Medical Xpress

# Brain changes during orgasmic meditation, study finds

November 11 2021

Credit: CC0 Public Domain

In a first-ever study, orgasmic meditation, a unique spiritual practice that uses stimulation of a woman's clitoris as its focus, has been found to produce a distinctive pattern of brain function, according to a study

published in the journal, *Frontiers in Psychology* on Nov 11th.

The study found significant changes in brain function in areas associated with sexual stimulation and also more traditional meditation practices—thus representing a true hybrid in terms of its effects. The brain changes were also correlated with alterations in the autonomic nervous system that regulates basic body functions and is implicated in both intense meditation effects as well as sexual stimulation. In addition, patients reported profound spiritual experiences including intense feelings of oneness, unity and connectedness. The study was conducted by the Department of Integrative Medicine and Nutritional Sciences, as well as the Departments of Obstetrics and Gynecology, at Thomas Jefferson University.

Orgasmic meditation, or OM, is a specified practice that lasts 15 minutes and is a paired practice such that there is one participant who stimulates the clitoris (a male in this study), and one participant who receives that stimulation (always a female). This study of 20 pairs of meditators used functional magnetic resonance imaging (fMRI) to measure the changes in functional connectivity between the OM practice and a comparable "neutral" state. Importantly, there were significant changes in both the males and females separately, as well as when combined. This implies that certain general aspects of the practice can affect both the male and female participants in similar and different ways. Specifically, there were changes in frontal lobes which has also been observed in other meditation practices that involve intense focus as well as a sense of release or flow. There were changes in the parietal lobe, an area of the brain involved in the spatial representation of the self, and associated with feelings of oneness and connectedness during spiritual practices. Parts of the temporal lobe were also affected, including the emotional centers of the limbic system, which have been observed to be affected during meditation practices as well as sexual stimulation.

"This is a ground-breaking study of a very unique practice," says senior author on the paper Andrew Newberg, MD, research director of the Department of Integrative Medicine and Nutritional Sciences and director of the Marcus Institute of Integrative Health at Thomas Jefferson University. "This study also suggests the possibility of an important link between sexuality and spirituality. It should be no surprise that there is such a relationship since both sexual and spiritual experiences can be referred to as "ecstatic" and spiritual traditions have long struggled with the potential problems and benefits of the sexual human being."

It should also be emphasized that the findings may have implications for therapeutic applications in the future, helping with various neurological and psychological problems including emotional traumas, sexual dysfunction and even depression.

**More information:** Andrew B. Newberg et al, Alterations in Functional Connectivity Measured by Functional Magnetic Resonance Imaging and the Relationship With Heart Rate Variability in Subjects After Performing Orgasmic Meditation: An Exploratory Study, *Frontiers in Psychology* (2021). DOI: 10.3389/fpsyg.2021.708973

Provided by Thomas Jefferson University