



# What is Cognitive Stimulation Therapy? Why does it work?

Cognitive stimulation therapy (CST) **is a series of mental exercises that stimulate the brain.**

Because of the concept of brain plasticity, we know the brain can continue to grow as we age. The key question for many of us is how do we make that happen?

## Growing Your Grey Matter

Research has shown that grey matter grows or increases when the brain learns **new and complex material**. The idea of new and complex is somewhat personal. New and complex to me is going to be different than new and complex to you. The important element in the activity or exercise is an appropriate level of challenge and engagement.

One research study at the University of Hamburg on medical students demonstrated this growth of grey matter. In this study, the grey matter in the students' brains grew in size over a six week period that coincided with studying for final exams. Their brains actually grew in size!

This doesn't mean you have to study medicine to get a big brain. What it does show is that **learning new material is a positive step for brain health.**



Learn new and complex material to build lifelong cognitive resilience.

## The Impact of Growing Your Grey Matter

Building your cognitive resilience can impact on how your brain buffers against disease or how quickly and to what extent you recover from a brain trauma. Individuals with a higher cognitive resilience have a greater capacity in both these areas.

Sister Bernadette, a nun who took part in the Nun Study is a case in point. She had been a high school teacher and very active in her community. At the age of 85 she died of a heart attack. An autopsy upon her death discovered significantly advanced Alzheimer's disease. The team

following her during the study concluded that her level of cognitive resilience was able to create a buffer against the disease and she died of other causes.

The media has also reported on the effects of brain plasticity and cognitive resilience after significant head traumas. The cases of both Congresswoman Gabrielle Gifford or Canadian Army Captain Trevor Green come to mind. Both of them suffered devastating brain injuries – Congresswoman Gifford was shot in the head, Captain Green was attacked with an axe. Given their background, it is safe to assume that they had significant cognitive resilience. They were both able to rewire and recover significant brain function through both physical and mental exercises. Their example offers great hope for individuals with a traumatic brain injury.

## **Cognitive Resilience and Dementia**

Cognitive Stimulation therapy offers healthy older adults a ways to improve and encourage higher levels of mental activity. This reduces the risk of developing dementia later on in life. Building cognitive resilience can happen at any stage of life – whether you are young or old. It is never too late!

This engaged approach also works with individuals suffering from Alzheimer's or another form of dementia. Cognitive stimulation therapy programs, like those developed by Fit Minds, cover different areas of cognition and provide greater benefits than programs that focus on only one cognitive domain like memory. When we are engaged and interested we try harder. So programming that engages and interests an individual makes it easier for them to challenge their brains.

Research has shown that CST is as effective as dementia drugs in improving cognition. Dr. Aimee Spector showed in a research trial that CST had the same positive impact as dementia drugs. This doesn't mean you should replace drug therapy in treating dementia. CST is a great supporting therapy or alternative when drug options are not available. In fact, research has shown that CST improves outcomes when used in conjunction with dementia drugs.

Dr. Spector also reported that CST had a significant impact on quality of life. Pause and consider which you would find more engaging –

**fun, positive human interactions around shared activities** or receiving a pill.

I bet you didn't choose the pill!

Interacting with another human being is vital for mental health. We all know that intuitively but it is also supported by research data.

## **Cognitive Stimulation Therapy works on many levels.**

**First, it provides engaging and challenging brain activities for the individual.** One of the key elements of dementia is apathy and the inability to self-motivate. This is a function of the disease. Thus it makes it difficult for individuals to do self-paced brain exercise or activities. By engaging in a CST program the individual feels encouraged and supported in exercising their brain. The second element that makes CST so effective is **the social interaction that is inherent in the therapy.** This therapy is human to human contact. We are wired to interact with other human beings. This applies to each of us – whether suffering from some form of dementia or not. The human to human contact allows for the programming to be immediately customized to the person. A computer can't laugh with you – a computer can't cry with you – why would we want it to? There is something immensely satisfying in interacting with another human being. A machine can't replace that.



Cognitive stimulation therapy is positive

The third and final element that makes CST an effective therapy is the effect it has on the individual who receives it. The therapy – at its best – can **provide meaning and purpose to an individual's life.**

So much gets taken away by this cruel disease.

**Cognitive Stimulation Therapy offers an opportunity to build up self-esteem, create friendship and give life purpose and meaning.**