

Mantra and Mental Health: The Art and Science of Chanting in Yoga

By Gemma Perry



Mantra meditation has been practiced as part of yoga for thousands of years. The practice involves focusing on a sound or phrase that can be recited aloud, whispered, or repeated mentally.¹ Mantra meditation can be practiced alone or in a group setting, with or without music, and with or without other ritualistic elements such as *mudras* (gestures), *yantras* (visual symbols used as an additional point of focus), or *malas* (counting beads).

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My own interest in mantra started with personal practice, then I became interested in whether the benefits I felt were shared by others. That question led to my doctoral research at Macquarie University

on the cognitive and emotional effects of mantra meditation, and then postdoctoral research at Bond University. Ten years—and ten scientific studies—later, we have some answers, as well as plenty of new questions.

The Science of Mantra

In yogic traditions, the ultimate purpose of mantra is not primarily relaxation, focus, or “well-being” in the modern sense, but rather liberation through recognition of one’s true nature¹—that is, the realization that one’s own awareness is not separate from universal consciousness. In tantra yoga, mantras are believed to be phonetic representations of the divine, not just linking the practitioner to the divine but merging the individual with the energy represented by the sound.^{2,3} In the Raja Yoga of Patañjali’s Yoga Sutras, mantra is said to be a one of the pathways to liberation. As Sutra 4.1 states, *Janma osadhi mantra tapah samadhi jah siddhyayah* (The subtler attainments come with birth or are attained through herbs, mantra, austerities or concentration).⁴ In Vedic ritual chanting and Buddhist tantric traditions, the most important mantra, *Om*, is said to express the cosmos itself.¹ Indeed, many contemplative traditions aim at eliciting altered states of consciousness to dissolve the sense of self or experience nondual awareness.⁵

Alongside traditional beliefs that mantra can dissolve the ego, liberate the mind, or have us pulsing at a cosmic rhythm, mantra repetition brings many health benefits, and it can be practiced for a range of physiological, psychological, and spiritual outcomes.

The various health outcomes of mantras depend on how they are practiced. For example, silent or internally repeated mantras tend to place greater demands on cognitive control, as sustaining attention on a silent mantra is more difficult. When practiced over time, this work can lead to less mind wandering and increased mindful attention.⁶

Vocal mantra directly engages the respiratory and autonomic nervous systems, leading to changes in breathing.⁷ By extending the exhalation, the rhythmic and controlled breathing involved in chanting can promote parasympathetic activity, contributing to reductions in physiological and psychological stress.^{8,9}

Practicing mantra in a group has an additional social and interpersonal dimension. Participants listen and respond to one another's voices and movements (e.g., clapping or dancing), which helps the group fall into a shared rhythm and state of attention. Such synchronization can promote feelings of social connectedness.^{10,11} To explore more of the mechanisms behind how mantra works, see "The Science of Mantra," by Julie Staples, in the Spring 2018 *Yoga Therapy Today*.

Reduced Stress and Cortisol

During periods of stress or uncertainty, overall levels of the stress hormone cortisol can increase, contributing to fatigue, impaired concentration, and increased vulnerability to mental and physical illness. Research has found an association between stress and cortisol, with chronic high levels of cortisol associated with a range of health problems including depression.¹²

Mantra meditation, whether practiced silently or aloud, has been found to reduce psychological and physiological stress as measured through self-report and cortisol levels. One study, for example, showed that nursing professionals with moderate to severe stress levels had reduced physiological stress after chanting the *Hare Krishna Mahamantra* for 20 minutes daily for 45 days when compared to a non-intervention control group.¹³

As a researcher investigating the effects of chanting, I have been interested in how mantra influences physiological and psychological stress. In one study by my group, conducted at Macquarie University in Australia, we demonstrated the immediate effects of vocal chanting on physiological stress by measuring cortisol levels in saliva before and after 12 minutes of group chanting. Thirty-four participants were randomly assigned to 12 minutes of *Om* repetition (with a recording) either vocally or silently. We found that the mantra reduced cortisol and self-reported anxiety, with vocal chanting showing more of a reduction in anxiety compared to silent mantra repetition (listening to the recording but not vocalizing).⁸ Although the study was moderately sized, it had sufficient statistical power and was designed as a randomized control trial, the gold standard approach in scientific research. This study adds to growing evidence that chanting may

decrease stress and supports the research showing that singing in groups decreases cortisol.¹⁴⁻¹⁶

➤ How does mantra decrease stress?

