

COGNITIVE TRAINING THROUGH CHESS (ECAM METHOD)

developed by **Juan Antonio Montero (psychologist)**

presentation by **Rodrigo Barbeito (sociologist)**

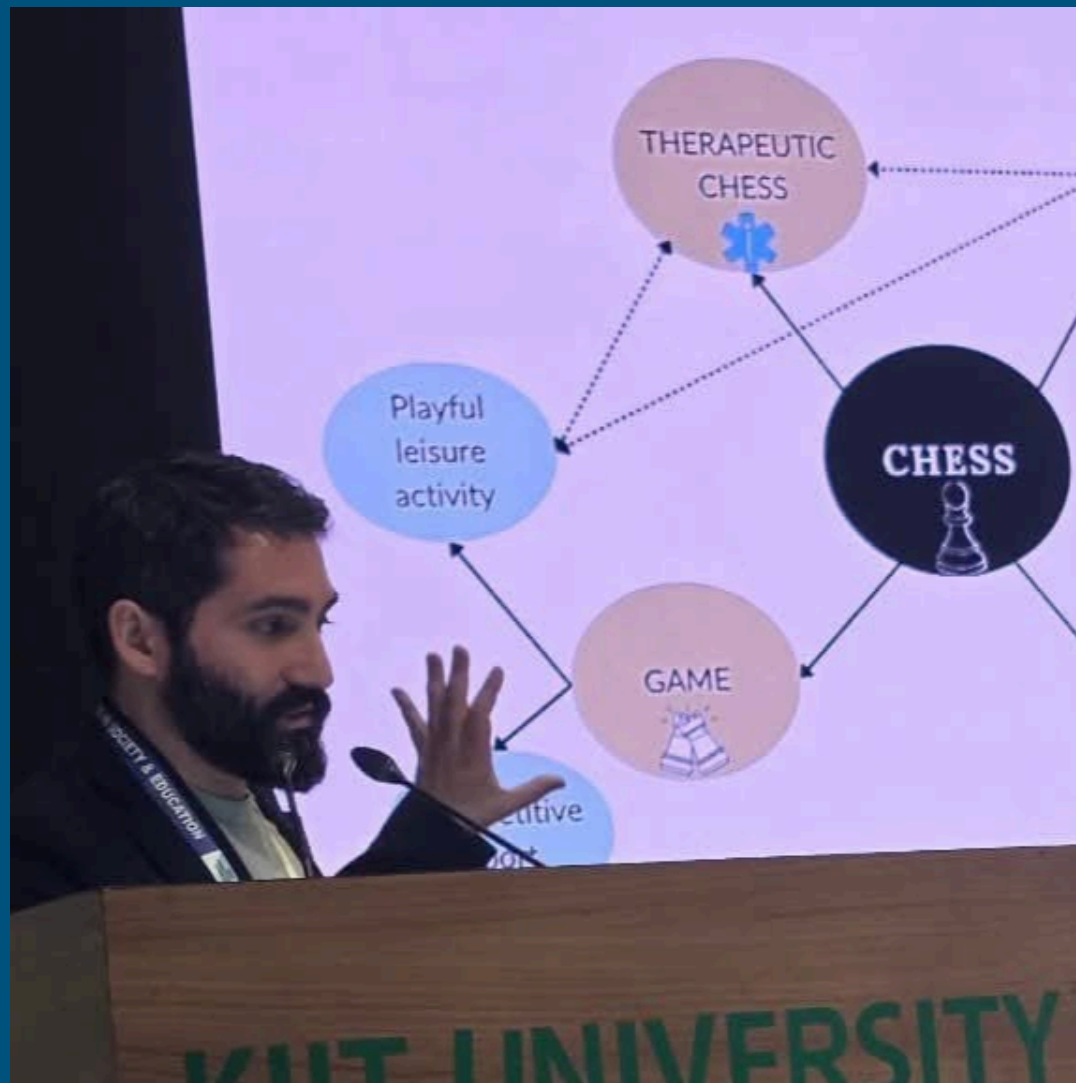
* All images are from initiatives by Club Magic Extremadura

