

Immediate and short term effect of mantra chanting on visual memory of college students using digit symbol substitution.

Dissertation Submitted by

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UNDER THE GUIDANCE OF

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TOWARDS THE PARTIAL FULFILMENT OF

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To

SWAMI VIVEKANANDA YOGA ANUSANDHANA SAMSTHANA [S-VYASA UNIVERSITY],

(DECLARED AS DEEMED-TO-BE UNIVERSITY UNDER SECTION 3 OF THE UGU ACT, 1956)

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CERTIFICATE

This is to certify that Annu Kumari is submitting this dissertation “**Immediate And short term effect of mantra chanting on visual memory of college Students using digit symbol substitution test**” for Partial fulfilment of the Requirement for the Master of Science (Yoga Therapy) registered in **Swami Vivekananda Yoga Anusandhana Samsthana (S-VYASA University) Bangalore** and this is a record of the work carried out by her in this institution.

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Place: Bangalore

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DECLARATION

I, hereby declare that this study was conducted by me at Swami Vivekananda Yoga ANUSANDHANA SAMSTHANA (S-VYASA), Bangalore, under the guidance of **Sushrutha S (M.sc & PhD)**, S-VYASA University Bangalore. I also declare that the Subject matter of my dissertation “**Immediate and short term effect of mantra Chanting on visual memory of college Students using digit symbol substitution test**” Has not previously formed the basis of the award of any degree, diploma, associate-ship, Fellowship or similar title.

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Date

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Place: Bangalore

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**STANDARD INTERNATIONAL TRANSLITERATION CODE USED TO
TRANSLITERATE SANSKRIT WORDS**

| | | | | | | | | |
|-----|---|----|-----|---|---|-----|---|-----|
| a | = | अ | ña | = | ञ | pa | = | प |
| ā | = | आ | ca | = | च | pha | = | फ |
| i | = | इ | cha | = | छ | ba | = | ब |
| ī | = | ई | ja | = | ज | bha | = | भ |
| u | = | उ | jha | = | झ | ma | = | म |
| ū | = | ऊ | ñ | = | ञ | ya | = | य |
| ṛ | = | ऋ | ṭa | = | ट | ra | = | र |
| ṝ | = | ॠ | ṭha | = | ठ | la | = | ल |
| e | = | ए | ḍa | = | ड | va | = | व |
| ai | = | ऐ | ḍha | = | ढ | śa | = | श |
| o | = | ओ | ṇa | = | ण | ṣa | = | ष |
| au | = | औ | ta | = | त | sa | = | स |
| m̐ | = | अं | tha | = | थ | ha | = | ह |
| ḥ | = | अः | da | = | द | kṣa | = | क्ष |
| ka | = | क | dha | = | ध | tra | = | त्र |
| kha | = | ख | na | = | न | jña | = | ज्ञ |

ABSTRACT

BACKGROUND

Mantras are the repetition of words and phrases of special significance, and can be said out either loud or internally. Mantras provide a vital tool in concretising your desired thoughts through repeated chanting. Mantra is a complete set of words from the Vedas attributed to the deities or devas

INTRODUCTION

Mantras are sound that develop energy in the form of vibrations and repeating on which one is protected. Mantras are especially composed chants to bring about different patterns of resonant waves to achieve the desired result. Mantras provide a vital tool in concretising your desired thoughts through repeated chanting. Mantras have come down to us from great sadhus, saints, rishis and yogis, who recited mantra for years and spread the motivation to us to follow them. Mantras are strung together as syllables, help to establish health, harmony and happiness at the individual, family and at social levels.

The aim of the study is to study the effect of mantra chanting on visual memory in college students using Digit Symbol Substitution Test.

METHODOLOGY

Thirty two subjects were studied, (26 male and 6 female), with a mean age group of (25.97±4.6). College students of S Vyasa University, Prasanati Kutiram. Subjects who were doing MSc in yoga therapy in the same university were selected. The information about the study was given in prior to the initiation and the need for the study was explained and a signed informed consent was obtained from the subjects. The required sample size was calculated using G power. Those Students who are not health and those students under any medication were excluded from the study.

DESIGN: Two group pre post design was used.

The intervention was chanting of three Mantras, Mahamrityunjaya mantra, Gayatri mantra and Durga mantra, for a period of ten days, and for a duration of one hour every day. DSST questionnaire were given before the test on day one, before the intervention on day ten, and post to the intervention of mantra chanting on day ten.

The One hour intervention for ten days included three different Mantras. These three Mantras were selected from the scriptures for better results. These mantras were trained to the students a week before the intervention.

RESULT

The study used a within group comparison between the pre-post outcomes of the short term mantra intervention group which showed a very significant reading and immediate mantra intervention group showed a less significant reading.

