



## Research Article

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### **BENEFICIAL EFFECTS OF OM CHANTING ON PERCEIVED STRESS, AUDITORY AND VISUAL REACTION TIME IN PRIVATE SCHOOL TEACHERS**

Soumya Mishra <sup>1\*</sup>, Archana R <sup>2</sup>, Kumar Sai Sailesh <sup>3</sup>, Srilatha Bashetti <sup>4</sup>, Swathy Ashok <sup>5</sup>, Udaya Kumar Reddy <sup>6</sup>, N J Antony <sup>7</sup>, Ayana Joy <sup>8</sup>, Mukkadan J K <sup>9</sup>

<sup>1</sup>Senior Resident, JIPMER, Pondicherry, India

<sup>2</sup>Professor, Department of Physiology, Saveetha Medical College, Saveetha University, Thandalam, Chennai, Tamil Nadu, India

<sup>3</sup>Assistant Professor, Department of Physiology, Little Flower Institute of Medical Sciences and Research, Angamaly, Kerala, India

<sup>4</sup>Tutor, Apollo Institute of Medical Sciences and Research, Hyderabad, Telangana, India

<sup>5</sup>Vice Chairman, Akshara Group of Institutions, karimnagar, Telangana, India

<sup>6</sup>President, International Stress Management Association, Hyderabad, Telangana, India

<sup>7</sup>Emeritus Professor, Department of Physiology, Little Flower Institute of Medical Sciences and Research, Angamaly, Kerala, India

<sup>8</sup>PG student, Department of Physiology, Little Flower Institute of Medical Sciences and Research, Angamaly, Kerala, India

<sup>9</sup>Research Director, Little Flower Medical Research Centre, Angamaly, Kerala, India

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**\*Corresponding author**

E-mail: saisailesh.kumar@gmail.com

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#### **ABSTRACT**

Practicing “OM” chanting has been reported to reduce stress levels and improve cognitive functions. Objective of the study was to observe beneficial effects of “OM” chanting on perceived stress and auditory and visual reaction time in private school teachers. 8 female school teachers of aged 27-40 years were part of this study after obtaining informed consent. Participants served as self-controls. After adequate training sessions, participants performed Om chanting once in a day at 6:00 am daily at meditation hall in school premises for 12 weeks under the supervision of yoga teacher. Perceived stress was recorded by using perceived stress scale. Auditory and visual reaction time was recorded by auditory and visual reaction time apparatus manufactured by Anand Agencies, Pune. We have observed significant decrease ( $P < 0.05$ ) in stress and significant improvement ( $P < 0.05$ ) in both auditory and visual reaction times in the participants followed by OM chanting. Our study provides further evidence for beneficial effects of OM chanting. We recommend Practicing OM chanting for better stress management and cognitive functions.

**Key words:** OM chanting, Teachers, Cognition, Stress.

#### **INTRODUCTION**

In present scenario, every individual irrespective of age, gender, qualification and cadre are exposed to stress. Stress disrupts the thinking process, lacks the concentration and may further lead to many health complications. To deal with stress in the modern life style many people are implementing and practicing different meditative processes. One such is ‘Om’ chanting. Om is a divine sound and a meditative chant. In the Upanishads Om represents a symbol of God <sup>1</sup>.

It has combination of three letters A, U and M. it represents the past, the present and the future respectively. Om means the Brahman, is the consciousness <sup>2,3</sup>. Practicing Om chanting, the spiritual mantra regularly makes an individual to achieve supreme goal <sup>4</sup>. Meditating by Om chanting reduces the psychological stress and pressure and enables to attain a peaceful, calm mental state <sup>5</sup>. Om chanting induces relaxation and helps to attain a state of consciousness. The vibrations generated by Om chanting causes the sensation around the ears, which is transmitted through the auricular branch of vagus nerve and further causes the vagus nerve stimulation. Vagal nerve

stimulation is one of the commonest treatments for depression <sup>6,7</sup>. Teaching is often considered as one of the most stressful profession. Kyriacou and Sutcliffe defined teacher’s stress as “a response syndrome of negative effects (such as anger or depression) usually accompanied by potentially pathogenic physiological changes (such as increased heart rate) resulting from aspects of the teaching job and mediated by the perception that demands made upon teacher constitute a threat to his/her self esteem or well being and by coping mechanisms activated to reduce the perceived threat.”<sup>8</sup>. Teachers all over the world are facing the problem of occupational stress, though extent of the problem varies. Job satisfaction and occupational stress is associated with a number of background and school-level factors. The present study is taken up to observe beneficial effects of “OM” chanting on perceived stress and auditory and visual reaction time in private school teachers.