ECAM: THEORETICAL FRAMEWORK



- *Developed by Juan Antonio Montero*
- *Cognitive skills respond positively to consistent **exercise** and repeated **practice***
- *Resources are **based entirely on chess**.*

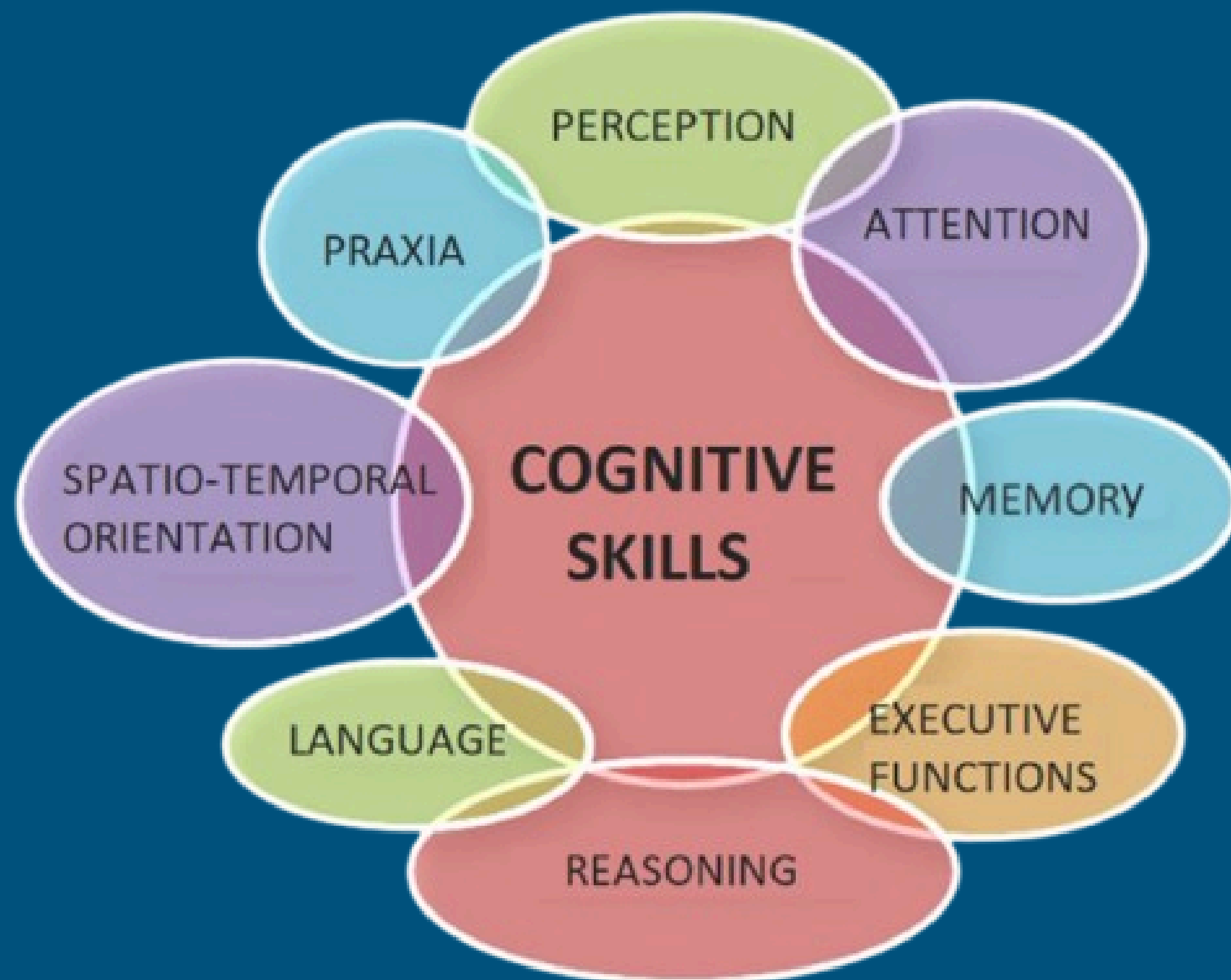
ECAM: OBJECTIVES



- Achieve a Cognitive Training Method that is **easy to apply** due to the simplicity of its postulates, **and cheap to carry out** due to the simplicity of the resources
- Take advantage of the **recreational component** that the game of chess has

ECAM

Cognitive training through chess



- The usual sense of chess exercises is changed.
- For a system relying on the training of specific cognitive functions.



