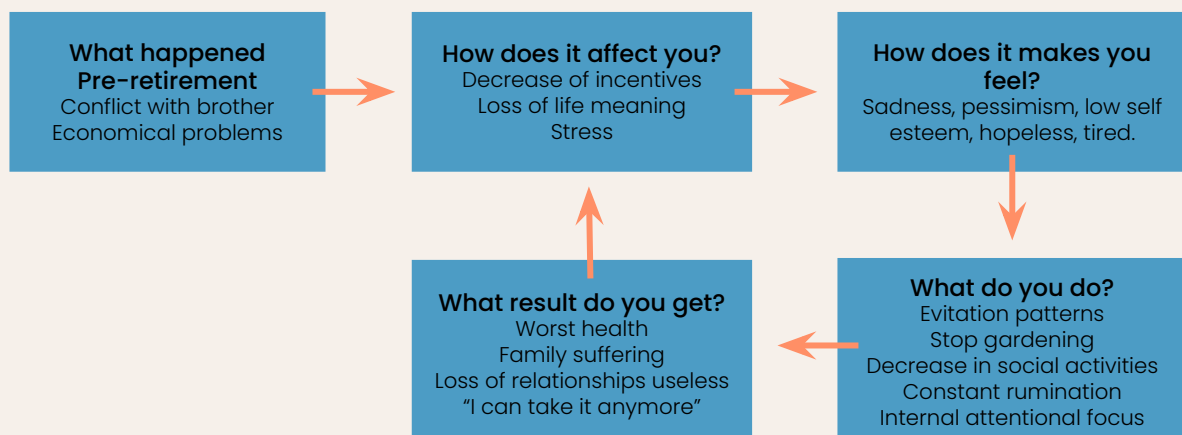
Objectives

Objectives to be achieved

Emotional regulation and attentional control.

Methodology

1. Create a good therapeutic alliance (a long time).
2. To see things from a distance and become aware of everyday life.
3. Personal and family psychoeducation (family as a positive accomplice).
4. Reduction of depressive and anxious response.
5. Cognitive restructuring of irrational beliefs.
6. Promotion of domain, health and pleasure activities → Behavioral activation (very important).
7. Gradual Exposure: Negotiate activities to be performed (once a week having to work in a social canteen).
8. Behavioral Experiments: Become aware of the acts he performs (Do this, look at this, try this...).
9. Reinforcement of executive attention (Psious). The patient's attention control facilitates insight into his problem-solving ability.
 - Self Instructions **"PA RE PI A"**(syllables for Spanish words: Stop - Breathe - Think - Act): Training word to mark action sequence in the presence of a depressive or anxious state.



Development

The sessions were established as follows:

11 sessions escalated in time (Starting with 2 sessions per week for 3 weeks, then 1 and after the 11 sessions some for reinforcement).

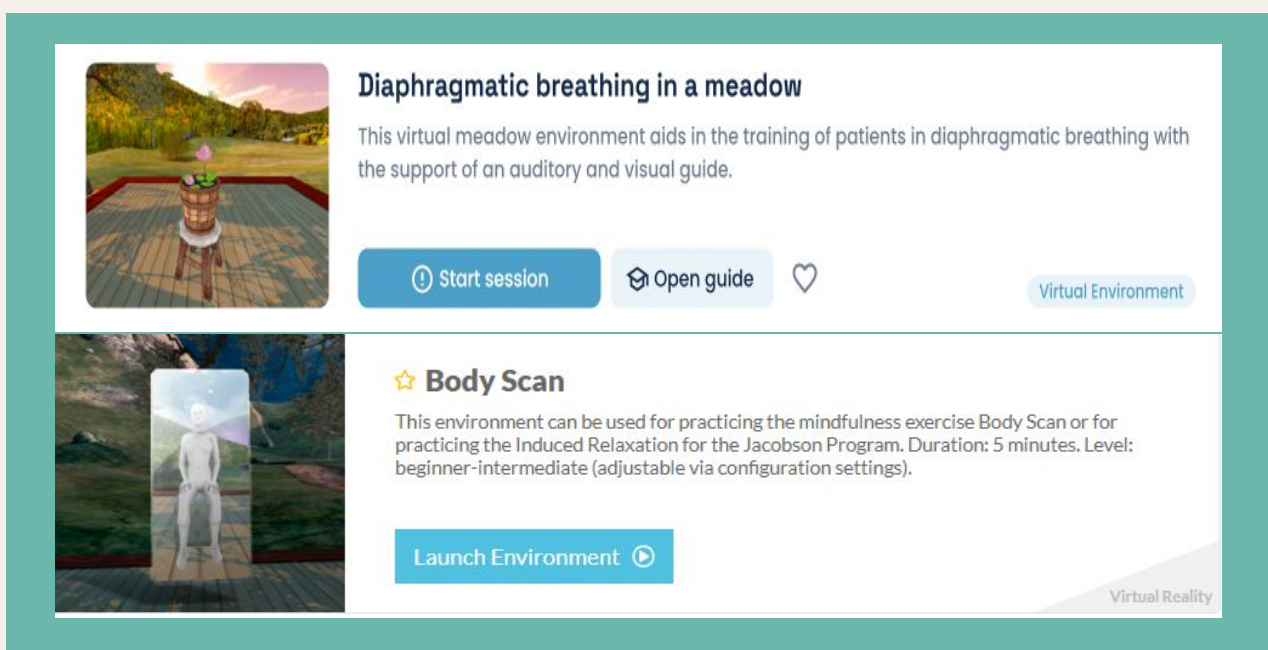
Training in "Jacobson's relaxation techniques" (without VR).

Using examples of "lucky and unlucky people" to raise awareness of the importance of attitude and focusing attention to achieve results.

Incorporation of Amelia by XRHealth to support emotional and attentional regulation (short sessions to avoid fatigue), alternating with traditional therapy.

Initiation of relaxation techniques (Jacobson to reinforce traditional method).

Diaphragmatic breathing technique and body scan (offer a shallower approach than mindfulness).



The screenshot displays a user interface for a VR application. It features two main sections, each with a thumbnail image, a title, a description, and interactive buttons.

Diaphragmatic breathing in a meadow
This virtual meadow environment aids in the training of patients in diaphragmatic breathing with the support of an auditory and visual guide.
Buttons: Start session, Open guide, Virtual Environment

Body Scan
This environment can be used for practicing the mindfulness exercise Body Scan or for practicing the Induced Relaxation for the Jacobson Program. Duration: 5 minutes. Level: beginner-intermediate (adjustable via configuration settings).
Button: Launch Environment
Virtual Reality

Development

Use of **PA-RE-PI-A** to become aware of what the patient does and feels at the moment of focalizing his attention.

Using environments which contain a lot of stimuli for the patient to redirect his attention based on the instructions given to him (interspersing the descriptions with the interpretations).

Environments: "Square", "Mall" and "Plane" (with many different stimuli).

Initially a description is requested based on audio sense and sights. The aim is to make the patient aware of the neutrality of his state of mind via the pauses between one activity and another. For example, shifting focus from describing the buildings to focusing on the actions performed by the avatars within the environment.



Results

VR turned out to be **a great therapeutic adherence tool**, especially for attentional regulation, by allowing the use of different environments (without the need to be labeled for that specific disorder).

This variability of environments **makes it easier for the patient** to comment and elaborate on aspects related to his emotions when making attentional changes.



amelia
by XRHealth