CONCLUSION

Significant of mantra chanting on improving the visual memory of college going students have been understood by the marking done by the subjects on DSST. It is also been understood that short term effect by ten days chanting is much significant than immediate effect of mantra chanting done for a day. The study concludes that the mantra chanting should be included in the course career curriculum of college students for an improvement in their visual memory.

Key terms

Mantra, memory

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CHAPTER 1

INTRODUCTION

CONCEPT OF MANTRA :

Mantras are the repetition of words and phrases of special significance, and can be said out either loud or internally. Mantras are sound that develops energy in the form of vibrations and repeating on which one is protected. Mantras are especially composed chants to bring about different patterns of resonant waves to achieve the desired result. Mantras provide a vital tool in concretising your desired thoughts through repeated chanting. Mantra is a complete set of words from the Vedas attributed to the deities or devas. Mantras have come down to us from great sadhus, saints, rishis and yogis, who recited mantra for years and spread the motivation to us to follow them. Mantras are single or strung together syllables and help to establish health, harmony and happiness at the individual, Family and social levels. (Nagendra, 2009)

Every mantra small or big has its own resonance pattern and to produce resonance while chanting the mantra loudly is the physical aspect of the chant. Mantra that is chanted mechanically without inducing resonance can enhance the strength of the vocal chord muscles. The mantras chanted with right intonation, clear pronunciation and the right tune help in invoking the resonance .Every letter brings resonance in a particular part of the body, chanting the whole mantra generates suitable resonance patterns, the resonant waves move from one part to another part of the body as you change the words, raga and the intonations. Recognition of these movements and associated resonance pattern in the physical body produces very special molecular changes in the cellular structure by harmonizing the prana mind, emotions and intellect. (Nagendra, 2009)

The power of mantras are enormous and beyond imagination. According to various ancient Vedas, Upanishads, & Puranas, so many sadhakas has fulfilled, and attained unlimited results from mantra chanting and directed the humankind to practice it to get benefits out of it. Mantras are very useful for the development of internal purity and get the bliss of nature. Supreme lord Shiva is said to be the founder of mantras. He blesses those who chant mantras. (Nagendra, 2009)

Rishis Munis selected the word, the mantras and arranged them, so that they not only convey meaning and generate specific powers of wisdom by the chanting of mantra. The sounds involved in these Mantras are significant in themselves as they produce a set of specific reaction in the person and awakening. (Nagendra, 2009)

Great power of chanting mantra, known as mantra Shakti was experienced during the ancient chants, which had a positive influence on who enchants and practice it and invoked the internal energy, that could put an end to the sufferings of life. Proper pronunciation of words are essential during enchanting of mantra, as they contain powerful healing and transformational energies and their reverberations affect the surrounding atmosphere also.

Sound is a form of energy. Sound needs a medium for its travel. The famous bell jar experiment proves that the sound cannot hear outside when the jar is evacuated proves the same. But, the concept of sound according to Yoga and Spiritual lore is that, it is a vibration, it is it is wave. In Sanskrit sound is called Shabda and it has two components, namely *āhata* (audible) and *anāhata* (inaudible). Sound is considered as the quality of *ākāṣa tatva* (space element) (Nagendra, 2009) .

Modern science too defines sound as vibration. At atomic levels all matter has same features, only the numbers and arrangement varies. Everything is in continuous motion or vibration and

this vibration produces sound of different frequencies and intensity determined by the internal structure of the matter and the external situations where it is placed. (C.Saraswati ., 2014)

In Vedic period the transfer of knowledge happened orally from master to disciple. For the same reason, the Vedic literature is called as '*Ṣrutī*' or that which is heard. To maintain the purity of the words and the meaning strict procedure of recitation was followed by of the inflections, intonations and the rhythms. The vibrations created by the methodological recitation of Sanskrit hymns also created specific effects on the body, particularly the mind and its workings (C.Saraswati ., 2014).

It is reported that, influence of meditation with sound upon organs energetic condition is found to be positive in the human body. This positive effect is clearly observed when meditation with sound has been practiced in groups. The effects can be found immediately after the chanting. From colour diagrams and quality practices of mantra, it is observed in the participants that, after the practice of meditation with along with mantra recitation, the organ functions improved much better. Exceptions are people inclined to high blood pressure and serious heart problems, for which it is recommended not to do meditation with sound (Yoga Federation of Serbia, 2010)

'*Nāda*' is the first emanation stage in the production of mantra. The second is Bindu. Nada and Bindu exists in all Bija Mantras. Sound in modern scientific terms refers to the pressure waves in air received by human beings in the audible range of generally 20 cycles/sec to 20000 cycles/sec. Vedas are collection of mantras and Vedic literature several terms such as *Nāda* and *ṣabda* are used, which known as *mantra* (Prasad, 2011).