PRACTICAL APPLICATION:

Exercises are created or adapted from chess

The usual sense of chess exercises is changed.



For a system relying on the training of specific cognitive functions.

“classical” chess problem:
White to play and mate in one.



Selective Attention Exercise:
How many pawns of any color are there on white squares?



EXERCISE DESIGN

- Different types created according to different cognitive functions.
- *E.g:* In **perception**: perceptual recognition, visuospatial functions, perceptual discrimination...
- **No chess knowledge required for a large number of exercises.** Also, for many other exercises, only very basic knowledge that is learned in the workshop practice itself



EXERCISE EXAMPLES

- Perception
- Attention
- Memory
- Logical Thinking
- Executive Functions

EXERCISE EXAMPLES: ATTENTION

ATENCIÓN FOCAL. Atención visual a detalles. Descripción.

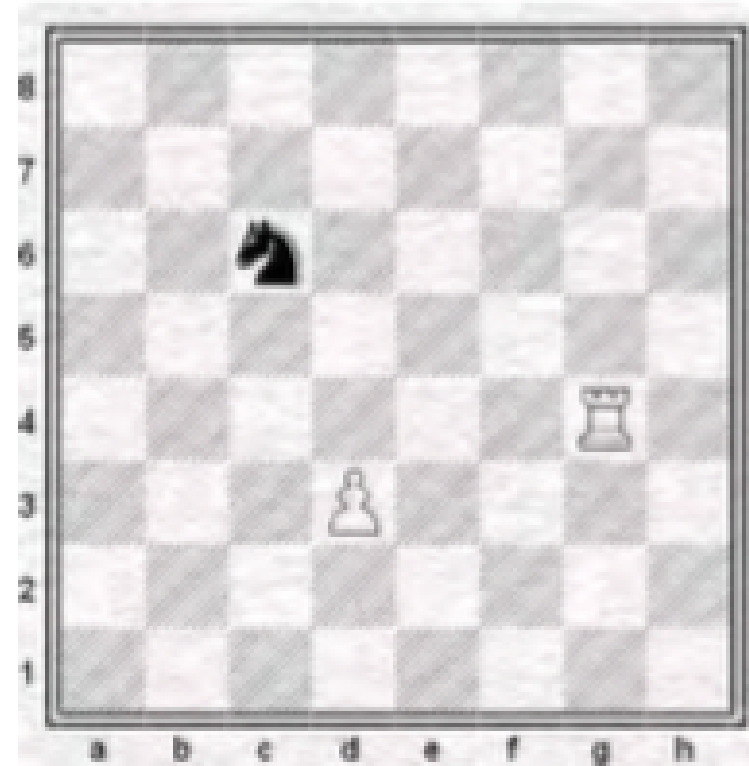
En este ejercicio el alumno tendrá que fijar la atención en el tablero, y al cabo de medio minuto y con el tablero delante, tendrá que describir de forma exhaustiva y pormenorizada todo lo que va observando, desde un punto de vista ajedrecístico o espacial. Formato Tablero mural.

Variación. El monitor puede interrumpir al alumno, pidiéndole que se no mire al tablero en ese momento, y le puede hacer una serie de preguntas sobre la posición. Indicamos varias preguntas a continuación.



- ¿Qué jugador tiene más peones?
- ¿Recuerdas si el jugador negro tenía alfiles?
- ¿Cuántos alfiles tenía el jugador de blancas?
- ¿Recuerdas si están en la misma fila los reyes?
- ¿Recuerdas si hay alguna columna en donde no haya piezas?
- ¿En qué filas están las filas negras?

