Sanskrit Shloka Chanting and Mindfulness

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ABSTRACT

Background: Mindfulness can simply be defined as "moment-by-moment awareness" or as "a state of psychological freedom that occurs when attention remains quiet and limber, without attachment to any particular point of view". Through past studies it was noted that chanting Sanskrit Shlokas has an energizing effect. It has been well established through various research findings that meditation increases mindfulness. But the relationship between Sanskrit Shloka chanting and mindfulness has not been explored. The purpose of this study was to investigate whether chanting of Sanskrit shlokas has an effect on mindfulness scores.

Methodology: Men and women in the age range of 45-55 years, were taken as samples and two groups were formed. The experimental group consisted of 15 participants who chant Sanskrit shlokas every day for about 25 minutes at the same time in the morning. The control group consisted of 15 participants who do not engage in chanting or meditation. To measure mindfulness, the Kentucky Inventory for Mindfulness Skills (KIMS) was administered.

Results: The mean scores of mindfulness on the KIMS questionnaire for the Sanskrit Shloka Chanting group was 137.93, with a Standard Deviation of 11.56. The mean scores of mindfulness on the KIMS questionnaire for the Non-Chanting group was 124.93 with a Standard Deviation of 5.47. An independent *t* test on the mean mindfulness (KIMS) scores found that the scores for Sanskrit Shloka Chanting group were significantly higher than the mean scores of the Non-Chanting group.

Conclusion: The findings suggest that mindfulness scores on the KIMS were significantly higher for the Sanskrit Shloka Chanting group as compared to the Non- Chanting group.

Keywords: mindfulness, sanskrit, chanting.

(Paper received – 28th April 2020, Peer review completed – 5th June 2020, Accepted – 8th June 2020)

INTRODUCTION

Sanskrit is one of the oldest documented languages in the history of the human civilization. Sanskrit's effect on the brain ("Sanskrit Effect") through chanting of shlokas can be realised through James Hartzell's research. They studied a bunch of verbal memory specialists to see whether intensive oral text memory is related to structural features of hippocampal and lateral-temporal regions implicated in language processing. Professional Vedic Sanskrit Pandits in India train from childhood for around 10 years in an ancient, formalized tradition of oral Sanskrit text memorization and recitation, mastering the precise pronunciation and invariant content of multiple 40,000-100,000 word oral texts. They conducted structural analysis of grey matter density, cortical thickness, local gyrification, and white matter structure, relative to matched controls. They found massive grey matter density and cortical thickness increases in Pandit brains in language, memory and visual systems, including i) bilateral lateral temporal cortices and ii) the anterior cingulate cortex and also the hippocampus, regions related to long term and short term memories. Differences in hippocampal morphometry matched those previously documented for expert spatial navigators and individuals with good verbal working memory. The findings provide unique insight into the brain organization implementing formalized oral knowledge systems [1]. In another study on the implications of

Sanskrit on Attention, 60 school students (boys = 30 and girls = 30) in the age range of 12-14 years, were trained for chanting GM (Gayatri Mantra) for 5 days. They were assessed on DLST (Digit Letter Substitution Task) immediately before and after two sessions (i) GM chanting (10 min) and (ii) Poem line (PL) chanting with an equal duration (10 min). Fifty percent of participants performed GM chanting and remaining on the PL recitation on day 6. The orders of the sessions were reversed on day 7. Both sessions showed significant improvement in the total and net score of DLST. The magnitude of net score improvement was greater after GM (21.67%) compared to PL (4.85%) [2].

Mindfulness can simply be defined as "moment-by-moment awareness" [3] or as "a state of psychological freedom that occurs when attention remains quiet and limber, without attachment to any particular point of view" [4]. The benefits of mindfulness training have been demonstrated by scientists from the University of Michigan Medical School and VA Ann Arbor Healthcare System. They studied 23 combat veterans with post-traumatic stress disorder (PTSD) who served in Afghanistan and Iraq. All of the veterans participated in weekly group therapy sessions, but only those who undertook mindfulness training showed specific brain connectivity improvements [5]. The purpose of this study was to investigate whether chanting of Sanskrit shlokas has an effect on mindfulness scores. Through past studies it was noted that chanting Sanskrit shlokas has an energizing effect. It has been well established through various research findings that meditation increases mindfulness. But the relationship between Sanskrit Shloka chanting and mindfulness has not been explored. Gao et al's study corroborates evidence suggesting that the neurophysiological correlates of religious chanting are distinct from correlates of the extensively researched mindfulness meditation [6]. The link between Sanskrit shloka chanting and mindfulness was thus thought of being studied. Hypothesis for the current study is:

• There is no significant difference between the mean scores on the KIMS questionnaire of participants who chant Sanskrit Shlokas daily and those who do not chant.