The MahaMrityunjaya mantra

As very much clear from the name itself, this is the mantra, which illuminates one's fear from uncertain death and gives the blessing of life and prosperity. Mahamrityngaya mantra is mantra which invokes the Supreme

“Om Tryambhakam Yajamahe

Sugandhim Pushtivardhanam

Urvarukamiva Bandhanan

Mrityor Mukshiya Maamritat”

Meaning of the Mantra:

“We worship the three eyed lord Siva, who is merciful, and fragrant and protector of the devotees. May he free us from the fear of death and lead us to immortality, like a ripe cucumber falls down from its creep“

It is said to be beneficial for mental, emotional and physical health and to be a moksha mantra, which bestows longevity and immortality. According to puranas, the mantra were chanted by rishis and sages when Chandra suffered from the curse of Prajapati Daksha. By reciting this mantra, the curse of Daksha that could even subject him to death got slowed lord Siva took it on his head. This mantra is addressed to Lord Shiva for warding off death. To get the best

result, this mantra is chanted while doing japa, homa and while smearing the vibhuti on body parts. Whereas the Gayatri Mantra is meant for spiritual guidance and purification. It is also meant to rejuvenate and nurture those reciting it.

Mahamrityunjaya Mantra is also known as Trayambakam mantra or Rudra mantra, where Rudra refers to lord Siva. It is one among the finest Mantra's in Indian Mythology and Spirituality, which combines three words of Hindi, i.e. "Maha" which means Great "Mrityun" means Death and "Jaya" means Victory which turns into Conquer death.

Benefits of chanting Mantra

Mantra and should be chanted with sincerity, faith and devotion. Best time to chant is early morning hours Brahma Muhurta. Make it a practice to chant minimum 9 times before you go to office or leave from the house and before going to bed or taking medicines. Before a drive, make a habit of chanting this mantra at least 3 times, keeping lord Siva in mind, for a safe drive. Chant 108 times daily to get good health and wealth. Make it a practice to chant this mantra when we apply chandan or vibhuti or kunkum or holy ashes. Take a glass of water, sit facing east, pray to Lord Shiva, close the top of the glass with your right hand palm, chant the mantra for 1008 times, spray the water inside the house, take few teaspoons and give it to people. You can invoke the energy of Lord Shiva in the water by doing this.

The Gayatri Mantra

The Gayatri Mantra is otherwise known as Savitri mantra. It is one of the most important mantras in the Hindu scriptures. It is found in the RigVeda (RigVeda III/62/10). It is perhaps the greatest mantra of the Veda. Gayatri mantra should be chanted at particular period of the day like during sun rise, noon time and sun set. At the dawn, the youthful form of the Goddess, consort of Lord Brahma, the creator and the mantra is called Gayatri mantra at the dawn. At

noon, it is named as Savitri mantra, which is the matured form and it will be a concert of lord Siva. At sunset, it will be at an elderly form and is called as Sarasvati and it will be on a concert of lord Vishnu. The Gayatri Mantra was first cognized by the Rishi Vishwamitra. He is a sage of great tapas. This mantra also has that power of light, energy and transformation. Through it one can be born again (dwija) in the truth in heavenly wisdom. This mantra has 3 parts: the first is the chants to the seven worlds, the second is the mantra proper of twentyfour syllables and the third is a summary of the mantra's energies. The following is a brief explanation of the mantra as presented in the Mahanarayana Upanishad.

OM Bhuvah! – the vital plane or atmosphere, realm of becoming or breath
OM Suvah! – the mental plane, space or heaven, realm of the illumination.
OM Mahah! – the sphere of cosmic mind, realm of Dharma and OM Janah! – the realm of creation or bliss
OM Tapah! – the realm of consciousness force
OM Satyam! – the realm of absolute truth
The Supreme Self, Paramatman, or Savitar, is the conscious being within the cosmic sun or Light of lights.

The mantra is his creative force, the Divine Word. Savitar is the master of modifications and spirit of evolution at higher level. He is the Brahman, the pure being of the Absolute. The Gayatri Mantra releases the supreme solar power. That power which lead to cosmic creation and self-realization. Those who want to bring a new dawn for the humanity, from the dark ages should chant this mantra. Those who wish to transform the samskaras, can use this mantra. This mantra also grants intelligence, creative vision and healing powers. Used with the chants to unfold the realities of the universe. The Gayatri mantra is central to Yoga, Vedanta, Ayurveda and Vedic astrology. For Yoga it sets in motion to awaken the kundalini power. For Vedanta it grants Self-knowledge, knowledge of the solar Self. For Ayurveda it gives the power of the cosmic prana, born from sun. Vedic astrology gives knowledge about heavenly bodies, ruled by the cosmic sun. Becoming radiant Divine light is the greatest benefits, but if that's not

enough for you, or you think it's too far away, along the path to Divinity there are many other benefits that you can enjoy sooner.