#### **MATERIALS AND METHODS**

The study was approved by institutional ethical committee. 8 female school teachers were part of this study after obtaining informed consent. Participants served as self-controls.

Participants were recruited by convenience sampling. The following criteria were followed for selecting the participants.

1. Apparently healthy females aged 27-40 years
2. Not practicing any relaxation methods
3. Not under any medication or therapy or treatment
4. Willing to perform OM chanting regularly
5. Not having any major disease or complications

### OM chanting

After adequate training sessions, participants performed Om chanting once in a day at 6:00 am daily at meditation hall in school premises for 12 weeks under the supervision of yoga teacher<sup>9</sup>.

### Perceived stress scale

Perceived stress scores were recorded by using perceived stress scale<sup>10,11</sup>.

### Reaction time

Auditory and visual reaction time was recorded by auditory and visual reaction time apparatus manufactured by Anand Agencies, Pune<sup>12</sup>.

### Data analysis

Data was analyzed by SPSS 20.0. Student t test was used to observe the significance of differences. P value less than 0.05 was considered as significant.

### Ethical consideration

The study was approved by International conference on Harmonization-Good Clinical practices guidelines (ICH-GCP).

### RESULTS

Demographic data was presented in Table 1. Followed by the intervention, we have observed significant decrease in stress scores, significant improvement in auditory and visual reaction times except auditory reaction time for high pitch left response.

**Table 1: Demographic data of the participants**

Parameter	Mean ± SD
Age (years)	30.63±4.0
Height (cm)	159.75±5.42
Weight (kg)	53.25±7.1
BMI (kg/m <sup>2</sup> )	20.79±1.76

Data presented are mean ± SD.

**Table 2: Perceived stress, auditory and visual reaction time of the participants before and after intervention**

Parameter	Pre intervention score	Post intervention score	P value
Perceived stress score	18±3.38	11.88±3.76	0.0005***
VRT green (L)	0.4411±0.096	0.2962±0.08	0.0057**
VRT green (R)	0.4121±0.09	0.3006±0.071	0.0156*
VRT red (L)	0.4928±0.07	0.3176±0.08	0.0006***
VRT red (R)	0.431±0.1	0.3195±0.08	0.0298**
ART high pitch (L)	0.4865±0.1	0.3893±0.08	0.0632
ART high pitch (R)	0.4856±0.06	0.3845±0.1	0.0344*
ART low pitch (L)	0.3706±0.08	0.2857±0.04	0.0329*
ART low pitch (R)	0.3927±0.09	0.2518±0.06	0.0052**

Data presented are mean ± SD. VRT= Visual Reaction Time, ART= Auditory Reaction Time, L=left response, R=Right response. (\*P<0.05, \*\*P<0.01, \*\*\*P<0.001).

### DISCUSSION

Mantras are the key to healthy mind and body. It might look funnier to you when you read it the first time since a regular reader is used to listening to advises like jogging, gymming, and a balanced diet is the key to staying healthy. The present day-to-day life of every individual is stressful. Occupational stress is very common in almost all the individuals irrespective of the cadre, qualification, fields and professions they are in. As brain is the control centre of the body and it has a major role to coordinate the functions of the body, so, if Midas touch is given to brain, it leads to healthy body and healthy living. The present education system is more of stress stimulator for the students as well as for the teachers working in the system. This may further lead to psychological stress due to psychosomatic complications. Meditation is the simplest and effective magical solution to reduce stress. Om mantra is believed to summate the positive energies that further get transformed into a power to the brain and awaken the five chakras inside us. Om chanting gives a smoothening effect to the nervous system, helps in reducing the blood pressure by improving the blood circulation<sup>9</sup>. It was reported that OM chanting provides relaxation<sup>13</sup>. The present study was aimed to determine the stress experienced by the teachers working in private schools. The study showed a significant effect on both the visual and auditory reaction time in the teachers as a result of meditating and chanting the Om

mantra. We found that teacher do experience the stress like any other individual working in the field other than teaching. We found very few studies on the positive effects of Om chanting on mental stress. One such study stated that Om chanting scientifically leads to the steadiness of mind. It reduces the stress by getting an individual to a state of peace and calmness<sup>14</sup>. Thus proving that Om mantra is very simple yet the great stress reliever, which with regular practice may improve the quality of life there by health. The present study sample size is very less, hence we recommend further detailed study with large number of randomly selected participants.

### CONCLUSION

Our study conclude that Om mantra is one of the effective tools in reducing occupational stress one such found in private school teachers.

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