METHODOLOGY

15 participants in the age range of 45-55 years were chosen for the study for each of the two conditions - the Sanskrit shloka chanting condition and the non-chanting condition. 15 participants who chant Sanskrit shlokas daily were assigned to the chanting condition. Likewise, it was established that the other 15 participants do not chant Sanskrit shlokas were assigned to the non-chanting condition. It was also ensured that none of the participants of both conditions participated in any other activity like meditation, yoga, dancing, singing, swimming, other sports and are not currently undertaking any therapy. Each participant filled a consent form which explained them about the study and the KIMS self-report questionnaire was administered. Each participant took 15 to 20 minutes to complete the scale.

The following scale was used to measure Mindfulness:

The Kentucky Inventory for Mindfulness Skills (KIMS): This is a 39-item self-report inventory that is used for the assessment of mindfulness skills. The instrument has good internal consistency. Alpha coefficients for Observe, Describe, Act with awareness and Accept without judgment were .91, .84, .76, and .87, respectively. Adequate to good test-retest reliability with correlations for the Observe, Describe, Act and Accept scores being .65, .81, .86, and .83, respectively. The instrument demonstrates good content validity. Higher scores on the questionnaire imply greater mindfulness [7].

The Shloka Chanting Condition group chanted the following Shlokas daily for 25 minutes.

- Shree Suktam
- Purusha Suktam
- Narayaneeyam
- Atharvashirsha
- Ganesh Stotram
- Mahamrityunjaya Mantra
- Mantrapushpanjali

RESULTS AND DISCUSSION

Table 1: Descriptive Statistics, t and p values of both conditions

Shloka Chanting Condition		Non-Char	Non-Chanting Condition		
Mean	SD	Mean	SD	t value	p value
137.93	11.56	124.93	5.47	- 3.94*	0.005

*p<0.05, significant

The mean scores of mindfulness on the KIMS questionnaire for the Sanskrit Shloka Chanting group was 137.93, with a Standard Deviation of 11.56. The mean scores of mindfulness on the KIMS questionnaire for the Non-Chanting group was 124.93 with a Standard Deviation of 5.47. An independent t test on the mean mindfulness (KIMS) scores found that the scores for Sanskrit Shloka Chanting group were significantly higher than the mean scores of the Non-Chanting group ($t_{(28)}$ = - 3.94, p< 0.005). The results indicate that mindfulness scores were enhanced by Sanskrit Chanting. Past studies indicate the benefits of chanting in the form of improved pulmonary function, increased mental alertness, increased environmental awareness and potential relief from depression and stress [8]. Psychological benefits of mantra repetition include decreased heart rate, lowered level of tension as well as a decreased rate of blood pressure [9]. Chanting vibrations with concentration enable to reduce the adrenaline level and cortisol and reducing the level of stress. Besides this, sound seed vibrations have a significant impact on improving the efficiency of the spinal cord. Meditation not only improves concentration but also strengthens the control on reacting to emotions, at the same time, helps with detoxification. Chanting these sound seeds along with a constant deep breathing process improves blood circulation by providing more oxygen to the body thus restoring youthfulness both externally and internally. Moreover, the other health benefits include filtering out negativity, getting enough sleep and nurturing throat and thyroid glands [10]. Religious chanting appears to provide a streamlined procedure for the modulation of biological processes [6]. The findings therefore imply that Sanskrit shloka chanting has implications on mindfulness. Mindfulness interventions are used as psychotherapeutic techniques by mental health professionals. This study demonstrates that Sanskrit Shloka chanting can be used as a cost-effective psychotherapeutic technique for improving mindfulness in people. Mental health professionals should encourage people suffering from stress or other emotional or behavioural problems to practice religious chanting at home or in stressful situations, which can be done without the intervention of a counsellor in a long run. The present study, however, has some shortcomings. The respondents were aged 45-55 years and the sample size was very small, hence this reduces the generalization of results. The results could be better generalized if data was collected by experimental method under laboratory conditions using pre-post-test method.

CONCLUSION

The findings of the study were found to be consistent with past research studies and have led to the following conclusion: Sanskrit Shloka Chanting helps to improve mindfulness scores as compared to the Non – Chanting group.

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Acknowledgements – We like to thank all participants who participated wholeheartedly in the study.

Conflict of Interest – Nil

Funding – Nil