Gayatri:

1. Removes obstacles from your life
2. Protects you from danger
3. Brightens your mind
4. Dispels ignorance
5. Improves communication abilities
6. Opens your psychic vision
7. Brings direct knowledge of the eternal truths

Durga-dua-tri-sanaamaalaa (32 names of goddess durga)

1. aum shri durgaye namah: |
2. aum durgatisamni namah: |
3. aum durgapadwineevarni namah: |
4. aum durgmaccheadini namah: |
5. aum durgshadhani namah: |
6. aum durgnaashani namah: |
7. aum durgtohddharni namah: |
8. aum durgneehantri namah: |
9. aum durgummapha namah: |
10. aum durgumgyaanda namah: |

11. aum durgdaitayeahlodkwanalaa namah: |

12. aum durgamaa namah: |

13. aum durgmaaloka namah: |

14. aum durgmatmswaroopini namah: |

15. aum durgmaargpradaa namah: |

16. aum durgumvidhyaa

namah: |

17. aum durgumaashritaa

namah: |

Mantra chanting involves minimum body activity and it is mind oriented and is a passive method of meditation. (Santosh C Gursale, 2015)

Meditation promotes both physical and mental wellbeing and contributes to the development of positive emotional traits .It is thus important to integrate its active principles in therapies for patients suffering from physical diseases and mental disorders. (Claire Braboszcz,2015)

Mantra meditation involves repeating words with phonetic significance and is based on the Kundalini yoga tradition. This type of meditation can increase cerebral blood flow and ultimately improve patient's emotional state. Study was conducted on patients having memory problems ranging from mild age-associated memory impairment to mild impairment with a diagnosis of Alzheimer's disease. The study was built on the premise that increases in blood flow in the prefrontal, superior frontal, and brain's superior parietal cortices. It improves the emotional state, memory and spirituality. There were significant changes noted in the amygdala in those who reported improved mood. (Andrew Newberg MD, 2014)

Meditation is a mental process that traditionally has been used to achieve an altered state of awareness in both religious and nonreligious practitioners. Recently, meditation is used to relieve anxiety, depression, and pain has increased in Western countries. Several research studies support the opinion that meditation and mindfulness training has health-promoting benefits.^{1–3} Tang et al.⁴ showed that short term meditation training resulted in lower anxiety, depression, anger, and fatigue in a group of students compared to a control group that was given conventional relaxation training. Physiologic measures (e.g., decreased levels of stress-related cortisol in saliva) were also found in the meditation-trained group. (Krygier et al., 2013)

The Gayatri mantra (GM) has been mentioned in the Rig Veda. The GM was revealed to the sage Vishwamitra. It is also called Savitṛ mantra since it concerns the deity Savitṛ (Sun). According to the Indian tradition, GM initiated to a student before starting his/her formal education. It is been found that Gayatri mantra improves the intellectual power. (Mantra et al., 2016)

RATIONALE OF THE STUDY

Mantra is one of the most influential part of meditation. One of the major effects of stress driven life is that it affects concentration and awareness. The calmness of mind reduces with raising stressful life events. It affects all the normal activities of people of all ages. The need for an alternative solution becomes more important. This study aims at bringing the effect of mantra chanting on visual memory.

CHAPTER 2

ANCIENT LITERATURE REVIEW

INTRODUCTION

A mantra is an energy composed of certain frequencies. The positive response of mantra influences the two sides of our brain. Fast chanting exhausts the mind, heart and breath, and relaxation comes after the chanting. Slow chanting helps in relaxing the mind, heart, and breath. (S.S. Saraswati, 1979). The frequencies of mantra and the positive effects generated by them, influence our nerves, which are spread around our internal organs. Hence *Mantra* chanting generates a creative force and brings one in tune with the Divine by the principle of sympathetic vibrations.

महामृत्युञ्जय मन्त्र (Mahāmṛtyuñjāmya Mantra)

ॐ त्र्यम्बकं यजामहे सुगन्धिं पुष्टिवर्धनम् ।

उर्वारुकमिव बन्धनात्मृत्योर्मुक्षीय मामृतात् ॥

Om tryambakaṁ yajāmahe sugandhiṁ puṣṭivardhanam |

Urvārukamiva bandhanātmṛtyormukṣīya mā'mṛtāta |

I worship the Three-eyed (Lord *Siva*), who is fragrant and makes us grow. Like the ripe cucumber (that is freed effortlessly) from bondage, I also can be released from mortality. May I never be distanced from immortality. *Mahāmātyuñjāya Mantra* is found in the *Rug Veda* as well as in the *Yajur Veda*. It is know as the powerful *Savitā Gāyatrī Mantra* (*Om Bhūr Bhuva Syvaha, Tat Savitur Varenyam*). It is popular because it releases one from his bondage and

prevents untimely death. It distracts accidents and cures diseases. Mainly it gives victory over death. That is why it is called the *Mahãmâtyuijãya Mantra*; *Mahã* means ‘great’, *Jaya* means ‘victory’, and *Mãtyuir* means ‘death’.

