

Amelia by XRHealth Clinical Case

**Agoraphobia Case (Barlow's Unified
Protocol)**



**Health care professional with expertise in VR:
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Patient

Maria, 50 years old. Married with two children. Degree in Economics.

She is the second-last of 7 siblings (5 are women with anxiety disorders).

She works as a civil servant (In a building with 21 floors, she works on the third floor).

Good family relations, upper-middle class.

A person of integrity, personal ethics and clear values, seeking to keep control.

Reason for consultation: Fear of flying → in June has a family trip.

Reference diagnosis

Background:

- **Personal:** Disciplined, responsible and controlling and disgusted by cats and dogs .
- **Medical:** Endometriosis, spine deviation, contractures and menstrual pains.
- **Familiar:** her mother was, unstable, gifted, frustrated, ambivalent and with airplane phobia (died 5 years ago) and her father (died 2 years ago with no psychopathological history).

Related to the reason for consultation:

- 16 years old first flight with the school, she didn't like it but there were no incidents.
- 26 years old, suffered "tornadoes" while in a small plane, start of AT.
- 46 years old, travels to London with a lot of tension.
- 48 years old, AT gets worse and coinciding with the Germanwings accident.
- After evaluation (interview, functional analysis, ATAVA, DSM-5) is oriented to the **diagnosis of agoraphobia** .

Evaluation

- ADIS-IV Interview: Describes four crises in the last year. Two of them had occurred in the last three months (Circumscribed to frightened situations when she can't avoid them) → **There are no more crises due to the evitative behaviour.**
- Agoraphobic cognitive questionnaire: Deadaptative thoughts during anxious situations , **“I'll have a heart attack and I'll paralyzed by fear”.**
- Body sensations questionnaire: body sensations appear; **dizziness, shortness of breath, chest pressure, and nauseas.**
- Mobility inventory (When she's alone): Fear of **high places, airplane, parties/social reunions, high floors elevators, metro, train, boat and driving.**

SCL-50: A psychopathological risk index of 96 is described, although nothing is mentioned in the reason for consultation.

ATAVA: Initially there are values of 113 before therapy, having 49 items valued of 0(no discomfort) - 4(very high discomfort).



Objectives

Objectives to be achieved.

Accept and tolerate a full range of emotions ("feel the fear that I don't allow myself to feel"). Self-regulation of emotions and thoughts.

Face without problems the situations that produce fear.

Evitative Behaviour: escape from the feared situation or avoid it. Avoids going to the balcony, avoids getting in the metro if there are a lot of people.

Suppression (Cognitive evitation): Negation, justification or forgetfulness.

Compensatory insurance strategies: To protect herself from the content of the schemes (try to be perfect and control the situations and be excessively responsible), gum, water, Biodepresan.

Methodology. Transdiagnostic treatment (Barlow unified protocol)

Characteristics of the treatment protocol

Centers in the common factors of emotional disorders

(The ones with a higher prevalence in our society).

- High response rate
- Triple weakness:
 - **Biology**: Temperamental structure.
 - **General psychology**: Early experiences, parenting styles and beliefs.
 - **Specific Psychology**: Learning experiences associated with anxiety on specific internal objects.



Development

The 18 sessions were organized in 8 modules during 5 months (! In each session the homework are revised) as follows:

- **Module 1:** Motivation and Decisional Balance. → why does she conduct herself in certain ways, and what will be achieved by changing it.

There are concerns about her child (35% handicapped, 13 years old) who is beginning to lower his performance at school and isolating himself. There are also concerns about the stability of the building she works in against the wind. → Assertiveness work to express doubts.

	Benefits	Costs
Change	Be able to be in elevators, terrace, metro... Personal satisfaction and be able to feel stronger	Time, effort and therapy economic cost...
Keep the same	Get to know the symptoms be familiarized. Be able to live.	Living limited, not being able to travel in public transport..

Tasks: Try to contact the architect for information on the effects the wind has on the building and seek information on the trip to Paris to increase her motivation.

Module 2: Psychoeducation → Understand what is happening to her, compare the unadaptive strategies that she's performing with the adaptive ones.

Tasks: Contact the architect and record emotional, personal and behavioural experiences at least once a week.

Development

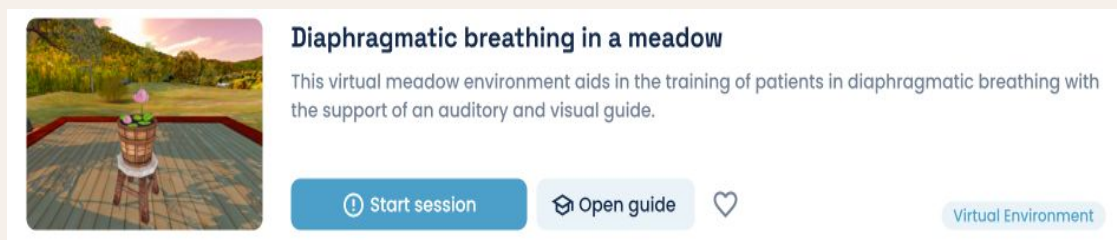
- **Module 3:** Observing the emotional experience without judging → Be aware of her emotions and actions.

Beginning of mindfulness and diaphragmatic breathing, becoming aware of emotions and actions, the metaphor of quicksand will be applied (the more you try to get out of worries the more you sink).

Objective: OBSERVE - DESCRIBE - PARTICIPATE: of thoughts, sensations and behaviours.

"notice how the water falls from the shower"

Tasks: Visit a cardiologist (clarify medical results), contact architect and gather questions to ask her child's tutor about the problems at school.



