

## TRAINING PROGRAMME IN STRATEGIES TO IMPROVE THE MEMORY

### Description



*Guide of the therapist.*

The practical application of Training Program in Strategies to Improve the Memory (PEEM) has been conducted in various adult and senior centers in Madrid. Currently, it has been implanted in socio-educational and social-health centers aimed at older people and people with disabilities in the Autonomous Region of Madrid and other regions.

Nowadays, there are many educational, social and health resources where training workshops are held to work the memory, but generally, the effectiveness of the exercises and activities carried out by participants is not studied. There are also books or notebooks with many exercises to work the memory or other cognitive skills or psycho-stimulation programs on which no scientific studies have been conducted to prove its usefulness to enhance those capacities for which they were initially designed.

This program has the advantage of being backed by a scientific study and have demonstrated their effectiveness and usefulness in improving the cognitive abilities of adults and the elderly, specifically in attentional and amnesic capabilities, fundamental for the proper functioning of the person in everyday life.

The program is useful for both adult and elderly as well as for the intervention with other groups such as children and adolescents in school age who need to optimize the performance of their cognitive abilities, young people in university formation, preparation of exams, and so on.

### How does it work

The PEEM is effective for the intervention in memory failures of everyday life presented by people.

The objectives of the program are:

- Training in learning and practicing a wide range of strategies and techniques that are useful for improving performance in learning and memory tasks.
- Exposing theoretical concepts about the functioning of memory, and the changes that take place during its development.
- Promoting the generalization of strategies and memory techniques to daily life.
- Stimulating cognitive processes such as orientation, attention, language, perception, memory, reasoning, etc.
- Improving mood, and self-perception health, and ultimately, the quality of people life.

The PEEM is based on the model of information processing, a process closely related to other cognitive abilities. It is a skill, and therefore it can be exercised and worked, thus promoting an improvement ("cognitive plasticity").

Its design is based on over 20 years of direct professional experience in neuropsychological assessment and intervention. Besides a constant, deep and wide review of the scientific literature.



*Training Workbook*



## Universidad Complutense de Madrid

Vice-rector of Knowledge Transfer and Entrepreneurship  
Transfer of Research Results Office (OTRI)

Among other assumptions it is based on the evidence that people perform information processing little bit elaborate, they do not use strategies that facilitate information encoding and therefore they present a deficit in their recovery. It is shown that this situation improves if they are taught to use memory strategies and techniques. The cognitive performance improves, thanks to a deeper understanding of information processing, making greater the recall of information.

The program is developed in 12 sessions, lasting an hour and a half each, and a frequency of one session per week. Once the program has been completed three follow-up sessions are performed on a monthly basis. Therefore, the full program consists of 15 sessions. In them, the theoretical concepts about the functioning of memory are discussed, a wide range of strategies and memory techniques are explained and practiced, with exercises and adapted material to the characteristics, needs and interests of the target population. The appropriate number of participants is between 14 and 16 people.

Each session consists of six parts. All sessions begin with 5-10 minutes of relaxation, which aims to reduce anxiety and improve attention and performance. Here the contents exposed and exercises done in the previous session are reviewed, as well as the inter tasks. Next, the central theme of the session, the foundations, objectives and applications to life are exposed, doing practical exercises that facilitate learning and assimilation of the strategy/s worked. Subsequently, the need for the task that will have to do until the next session material is delivered. Finally, a complete review of the training session is conducted.

In scientific studies to determine the effectiveness of the program, it is revealed an improvement in the experimental group versus the control group in trained and assessed abilities (attention, learning, memory ...). Even elapsed six months after the completion of the program, it is observed that the improvement obtained is maintained over time. So, it is considered that the program is beneficial both in the short and medium term.

### Advantages

- In the PEEM a wide range of strategies and techniques that promote learning and memory are taught.
- The material is totally organic, adapted to everyday life.
- The versatility of the proposed tasks and the basis on which they are based allow it to be easily adaptable to other groups and other needs.
- At present, its application to adults and older is amply demonstrated.
- It has verified its effectiveness in improving cognitive abilities, mainly in attention and memory.
- It has important psychological and social benefits.

### Where has it been developed

The PEEM has been designed by teachers and research staff of the Basic Psychology II (cognitive processes) Department of the Faculty of Psychology of the UCM.

The team has a great professional experience in the field of neuroscience, specifically, the study of cognitive functions in normal and pathological aging. It has developed a broad research experience that is demonstrated by their participation in various projects funded by the Ministry of Economy and Competitiveness, European Commission, Carlos III Institute and CIEN Foundation and IMSERSO.

### And also

In recent years, we have been also working on the line of aging people with intellectual disabilities, transferring the experience and knowledge acquired in the general population to this new reality we are beginning to live in our society.

### Responsible Researcher

**María Luisa Delgado Losada:** [mldelgad@ucm.es](mailto:mldelgad@ucm.es)  
**Department:** Basic Psychology II (Cognitive Processes)  
**Faculty:** Psychology