Mantra's ability to reduce physiological and psychological stress is likely driven by the combined effects of focused attention, slowed breathing, and activation of the parasympathetic nervous system. Practicing in groups offers the additional benefit of increased oxytocin, which can improve mood.

Focused attention, or focusing with effort, may be seen as *dharana* (concentration), defined in Yoga Sutra 3.1: *Deshah bandhah chittasya dharan*. This can be loosely translated as *dharana* being the process of holding attention on an object or place.⁴ Slowed breathing is also mentioned in Yoga Sutra 1.34, *Pracchardana vidharanabhyam va pranayama*, referring to how regulated breathing calms the mind.⁴ The practice of mantra repetition may be seen as contributing to fundamental concepts of Raja Yoga.

Increased Social Connection

Social isolation and loneliness are growing public health concerns, linked to increased risk of depression, anxiety, cognitive decline, and reduced overall well-being. Beyond mantra's effects on stress regulation, group chanting can also strengthen social connection, as measured through self-report questionnaires.

In another of our Macquarie University studies, we wanted to determine whether chanting online could increase social connection. This investigation was especially important at the time, during the COVID-19 pandemic when many people were experiencing heightened isolation. The study was a 2 (chanting vs. control) x 2 (group vs. individual) between-subjects design in which we pseudo-randomly allocated 117 participants across the four conditions: *Om* chanting individually or in a group and listening to a narrative individually or in a group as the control (Fig. 1). All interventions were 10 minutes long, and participants met on videoconferencing software, completing psychological measures before and after the chanting or listening to the narrative recording. Our results showed that online chanting reduced stress and increased positive mood compared to the listening control task, and participants who chanted in a group also felt more connected to others in their group.⁹

➤ How does mantra increase social connection?

Chanting in groups creates rhythmic synchrony of breath, vocalization, and attention. The group also often has a shared intention, which can be a powerful form of connection. This effect becomes apparent when social connection is observed with virtual choirs and online chanting practices, demonstrating that shared intention and synchronized engagement may be more important for social connection than being in a physical space together.

Altered States of Consciousness

In tantra yoga traditions, chanting mantras is believed to dissolve the ego, resulting in a loss of duality between the self and external world.¹ With sustained practice, mantra meditation may facilitate these altered states such as mystical experiences and ego dissolution. Such