EXERCISE EXAMPLE: MEMORY



C.A.Magic

- ¿Cuántas piezas había en el tablero?
- ¿Cuántas piezas blancas había?
- ¿De qué color era el caballo?
- ¿Había algún peón?
- ¿Había algún rey?
- ¿Cuántas piezas negras había?
- ¿Había algún alfil?
- ¿De qué color era la torre?

BENEFITS OF USING ECAM

- Very easy to understand.
- Immediate impact (reinforcement).
- Successfully tested in several collectives.
- It is not necessary to know how to play chess.



HOW DO WE APPLY ECAM?

- Individualised within the group
- Awareness of your own thought processes
- Motivational and immediate reinforcement
- Methodology especially attractive to women



HOW DO WE APPLY ECAM?

- **Error-free learning.**
- **Grouping of exercises in homogeneous series**
- **More emphasis on deficit functions according to the collectives**



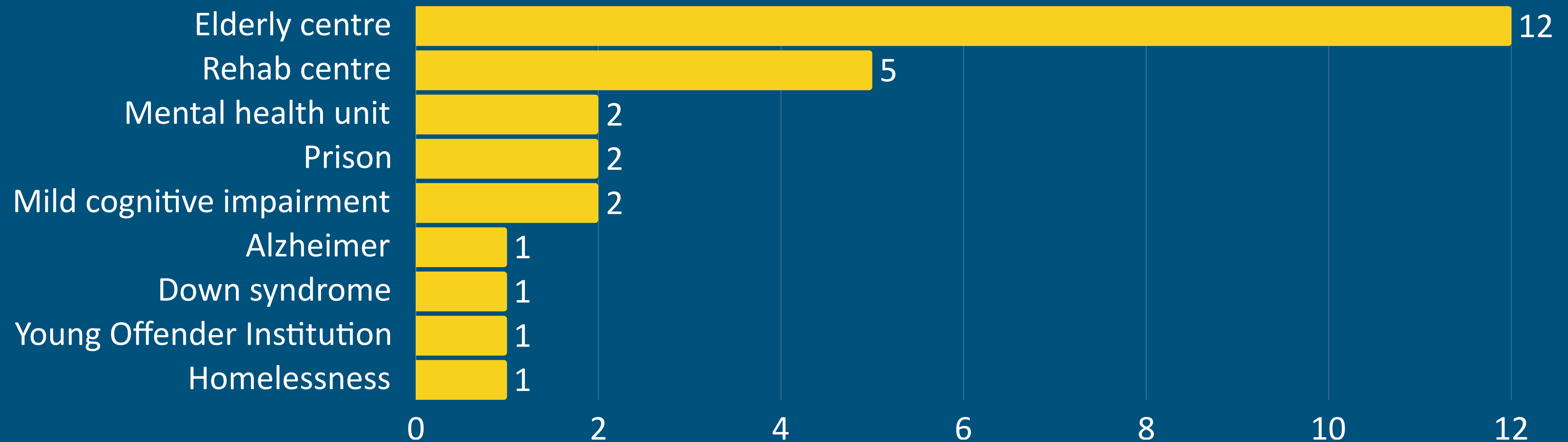
OUR EXPERIENCE AT CLUB MAGIC

Several initiatives with elderly people, prisons, recovery...



Multiple target groups with different capacities and needs

27 active centres



- **+10 different cities and towns in the region of Extremadura**
- **Most of the initiatives +10 years**

OUR METHODOLOGY AS A GUARANTEE OF SUCCESS

- Social chess initiatives often struggle with inclusivity and scalability due to differing skill levels and prior chess knowledge.



- A methodology (ECAM method, created by Juan Antonio Montero) which allows cognitive training. Suitable for different ages and target groups, with no need to know chess.