GAYATRI MANTRA:

ॐ भूर्भुवः स्वः तत्सवितुर्वरेण्यं ।

भर्गोदेवस्य धीमहि धियो यो नः प्रचोदयात् ॥

om bhũrbhuvah svaḥ tatsaviturvareṇyam |
bhargodevasya dhĩmahī dhiyo yo naḥ pracodayãt ||

meaning:

Let us meditate upon the glory of isvara, who created this universe, who is fit to be worshipped, who is remover of all sins and ignorance. May He enlighten our intellect.

Durga mantra:

It is believed that the mantras are a method to connect to ones inner self. Chanting of durga mantra brings symbolic changes in the chanter. There should be a mental discipline to get the best effect and correct recitation is essential. It relaxes our mind and solves ones issues. Mantras to Goddess Durga is famous in Hinduism. It is effective when chanted with following disciplines: using red powders, red clothes for worshipping the diety, using an idol or photo of the diety, and invoking the diety.

नमो देव्यै महादेव्यै शिवायै सततं नमः ।

नमः प्रकृत्यै भद्रायै नियताः प्रणताः स्म ताम् ॥१॥

namo devyai mahãdevyai śivãyai satataṁ namaḥ |

namaḥ prakṛtyai bhadrayai niyatãḥ praṇatãḥ sma tãṁ ||1||

Salutations to the Devi, to the Mahadevi; (the Auspicious One), who is always with Siva.
Salutations to Her Who is the Auspicious (being One with Shiva) Primordial Source of
Creation and Controller of Everything; We Bow Always to Her.

रौद्रयै नमो नित्यायै गौर्यै धात्र्यै नमो नमः ।

ज्योत्स्नायै चेन्दुरुपिण्यै सुखायै सततं नमः ॥२॥

raudrayai namo nityāyai gauryai dhātryai namo namaḥ ।

jyotsnāyai cendurupiṇyai sukhāyai satataṁ namaḥ ॥2॥

Salutations to the Terrible, Salutations to the Eternal, the Shining One and the Supporter of the
Universe. Salutations Always to Her, Who has a Cool Brightness like the Moonlit Night, And
the Radiant Form of the Moon, and who is Joy Herself.

कल्याण्यै प्रणतां वृद्ध्यै सिद्ध्यै कुर्मो नमो नमः ।

नैर्ऋत्यै भुभृतां लक्ष्म्यै शर्वाण्यै ते नमो नमः ॥३॥

kalyāṇyai praṇatāṁ vṛddhyai siddhyai kurmo namo namaḥ ।

nairṛtyai bhubhṛtāṁ lakṣmyai śarvāṇyai te namo namaḥ ॥3॥

We Bow to Her Who is the Source of Welfare, Who is Great, Fulfilled and Abides as the
Universe, and salutation to the one who is the destroyer and brings prosperity and who is the
Consort of Shiva (in the Divine Play of Creation, Sustenance and Destruction).

दुर्गायै दुर्गपारयै सारायै सर्वकारिण्यै ।

ख्यात्यै तथैव कृष्णायै धूम्रायै सततं नमः ॥४॥

durgāyai durgapārayai sārāyai sarvekāriṇyai |

khyaṭyai tathaiva kṛṣṇāyai dhūmrāyai satataṁ namaḥ ||4||

(Salutations to Devi Durga, who free us from fear and danger of life and destroy all the causes. Salutations Always to Her, Who is Renowned and Widely Known Outside (in Creation) Just As She is Dark and Smoky and Difficult to Know Inside (in Meditation).

अतिसौम्यातिरौद्रायै नमोस्तस्यै नमो नमः ।

नमो जगत्प्रतिष्ठायै देव्यै कृत्यै नमो नमः ॥५॥

atisaumyātiraudrāyai namostasyai namo namaḥ |

namo jagatpratiṣṭhāyai devyai kṛtyai namo namaḥ ||5||

Salutations to Her Who is Extremely Gentle like the Moon and also Extremely Terrible like Rudra, Salutations to the Devi Who is the Supporter of the Universe and Salutations to Her Who is the Creator of the Universe.