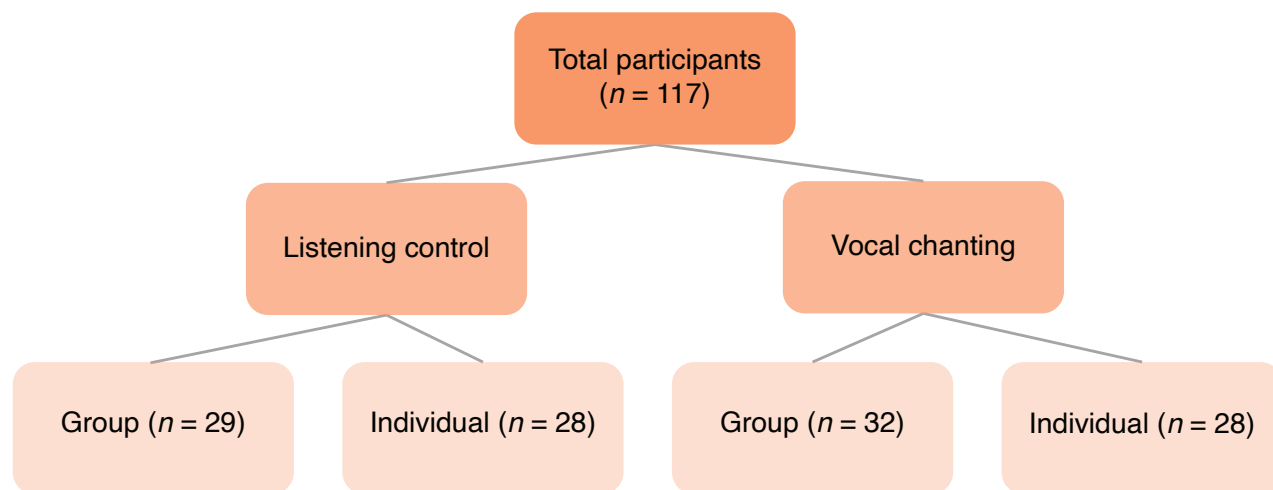
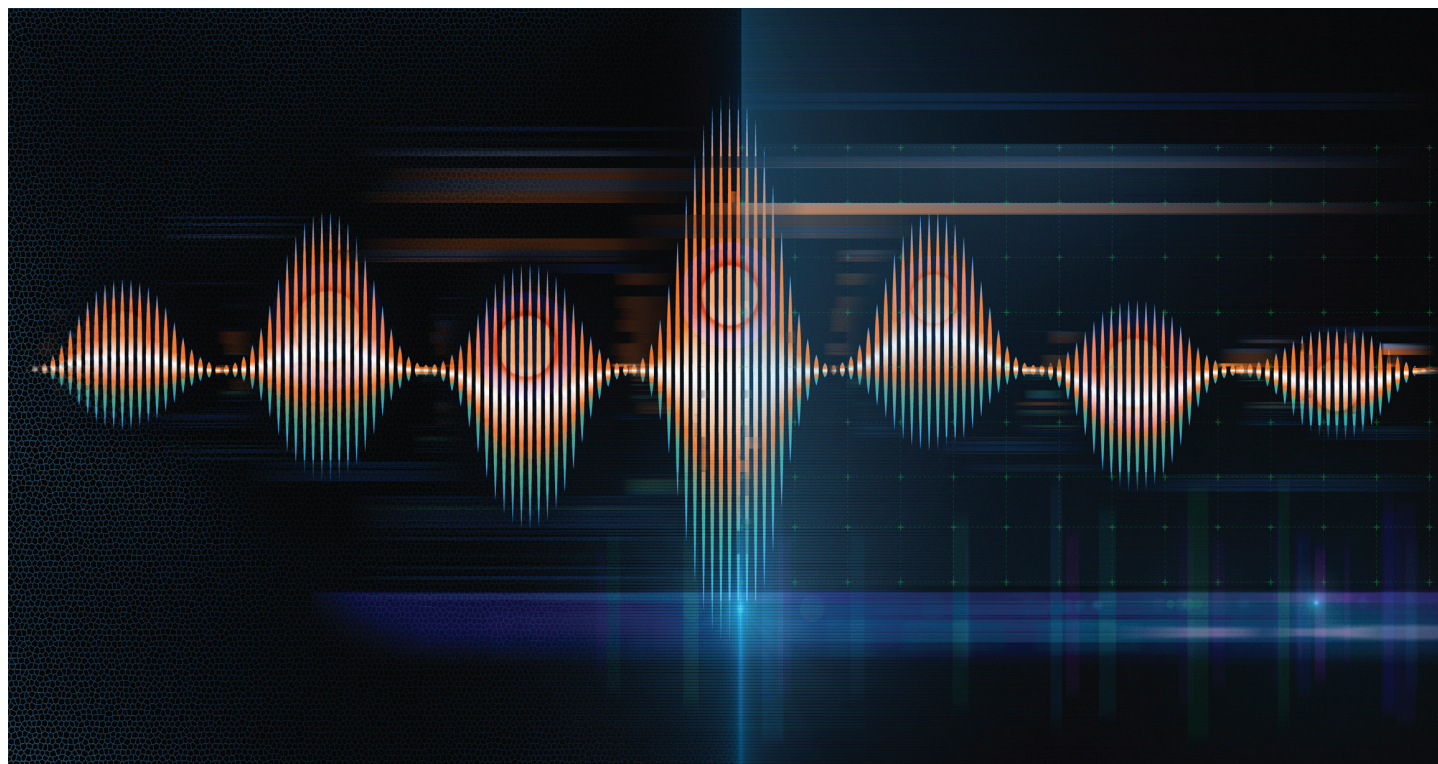


Figure 1. Study conditions and participants

states of consciousness are characterized by feelings of peace, unity, and interconnectedness, and they have been found to have lasting positive outcomes including enhanced self-awareness and feelings of social connection. These experiences are more commonly reported by experienced practitioners, although they may occur in novices, too.

Our research also shows that specific chanting techniques may be important to experience altered states. To explore chanting experiences across diverse traditions and faiths (e.g., tantra, transcendental meditation, Vedic, Buddhist, and *bhakti* [devotional] traditions), we conducted an online survey with 456 participants

to investigate the relationship between chanting attributes (e.g., type of chanting, quality of practice, and intensity of practice) and psychological outcomes (e.g., altered states and cognitive benefits). We found that call-and-response chanting was significantly linked to increased mystical experiences, whereas silent mantra repetition was significantly linked to reduced mind wandering, suggesting distinct cognitive and experiential effects of the different forms. We also found that practices involving more complicated rhythm and movement were associated with flow states significantly more often than practices with simple rhythm and limited movement.⁶