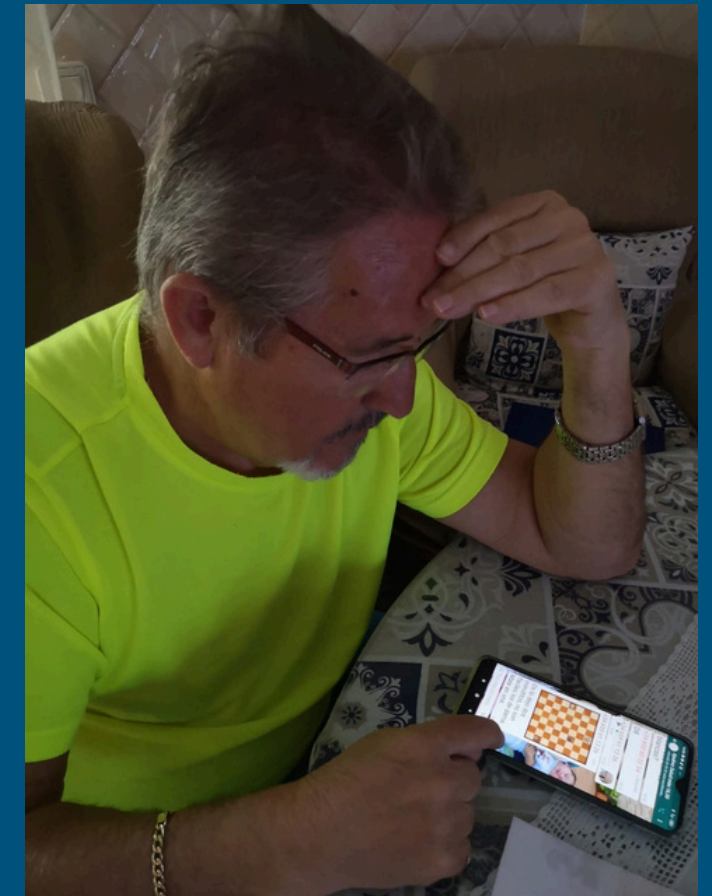
OUR METHODOLOGY AS A GUARANTEE OF SUCCESS

- Covid and the lockdown causes us to see that an app based on ECAM is possible:
- We experiment with WhatsApp