या देवी सर्वभुतेषु विष्णुमायेति शब्दिता ।

नमस्तस्यै नमस्तस्यै नमस्तस्यै नमो नमः ॥६॥

yā devī sarvabhuteṣu viṣṇumāyeti śabditā |

namastasyai namastasyai namastasyai namo namaḥ ||6||

To that Devi Who in All Beings is Called Vishnumaya, Salutations to Her, Salutations to Her, Salutations to Her, Salutations again and again.

या देवी सर्वभुतेषु चेतनेत्यभिधीयते ।
नमस्तस्यै नमस्तस्यै नमस्तस्यै नमो नमः ॥७॥

yā devī sarvabhuteṣu cetanetyabhidhīyate |
namastasyai namastasyai namastasyai namo namaḥ ||7||

To that Devi Who in All Beings is Reflected as Consciousness,

Salutations to Her, Salutations to Her, Salutations to Her, Salutations again and again.

या देवी सर्वभुतेषु बुद्धिरुपेण संस्थिता ।
नमस्तस्यै नमस्तस्यै नमस्तस्यै नमो नमः ॥८॥

yā devī sarvabhuteṣu buddhirupeṇa saṁsthitā |
namastasyai namastasyai namastasyai namo namaḥ ||8||

To that Devi Who in All Beings is Abiding in the Form of Intelligence, Salutations to Her,

Salutations to Her, Salutations to Her, Salutations again and again.

या देवी सर्वभुतेषु निद्रारुपेण संस्थिता ।
नमस्तस्यै नमस्तस्यै नमस्तस्यै नमो नमः ॥९॥

yā devī sarvabhuteṣu nidrārupeṇa saṁsthitā |
namastasyai namastasyai namastasyai namo namaḥ ||9||

To that Devi Who in All Beings is Abiding in the Form of Sleep, Salutations to Her,
Salutations to Her, Salutations to Her, Salutations again and again.

या देवी सर्वभुतेषु क्षुधारुपेण संस्थिता ।
नमस्तस्यै नमस्तस्यै नमस्तस्यै नमो नमः ॥१० ॥
yā devī sarvabhuteṣu kṣudhārupeṇa saṁsthitā |
namastasyai namastasyai namastasyai namo namaḥ ||10||

To that Devi Who in All Beings is Abiding in the Form of Hunger, Salutations to Her,
Salutations to Her, Salutations to Her, Salutations again and again.

या देवी सर्वभुतेषुच्छायारुपेण संस्थिता ।
नमस्तस्यै नमस्तस्यै नमस्तस्यै नमो नमः ॥११ ॥
yā devī sarvabhuteṣucchāyārupeṇa saṁsthitā |
namastasyai namastasyai amastasyai namo namaḥ ||11||

To that Devi Who in All Beings is Abiding in the Form of Shadow (of Higher Self) (Jivatma
as a Shadow of Paramatma), Salutations to Her, Salutations to Her, Salutations to Her,
Salutations again and again.

या देवी सर्वभुतेषु शक्ति रूपेण संस्थिता ।
नमस्तस्यै नमस्तस्यै नमस्तस्यै नमो नमः ॥१२॥

yā devī sarvabhuteṣu śakti rūpeṇa saṁsthitā |
namastasyai namastasyai namastasyai namo namaḥ ||12||

To that Devi Who in All Beings is Abiding in the Form of Power, Salutations to Her,
Salutations to Her, Salutations to Her, Salutations again and again.

या देवी सर्वभुतेषु तृष्णारूपेण संस्थिता ।
नमस्तस्यै नमस्तस्यै नमस्तस्यै नमो नमः ॥१३॥

yā devī sarvabhuteṣu tṛṣṇārūpeṇa saṁsthitā |
namastasyai namastasyai namastasyai namo namaḥ ||13||

To that Devi Who in All Beings is Abiding in the Form of Thirst,
Salutations to Her, Salutations to Her, Salutations to Her, Salutations again and again.

या देवी सर्वभुतेषु क्षान्तिरूपेण संस्थिता ।
नमस्तस्यै नमस्तस्यै नमस्तस्यै नमो नमः ॥१४॥

yā devī sarvabhuteṣu kṣāntirūpeṇa saṁsthitā |
namastasyai namastasyai namastasyai namo namaḥ ||14||

To that Devi Who in All Beings is Abiding in the Form of Forbearance,
Salutations to Her, Salutations to Her, Salutations to Her, Salutations again and again.

या देवी सर्वभुतेषु जातिरुपेण संस्थिता ।
नमस्तस्यै नमस्तस्यै नमस्तस्यै नमो नमः ॥१५ ॥

yā devī sarvabhuteṣu jātirupeṇa saṁsthitā |
namastasyai namastasyai namastasyai namo namaḥ ||15||

To that Devi Who in All Beings is Abiding in the Form of Genus (Original Cause of Everything),

Salutations to Her, Salutations to Her, Salutations to Her, Salutations again and again.

