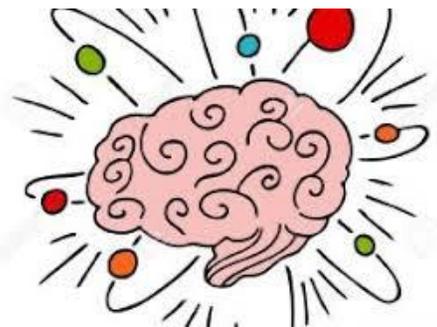


8 Helpful Exercises:

- Memory tasks and games
- Learning to juggle
- Learning to play a new instrument
- Learning a new language
- Yoga
- Mild to moderate regular exercise
- Challenging brain activities like crosswords or Sudoku
- Creating artwork
- Dancing
- Sleeping

How to Rewire Your Brain:

- Traveling
- Using mnemonic devices
- Learning a musical instrument
- Non-dominant hand exercises
- Reading fiction
- Expanding your vocabulary
- Intermittent fasting



Support from The Gatehouse:

After your intake appointment the programs available to you are:

- Phase 1 Program
- Weekly Co-ed Drop-in
- Partners Support 1-day workshop (attended with your partner)

If you are not at the point in your journey where you feel ready to go into a group you can request up to six one-on-one support sessions.

Please note that the programs offered at The Gatehouse are peer-support based and not counselling. For more information and to register call (416) 255-5900.



Emergency / Crisis Resources:

If you are in crisis and need of immediate support call 911. You may also request a Mobile Crisis Intervention Team, in this case a mental health nurse will accompany the officer.

Toronto Distress Centre: (416) 408-4357

Gerstein Crisis Centre: (416) 929-5200

Assaulted Women's Helpline:

(416) 863-0511

Spectra Helpline: (416) 920-0497

Spectra (Brampton/Mississauga):

(905) 459-7777

York Region Crisis Line: 1 (855) 310-2673

Rape Crisis Centre Toronto: (416)-597-8808

CMHA-Peel-Mobile Crisis: (905)-278-9306

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Neuroplasticity

For Survivors of Childhood Sexual Abuse

The following information is solely meant to provide general information about Neuroplasticity. It does not substitute the information from a person's healthcare provider. It is recommended for individuals to contact a qualified health professional for additional information surrounding their unique situation.

Neuroplasticity:

The brain's ability to adapt and reorganize. From the time the brain starts to develop until the day we die the connections in our cells in our brains reorganize in response to our changing needs. This is how we learn and adapt to different experiences. We rewire our brains to adapt to new circumstances.

7 Benefits Neuroplasticity has on the Brain:

- Recovery from brain injuries like stroke
- Recovery from traumatic brain injuries
- Ability to rewire function in the brain (other areas may pick up slack when another area is damaged)
- Losing function in one area may enhance function in other areas
- Enhanced memory
- Wide range of enhanced cognitive ability
- More effective learning

How does Childhood Sexual Abuse Affect the Brain?

- Persistent fear response and hyperarousal
- Emergence of mental health disorders
- Diminished response to positive feedback
- Diminished executive functioning
- Social impairment
- Altered Sensory Experiences

Neuroplasticity in Kids:

If a child is treated with ongoing neglect or abuse, the brain's default response would be to find relationships that fit that narrative. Because these neural pathways have been solidified through years of abuse, it can be difficult to change. These children grow into adults who enter unhealthy relationships, potentially resulting in depression, anxiety or PTSD.

Neuroplasticity and CSA

- The size and shape of the brain may shrink
- Neurons may face inflammation leading to poor executive functioning
- Telomeres: early trauma can make children seem "older" emotionally this may happen on a cellular level
- Brain to body pathway can become chronically stressed
- Default mode network damaged leading to trouble reacting to world around them



Positive Psychology Program. (2018). What is Neuroplasticity? definition + 14 brain plasticity exercises. Retrieved from <https://positivepsychologyprogram.com/neuroplasticity/>
Science Daily. (2013). Specific changes in brain structure after different forms of child abuse. Retrieved from <https://www.sciencedaily.com/releases/2013/06/130601133735.htm>

Healing the Brain after Trauma

After trauma, neurons die and inhibitory pathways decrease. Lasting 1-2 days, it may uncover secondary neural networks that have never/rarely been used. After a few days new synapses are formed. Both neurons and other cells are recruited to replace damaged or dead cells and facilitate healing.

After a few weeks, new synapses continue to appear and the "remodeling" of the brain happens. This is when rehabilitation/therapy can help the brain to learn helpful new pathways.

How Does Neuroplasticity Help?

Research shows that your day to day behaviours can have measurable effects on brain structure and function which can offer healing and recovery from disorders like depression and anxiety.

As memory and function improves overall stress decreases.

Repetition and Mental Games to help with plasticity can offer relief from severe triggers.

Nakazawa, D.J. (2018). 7 ways childhood adversity can change your brain. Retrieved from <https://www.psychologytoday.com/us/blog/the-last-best-cure/201508/7-ways-childhood-adversity-can-change-your-brain>

Kvarnstrom, E. (2018). Childhood trauma and the brain: How therapy can restore psychological health after sexual abuse. Retrieved from <https://www.bridgestorecovery.com/blog/childhood-trauma-and-the-brain-how-therapy-can-restore-psychological-health-after-sexual-abuse/>