Insecure? Reduce Self-Judgement by practicing Self-Compassion

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Many find themselves glancing at a mirror and becoming overwhelmed by critical thoughts. It certainly becomes an unconscious habit at a certain point in time, no doubt the persistent commentary in the brain can have a negative effect on inner happiness and confidence over time. Emerging research is suggesting that a simple emotional practice can be extremely powerful and offer those who find themselves distracted and held back by negative self-talk, a sense of hope. Researchers from Harvard Medical School in Boston, Massachusetts and a group of other trusted neurological research centers have done further research on a method, called the Mindful Self-Compassion program, to help individuals who struggle with different types of depression and anxiety fight against the self-judgement they normally face and build resilience. The Mindful Self-Compassion program is a method used to promote more gentle internal attitudes toward oneself, aiming to change the individual's relationship with themselves by fostering self-referential thoughts of kindness and understanding.

This pilot study published in the Journal of Mood and Anxiety Disorders has presented data on the ways negative self-talk and self-reference can recircuit brain areas. Before the program, participants were gathered based on the criteria of high self-criticism and other mental health factors making them eligible to be a study participant. These

participants then spent the next 8 weeks in weekly meetings, practicing mindfulness in their daily lives, and focusing in on meditations designed to lead them to accept their emotions. The researchers used an innovative brain imaging method, called resting-state functional MRI, to indicate any changes in brain area connectivity patterns. Brain areas of interest were those involved with self-reference and judgement processes. Scans were done as a pre-screen before the trial, as well as at the end of the 8-week program (Joss et al., 2025).

The results found participants reporting lower levels of self-judgement and were more likely to lead with self-compassion after their training. What was most profound was the shift marked in their brain areas. Resting-state fMRI data revealed reduced connectivity within the Default Mode Network, an area commonly active in self-referential thought, which is in turn related to self-critical thinking. The reduced connectivity here points to a weaker presence of negative thoughts about oneself. In another area, the fMRI scans showed increased connectivity between the Medial Prefrontal Cortex and other brain regions at work in emotion regulation (Joss et al., 2025). This is extremely notable research, which has true potential in offering those who struggle with mental health an opportunity to break this habit. These results offer a true glimpse into the brain and how it has the capacity to change when deliberate emotional training is done.

The authors suggest that the participants brains shifted away from rumination and towards healthy self-reflection. The findings add to a growing set of evidence that proves mindfulness practices to be effective in producing biological changes within the brain. One of the most interesting features of this particular study, though, is the outcomes seen after

only 8 weeks of emotional control and work. The daily practices that the participants were assigned showed large improvements by the end of the trial. In a culture that compares self-worth with achievement, intense levels of pressure can distract any mind from continuing to love themselves back. Experts in mental health are looking for any way to help calm the mental health crisis that we are finding ourselves in today, so an intervention like this might be especially useful. The method is reproducible, non-pharmaceutical, and promotes greater good for the whole person, which makes it likely to be widely accepted by those seeking this kind of change.

As groundbreaking as this research is, limitations were acknowledged in the discussion by the authors. Pilot studies typically have small sample sizes, which makes results less generalizable and somewhat less realistic. The power of the results is dimmed because of a small participant group, so more diverse populations within a sample are needed in order to understand how flexible these brain changes are and if effects are as long-lasting as participants would like. Self-report measures have also been noticed as confounding, as they could involve bias and could be less representative of actual changes. It is also important to note that the absence of a control group makes it hard to rule out placebo effect and, in this case, differentiate between those affected by a mental illness and those not. Future studies in this area of fMRI would be strengthened by a large sample, randomized, and controlled trial that could make findings more trustworthy.

The findings from Joss and colleagues here offer up a reminder about the brain: change is always an opportunity even if is shown in small-scale images. Deep in the self-referential areas, there are profound improvement felt by participants, making any

emotional work seem to be worth it. Consistent practice of self-compassion has the power to lift an individual from a low of persistent negative thoughts to a new high of feeling love for themselves. This preliminary research leaves a meaningful message with neuroscientists dedicated to promoting positive emotional and mental outcomes for the people they aim to help. The thoughts and attitudes people cultivate in their mind can make profound changes inside of their brain, so these researchers have discovered evidence to treat ourselves with compassion in an effort to live in a comfortable and happy emotional environment.

Sources: Joss, D., Datko, M., Washington, C. I., Tresvalles, M. A., Mete, M., Lazar, S. W., Schuman-Olivier, Z., & Hoge, E. A. (2025). Neural correlates of reduction in self-judgment after mindful self-compassion training: A pilot study with resting state fMRI. *Journal of Mood & Anxiety Disorders*, *9*, 100096. https://doi.org/10.1016/j.xjmad.2024.100096