या देवी सर्वभुतेषु लज्जारुपेण संस्थिता ।
नमस्तस्यै नमस्तस्यै मस्तस्यै नमो नमः ॥१६ ॥

yā devī sarvabhuteṣu lajjārupeṇa saṁsthitā |
namastasyai namastasyai namastasyai namo namaḥ ||16||

To that Devi Who in All Beings is Abiding in the Form of Modesty, Salutations to Her,

Salutations to Her, Salutations to Her, Salutations again and again.

या देवी सर्वभुतेषु शान्तिरुपेण संस्थिता ।
नमस्तस्यै नमस्तस्यै नमस्तस्यै नमो नमः ॥१७ ॥

yā devī sarvabhuteṣu śāntirupeṇa saṁsthitā |

namastasyai namastasyai namastasyai namo namaḥ||17||

To that Devi Who in All Beings is Abiding in the Form of Peace, Salutations to Her,
Salutations to Her, Salutations to Her, Salutations again and again.

या देवी सर्वभुतेषु श्रद्धारूपेण संस्थिता ।

नमस्तस्यै नमस्तस्यै नमस्तस्यै नमो नमः ॥१८ ॥

yā devī sarvabhuteṣu śraddhārupeṇa saṁsthitā |
namastasyai namastasyai namastasyai namo namaḥ||18||

To that Devi Who in All Beings is Abiding in the Form of Faith (in Higher Self),
Salutations to Her, Salutations to Her, Salutations to Her, Salutations again and again.

या देवी सर्वभुतेषु कान्तिरूपेण संस्थिता ।

नमस्तस्यै नमस्तस्यै नमस्तस्यै नमो नमः ॥१९ ॥

yā devī sarvabhuteṣu kāntirupeṇa saṁsthitā |
namastasyai namastasyai namastasyai namo namaḥ||19||

To that Devi Who in All Beings is Abiding in the Form of Loveliness and Beauty,
Salutations to Her, Salutations to Her, Salutations to Her, Salutations again and again.

या देवी सर्वभुतेषु लक्ष्मीरुपेण संस्थिता ।
नमस्तस्यै नमस्तस्यै नमस्तस्यै नमो नमः ॥२० ॥

yā devī sarvabhuteṣu lakṣmīrupeṇa saṁsthitā |
namastasyai namastasyai namastasyai namo namaḥ ||20||

To that Devi Who in All Beings is Abiding in the Form of Good Fortune,
Salutations to Her, Salutations to Her, Salutations to Her, Salutations again and again.

या देवी सर्वभुतेषु वृत्तिरुपेण संस्थिता ।
नमस्तस्यै नमस्तस्यै नमस्तस्यै नमो नमः ॥२१ ॥

yā devī sarvabhuteṣu vṛttirupeṇa saṁsthitā |
namastasyai namastasyai namastasyai namo namaḥ ||21||

To that Devi Who in All Beings is Abiding in the Form of Activity,
Salutations to Her, Salutations to Her, Salutations to Her, Salutations again and again.

या देवी सर्वभुतेषु स्मृतिरुपेण संस्थिता ।
नमस्तस्यै नमस्तस्यै नमस्तस्यै नमो नमः ॥२२ ॥

yā devī sarvabhuteṣu smṛtirupeṇa saṁsthitā |
namastasyai namastasyai namastasyai namo namaḥ ||22||

To that Devi Who in All Beings is Abiding in the Form of Memory,

Salutations to Her, Salutations to Her, Salutations to Her, Salutations again and again.

या देवी सर्वभुतेषु दयारूपेण संस्थिता ।

नमस्तस्यै नमस्तस्यै नमस्तस्यै नमो नमः ॥२३॥

yā devī sarvabhuteṣu dayārupeṇa saṁsthitā |
namastasyai namastasyai namastasyai namo namaḥ ||23||

To that Devi Who in All Beings is abiding in the Form of Kindness,

Salutations to Her, Salutations to Her, Salutations to Her, Salutations again and again.

या देवी सर्वभुतेषु तुष्टिरूपेण संस्थिता ।

नमस्तस्यै नमस्तस्यै नमस्तस्यै नमो नमः ॥२४॥

yā devī sarvabhuteṣu tuṣṭirupeṇa saṁsthitā |
namastasyai namastasyai namastasyai namo namaḥ ||24||

To that Devi Who in All Beings is Abiding in the Form of Contentment,

Salutations to Her, Salutations to Her, Salutations to Her, Salutations again and again.

या देवी सर्वभुतेषु मातृरूपेण संस्थिता ।

नमस्तस्यै नमस्तस्यै नमस्तस्यै नमो नमः ॥२५॥

yā devī sarvabhuteṣu māṭṛrupeṇa saṁsthitā |
namastasyai namastasyai namastasyai namo namaḥ ||25||

To that Devi Who in All Beings is Abiding in the Form of Mother,
Salutations to Her, Salutations to Her, Salutations to Her, Salutations again and again.

