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INTRODUCTION
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The practice of meditation has become increasingly popular all over the world in the last few decades. Positive physiological and psychological changes following meditation are supported by the number of research studies (Cahn & Polich, 2006; Keng et al., 2011). Meditation has been defined as a training in awareness, which when practiced over a period of time improves perception, attention, and cognition (Brown, 1977). Meditation is also recognized as a specific consciousness state in which deep relaxation and increased internalized attention exist at the same time (Murata et al., 2004).

The well-known meditation techniques are Transcendental Meditation, Zazen meditation, Anandamarga meditation, Brahmakumaris Raja Yoga meditation, Sahaja Yoga meditation, Vipassana meditation, Om meditation and Cyclic Meditation. All these meditation techniques are derived within last 300 years. All these practices are intended to have a common end result (viz., a calm, yet alert mind). This is supported by research from the late 1960s, since when there have been investigations on the effects of meditation in experienced as well as inexperienced meditators.

In certain cases meditators practicing the same technique showed the opposite trend of results, specifically for the recordings of electroencephalogram (EEG) and autonomic variables. Some studies reported reduced sympathetic activity during meditation, whereas other studies reported increased sympathetic activity. Particularly, for three meditation techniques, the results appeared suggestive of both increased arousal (in some cases) and reduced arousal (in others). These are Transcendental Meditation, Zazen meditation, and Anandamarga meditation.
Early study on Transcendental Meditation showed a decrease in oxygen consumption, reduced heart and breath rates, lower blood lactate levels, and an increase in slow alpha and occasional theta in the EEG after 20 minutes of practice, suggestive of a quietening effect (Wallace, 1970). In fact most of the studies on Transcendental Meditation showed increase in autonomic stability and sympathetic withdrawal (Orme-Johnson, 1973). In addition, a meta-analysis of 31 studies carried out to evaluate the effect of meditation on reducing somatic arousal (Dillbeck & Orme-Johnson, 1987). The studies showed reduced somatic arousal with some physiological changes suggestive of increased alertness. A study on long term Transcendental Meditators showed increased alertness (Lang et al., 1979). The findings contradict the idea that meditation is simply a state of reduced sympathetic activity but supports the idea of it being a “calm yet alert” state.

Similar findings (increased as well as decreased arousal) were also reported for the eyes open, Zazen meditation. An increase in heart rate during Zazen meditation was reported by Hirai (Hirai, 1960), whereas Sugi and Akatsu reported a decrease in oxygen consumption in Zazen meditators (Sugi & Akatsu, 1968). Hence, the first report was suggestive of activation while the second report was suggestive of relaxation.

Similarly, two reports were also found in Anandamarga meditation, which is a tantric meditation and involves intense concentration. One study reported an increase in autonomic activation and decreased autonomic orienting to external stimulation in advanced meditators (Corby et al., 1978). Another study showed an increase in
galvanic skin resistance, a decrease in breath rate, and a more stable EEG during Ananda Marga meditation (Elson, Hauri & Cunis, 1977).

Hence, these early research studies on different meditation techniques could not present a single model of meditation as either activating or relaxing. However, these studies could substantiate the idea that, the meditation is a state of ‘alertful rest’.

An effort was made to classify all the meditation techniques in two main styles, based on how attention is directed (Lutz et al., 2008). The first category is called focused attention (FA), during which attention is sustained and focused on a chosen object. The second category is called open monitoring (OM), which is featured by non-reactive monitoring of the content of experience from moment to moment. More recently, the third category of meditation was also proposed (Travis & Shear, 2010). This is called “automatic self-transcending” which includes techniques intended to transcend their own activity.

These modern classifications of meditations are somewhat similar to the descriptions in the ancient yoga texts. In Patañjali’s Yoga Sūtras (Circa 900 B.C.), there are two meditative states described, one leading to the other (Taimini, 1986). The first stage is dhāraṇā or meditative focusing, confining the mind within a limited mental area (Patañjali’s Yoga Sūtras, III.1). The next stage is dhyāna or effortless meditation (Patañjali’s Yoga Sūtras, III.2), which is characterized by the uninterrupted flow of the mind towards the object chosen for meditation. The practice of dhāraṇā is supposed to precede dhyāna. Dhāraṇā and dhyāna may be considered as the last two of the four stages, which form a continuum in the process of gaining
mastery over the mind. The first two stages are initial phases of mind training described in another ancient Indian text the Bhagavad Gītā (Sarasvati & Swami, 1998). The first stage is cañcalatā (random thinking) which is featured by multiple subjects and multiple thoughts. The second stage is ekāgratā, during which the attention is directed to a series of associated thoughts.

An effort was made to assess the changes in brainstem auditory evoked potentials in thirty male volunteers following four mental states described in yoga texts viz., cañcalatā, ekāgratā, dhāraṇā and dhyāna (Kumar et al., 2010). The results showed an increase in the peak latency of wave V during dhāraṇā, ekāgratā, and cañcalatā sessions, whereas no change during dhyāna. The results suggest that dhyāna practice alone does not delay auditory information transmission at the brainstem level, whereas cañcalatā, ekāgratā and dhāraṇā showed delay in auditory information processing at the inferior collicular level since the wave V corresponds to that level.

Another study assessed the changes in autonomic and respiratory variables in thirty healthy male volunteers following cañcalatā, ekāgratā, dhāraṇā and dhyāna (Telles et al., 2012). The results suggest that, during dhyāna all the changes were suggestive of reduced sympathetic activity and/or increased vagal modulation.

The performance in a cancellation task was compared in seventy normal healthy male volunteers at the beginning and end of the four types of sessions viz., cañcalatā, ekāgratā, dhāraṇā and dhyāna (Kumar & Telles, 2009). Letter cancellation
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task assess selective attention and concentration (Uttl & Pilkenton-Taylor, 2001). The performance in cancellation task significantly improved after dhāraṇā and was worse after caṇcalatā, suggesting better attention after dhāraṇā. However, other aspects of attention have not been studied following these four mental states.

There have been no study comparing the four mental states using mid-latency auditory evoked potentials. Hence, the present study was planned to assess the changes in mid-latency auditory evoked potentials in normal healthy volunteers before, during and after the four types of sessions (caṇcalatā, ekāgratā, dhāraṇā, dhyāna) on separate days. And also, performance in attentional tasks were also studied before and after the practice of ekāgratā and dhāraṇā. These four mental states are descriptions from the ancient yoga texts and studying them was hoping to increase the understanding about meditation including differences seen in earlier studies.