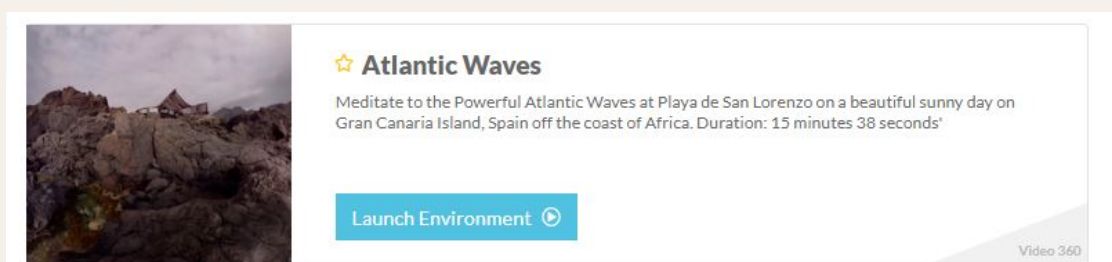
Diaphragmatic breathing in a meadow

This virtual meadow environment aids in the training of patients in diaphragmatic breathing with the support of an auditory and visual guide.

[Start session](#) [Open guide](#) [Virtual Environment](#)

- **Module 4:** Cognitive interpretation and reinterpretation → Decatastrophizing, preventing cognitive leaps into catastrophes to justify avoiding the situation.

Tasks: Contact architect, full consciousness exercises, automatic thought register and its alternatives.



Atlantic Waves

Meditate to the Powerful Atlantic Waves at Playa de San Lorenzo on a beautiful sunny day on Gran Canaria Island, Spain off the coast of Africa. Duration: 15 minutes 38 seconds'

[Launch Environment](#)

Video 360

Development

- **Module 5. First part:** Emotional and Behavioural Avoidance → Learn to identify the unadaptive patterns of response and the effects it has on her life.

Observations: Good response to mindfulness, her anxiety situation is reduced by contacting with the architect. Mentions avoidance in many situations by distracting herself with other activities.

Tasks: Exercises of full attention and registration of ARC (analysis of thoughts and conducts and what are their consequences), these are related to the nuclear, immediate beliefs and their mental schemes (fear of vulnerability, imperfection, excess of control).

Background/ Triggers	Response			Consequences
	Thoughts	Emotions	Behaviour	
Climb a high floor. Physical sensations	I'm going to have an attack..	Fears, Anxiety.	Avoids getting in higher levels, gets quiet..	Relieve discomfort
	Immediate beliefs: I should be capable.. Nuclear Beliefs: I'm not capable..			
	Schemes: Of vulnerability to damage, imperfection..			

- **Second part:** Realization of ICDs → Learn to identify unadaptive behaviors and how to redirect those behaviors.

Tasks: Initiate first exposure to noise until anxiety is reduced, continue with full consciousness exercises and start head movement exercises to get used to the sensation of dizziness.

Development

- **Module 6:** Coexistence and tolerance to physical sensations → Endure unpleasant physical sensations with exercises.

Observations: Tolerates noises and head movements that may produce dizziness

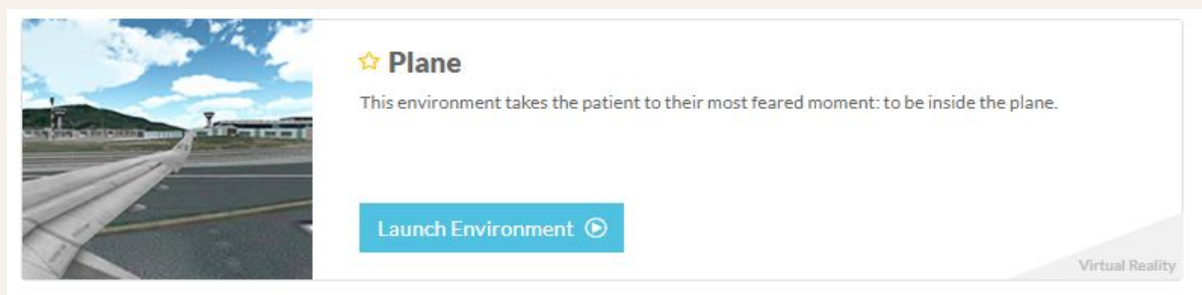
Objective: To search on a hierarchical scale for situations that frighten her and to try to bear them. In therapy a hyperventilation exercise is carried out to check that dizziness does not lead to tachycardias.

Tasks: Full consciousness exercises and in vivo exercises using the metro on tours without a swing.

- **Module 7:** Interoceptive and emotional exposure → Behavioural experiment of hyperventilation and dizziness during consult verify that her interpretations are not catastrophic.

Observations: Hierarchy exposure in the elevator from her work to the terrace of the building (In vivo). Exposures with VR for internal and external situations to become aware of the full experience. Presents a good response to **agoraphobic** scenarios (it's able to enjoy the terrace on a sunny day) and to **fear of flying** (presents more difficulties in the moment of take off with turbulence and in landing).

- **Module 8:** To explain the difference between relapse (going back to the starting point) and slip (having a small regression) so that she doesn't get frustrated.



Results

An evolution in the ATAVA index it's observed. The results show a significant change from initial results of 113 points to a final score of 23.

After therapy, the patient is able to make her trip to Paris without incidents.

At a more generic level it's possible to observe a significant improvement not only towards the fear of flying but also in situations that generated a highly anxiety-related response, in the same way a change in her beliefs and initial schemes it's observed.

"She gets to take the subway without having to carry a bottle of water to drink from".

A key aspect for these results is, firstly, to involve the patient and, secondly, to make a good differentiated diagnosis in order to know which environments are the best for each patient.





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