

## **Neuroscientific comparison of attentional resource allocation in different meditation traditions**

### **Results:**

Despite decades of research, effects of different types of meditation on electroencephalographic (EEG) activity are still being defined. We compared practitioners of three different meditation traditions (Vipassana, Himalayan Yoga and Shoonya) with a control group during a meditative and instructed mind-wandering (IMW) block. All meditators showed higher 60-110 Hz gamma activity than control subjects when meditating. This effect was positively correlated with meditation experience. Independent component analysis was used to show that gamma activity did not originate in eye or muscle artifacts. In addition, we observed higher 7-11 Hz alpha activity in the Vipassana group during meditation compared to all other groups. We showed that meditation practice evokes changes in the EEG gamma frequency range that are common to a variety of meditation practices. Our results emphasize the value of including controls and groups of different meditation traditions in neuroscientific studies of meditation.

### **Area(s) of interest:**

Meditation, Brain activity

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