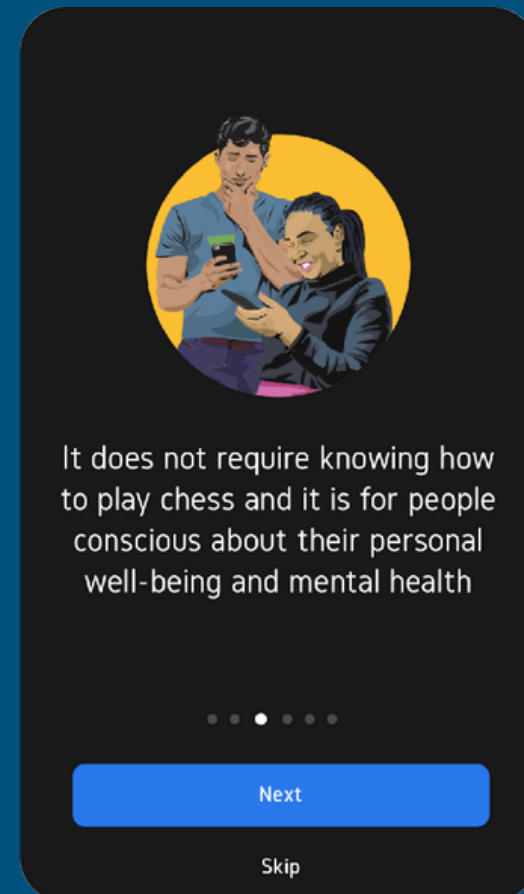
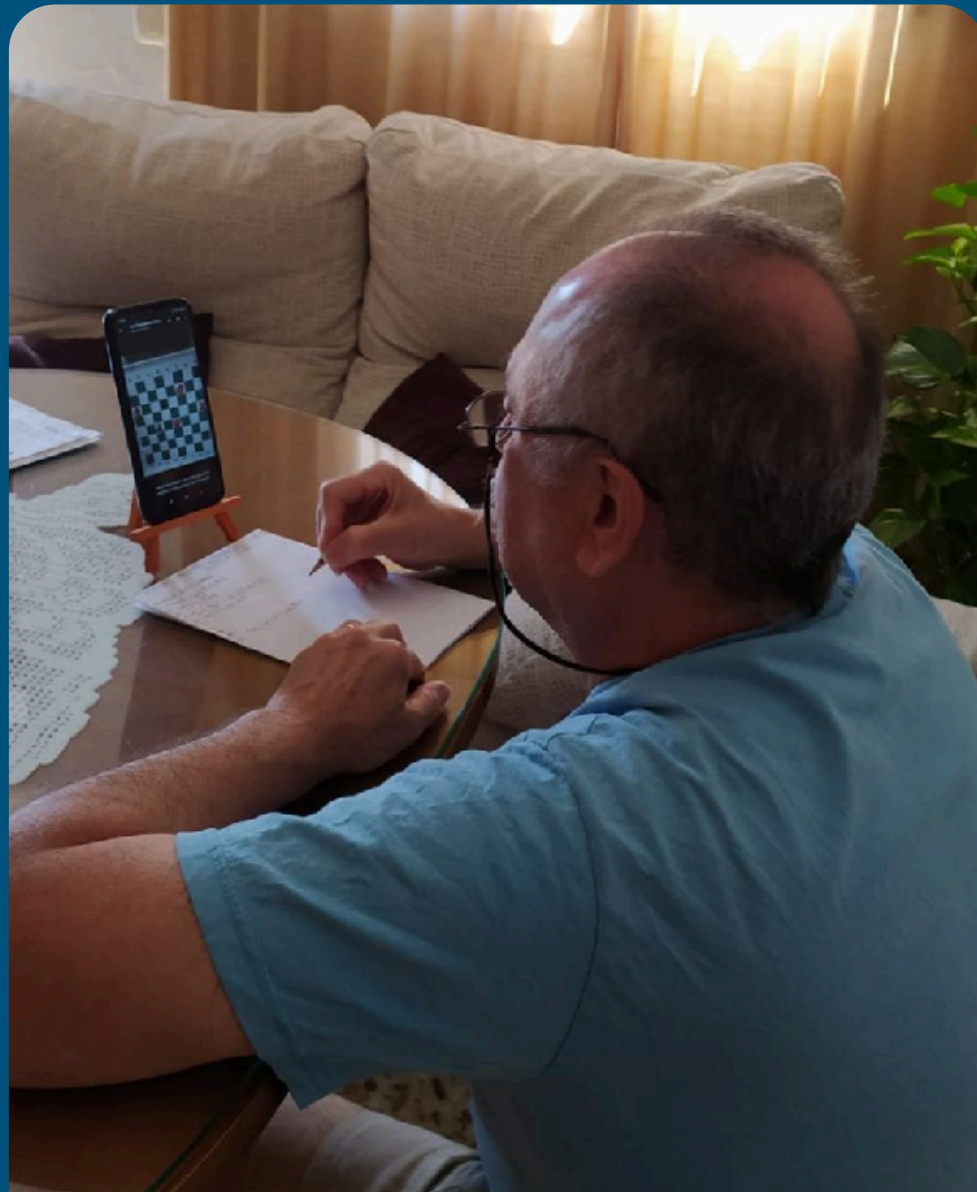


-WhatsApp groups are created, and the exercises are crafted into the phone format.

-We keep the structure of face-to-face lessons



GYMCHESS



- **Gymchess** is an app which uses the principles of the **ECAM method**
- Enables **scalable and sustainable** delivery of social chess initiatives.
- **Adaptable** to different ages, levels, and target groups.
- Focuses on **cognitive training**, not on knowing how to play chess.
- It can work on specific cognitive skills





¡A entrenar!

Funciones visoespaciales

Las habilidades que nos permiten ubicar elementos en el espacio. Implicadas en múltiples actividades de la vida diaria: imaginando cómo llegaremos a un sitio mientras nos lo van explicando, o incluso cómo completar un puzzle.

Aceptar

Aceptar

explicando o incluso cómo completar un puzzle:
llegaremos a un sitio mientras nos lo van
explicando de la vida diaria: imaginando cómo
llegaremos a un sitio mientras nos lo van

THANK YOU FOR YOUR
ATTENTION



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