

# Shrink Rap: Taming the Monkey Mind, Part III:

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In [Part 2](#), I asserted that meditation practice teaches us the habit of returning to the present, making us less vulnerable to the mental tape-loops of rumination, and more flexible at "shifting gears" from one topic or activity to another. In this final column of the series, I intend to support this contention by presenting just-published research.

In studying experienced meditators who had practiced a form of non-reactive awareness (Vipassana) both before and after an intensive three-month retreat, researchers found there was a significant shift in how the brain allocated attention. The intensive meditators were able to detect fast-changing stimuli better than a control group comprised of novice meditators.

One researcher, psychologist Richard Davidson, said that being able to quickly let go of thoughts that pop into the mind frees the brain to attend to rapidly changing things and events in the world. Expert meditators are better than other people at detecting such fast-changing stimuli, like emotional facial expressions.

The prevailing neuropsychology model is that we're constantly being bombarded with stimulation and are only able to process a certain amount of it. One of the major limitations of our attention is the ability to process two temporally close, task relevant stimuli. So, when a second of two stimuli (like a number flashing on a screen) is presented within a half second of the first one in a rapid sequence of events, it is often not detected.

This non-detection is called "attentional blink" and is thought to result from stimuli competing for limited attentional resources. The control group of less experienced meditators would see the first number in a series and grasp onto it, so that they missed the second number presented. The long-term meditators invested less attention in the first number, allowing them an increased ability to grasp the second number.

The findings demonstrated that meditative training can improve performance on a novel task that requires these attentional abilities; in other words, tasks that require quickly moving from one perception or event to another, especially when occurring closely in time. Translated into practical terms, it means with attentional training, we're capable of not only changing what goes on in the brain, but we're also able to train how quickly we tune in to freshly changing events in our moment-to-moment experience - whether that experience be inner (thoughts and images) or outer (perceptual events and behavior).

The results extend previous research showing that the adult human brain is capable of plastic change in response to environmental stimulation. They corroborate previous findings in experienced meditators by showing that, over time, individuals' attention processes are flexible skills that can be enhanced through mental training. They also confirm subjective reports that Vipassana meditation affects attentional processes and can significantly affect the way stimuli are perceived and processed.

Western science is now verifying experimentally through sophisticated technology what the Eastern contemplative traditions have long held. This literature, authored by experienced adepts from various spiritual, philosophical and religious traditions, has always maintained that we're able (with the proper mental training) to direct our own attention for various purposes. This contrasts with the classical position of Western science, which viewed the allocation of attention within narrow limits, and that brain activity could not be shaped through our own efforts.

Not only are some Eastern understandings of consciousness, attention and psychology currently being tested and proven true through Western science, but we're discovering that how we focus our attention even changes the workings of our brain.