➤ **How does mantra enhance altered states of consciousness?**

Chanting may support altered states of consciousness by combining focused attention with repetition, which can gradually pull the mind away from habitual self-talk and rumination. With sustained repetition, awareness can become less caught in conceptual thinking and more absorbed in direct experience. For example, have you ever found yourself replaying something that happened during your day? Maybe something you wish you hadn't said, or what you wish you had said instead? The mind can loop the same thought again and again, so interrupting that thought with something repetitive, such as a mantra, makes sense. Over a period of repeating a sound, awareness may shift from the ruminative mental commentary to the direct, sensory experience of the mantra. Perhaps you start to focus on the sound vibration in your body and the rhythmic breathing created by the sound.

Rhythm and synchrony in group chanting can lead to neural entrainment, in which participants naturally align their voices, breathing, and attention. As this shared rhythm develops, self-focused thinking often decreases, giving rise to stronger feelings of unity and reduced boundaries between oneself and others. These mechanisms can give rise to experiences of altered states of consciousness, sometimes permanently altering one's perspective of the world.

Clinical and Therapeutic Applications of Mantra

Mantra has been used as a complementary approach within clinical and therapeutic contexts, particularly for conditions involving stress, trauma, and mood disturbance. Yoga therapists may turn to mantra as an accessible tool to help clients develop greater awareness and build practical self-regulation skills. It can be adapted to suit individual needs, preferences, and cultural backgrounds, and may be practiced silently, vocally, or alongside music, movement, or pranayama.

Trauma and PTSD

The mental health condition of posttraumatic stress disorder (PTSD) can develop after exposure to a traumatic event. Symptoms include intrusive memories or flashbacks, heightened anxiety and alertness, avoidance of reminders of the event, and changes in mood and thinking. Many people with PTSD also experience sleep disturbance, emotional numbness, and difficulties with concentration.

Conventional PTSD treatments can have drawbacks including side-effects of medication and the emotional difficulty of modalities that may require recalling distressing memories (e.g., cognitive behavioral therapy and prolonged exposure therapy). Mantra may be a safe and effective technique for decreasing PTSD symptoms without having to recall the trauma.

Randomized controlled trials with military veterans have demonstrated that mantra-repetition programs can lead to reductions in PTSD symptoms. One study found that those who completed an 8-week mantra-repetition program showed greater improvements in PTSD symptoms and sleep compared to a present-centered therapy control group.¹⁷

Another randomized trial with 132 veterans with PTSD examined whether a 6-week mantra-repetition program could strengthen self-efficacy for managing symptoms. Participants receiving case management plus the mantra-repetition program showed steady increases in self-efficacy across the 6 weeks compared with those who received case management alone.¹⁸ These findings suggest that one way mantra may support PTSD recovery is by building confidence in one's ability to regulate distress in daily life. Mantra meditation may offer a practical way to reduce physiological arousal, decrease ruminative thoughts, and redirect attention when intrusive memories occur.

Depression and Anxiety

Depression and anxiety are among the most common mental health conditions, often characterized by persistent low mood, excessive worry, fatigue, sleep disturbance, and difficulties with concentration and motivation. Both conditions are closely linked to heightened stress and repetitive negative thinking. Mantra meditation has demonstrated beneficial effects for depressive symptoms and anxiety in clinical and nonclinical populations alike.

A systematic review of randomized controlled trials examined mantra-based meditation for mental health symptoms. Across studies, mantra meditation was associated with small to moderate reductions in anxiety, depression, stress, and PTSD symptoms, as well as small improvements in mental health-related quality of life, compared with control conditions.¹⁹ By providing a simple and repeatable anchor of focus, mantra practice may reduce rumination and interrupt negative thought patterns commonly associated with depression and anxiety.

In Sum

Evidence suggests that mantra practice is linked with improved stress regulation, mood, social connection, and trauma-related symptoms, with effects that likely reflect a mix of attentional training, breath and nervous system regulation, and, when in group settings, interpersonal synchrony.

It is important to note that studies vary widely in the style of mantra used, amount of practice, and outcomes measured, making results difficult to compare across trials. Even so, mantra remains a promising, low-cost, adaptable practice that can be integrated thoughtfully within yoga therapy and well-being programs. Too often we may overlook mantra in yoga classes and yoga therapy contexts, but when applied within a trauma-informed, culturally sensitive framework and combined with other yoga therapy modalities, mantra can powerfully support physiological, psychosocial, and spiritual well-being. ●



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