या देवी सर्वभुतेषु भ्रान्तिरुपेण संस्थिता ।
नमस्तस्यै नमस्तस्यै नमस्तस्यै नमो नमः ॥२६॥
yā devī sarvabhuteṣu bhrāntirupeṇa saṁsthitā |
namastasyai namastasyai namastasyai namo namaḥ ||26||

To that Devi Who in All Beings is Abiding in the Form of Delusion,
Salutations to Her, Salutations to Her, Salutations to Her, Salutations again and again.

इन्द्रियाणामधिष्ठात्री भूतानां चाखिलेषु या ।
भुतेषु सततं तस्यै व्याप्तिदेव्यै नमो नमः ॥२७॥
Indriyāṇāmadhiṣṭhātrī bhūtānām cāakhileṣu yā |
bhuteṣu satataṁ tasyai vyāptidevyai namo namaḥ ||27||

(Salutations) To that Devi Who Governs the Faculty of Senses of Beings in All the Worlds,
Salutations to Her Who is the Devi Who Always Pervades all Beings.

चितिरुपेण या कृत्स्नमेतद् व्याप्य स्थिता जगत् ।

नमस्तस्यै नमस्तस्यै नमस्तस्यै नमो नमः ॥२८॥

citirupeṇa yā kṛtsnametad vyāpya sthitā jagat|
namastasyai namastasyai namastasyai namo namaḥ||28||

(Salutations to Her) Who in the Form of Consciousness Pervades This Universe and Abides in It. Salutations to Her, Salutations to Her, Salutations to Her, Salutations again and again.

करोतु सा नः शुभहेतुरीश्वरी शुभानि

भद्राण्यभिहन्तु चापदः ॥२९॥

stutā suraiḥ pūrvamabhīṣṭasamśrayā ttathā surendreṇa
dineṣu sevītā|

karotu sā naḥ śubhaheturiśvarī śubhāni
bhadraṅyabhihantu cāpadaḥ||29||

in the old age, that was eulogized by the means of earlier attempt, wealth, by the demon Gods and Indira. May Goddess Durga, who is so auspicious, who brings beautiful fortune to us, may she destroy the calamities.

या साम्प्रतं चोद्धतदैत्यतापितैरस्माभिरीशा च सुरैर्नमस्यते ।

या च स्मृता तत्क्षणमेव हान्ति नः सर्वापदो भक्ति विनम्रमूर्तिभिः ॥३०॥

yā sāmpratam coddhatadaityatāpitairasmābhirīśā ca surairnamasyate |
yā ca smṛtā tatkṣaṇameva hānti naḥ sarvāpado bhakti vinamramūrtibhiḥ ||30||

We Gods have been harrassed by arrogant thoughts in the manner of man, and at this time all of the Gods bow to seers of all, who bowed with devotions and remembered in physical illness, immediately terminates all adversities.

CHAPTER 3

LITERATURE REVIEW

Scientific investigation also found that yoga sutras and mantra has its influence on psychological and physiological functions of the body. During both prayers and mantras, there will be an increase in the synchronicity of cardiovascular rhythms when they were recited 6 times a minute. There was also an increase in baroflex sensitivity. These findings suggested that chanting mantras or rosary at specific frequencies can induce favourable psychological and physiological effects. The significance of recitation of “Om” was understood from a study done on twelve meditators. The result showed a reduction in skin resistance and changes in mental states. The different types of meditation in Japanese Buddhism showed an activation of brain region along with the activation of prefrontal cortex of brain. The Buddhist sutra also activated the left dorsolateral prefrontal cortex and right parietal cortex. (Mantra et al., 2016)

A study was built on the premise that increases in blood flow in the prefrontal, superior frontal, and superior parietal cortices of the brain would improve emotional state, feelings of spirituality, and improvements in memory. There were significant changes noted in the amygdala in those who reported improved mood. (Andrew Newberg MD, 2014)

| Author/ year | Sampl e size | design | Interventi on | Assessment tools | conclusion |
|----------------------------------|-------------------------|--------------------|--------------------------|--|---|
| Ghaligi Sripad et al; 2006 | 35 | Cross sectional | Vedic chanting | Verbal memory test; Spatial memory test | It's help to calming down the mind; enhance the |

| | | | | | |
|---|----|----------------------|--------------------------------------|--|--|
| | | | | | memory and effective in attention. |
| Malhotra Varun et al;2014 | 40 | RCT | “OM” chanting | Diamond digital sphygmomanometers (BPDG024) and pulse-oxy meter (EDAN H100B). Depression Anxiety Stress Scale (DASS); Mini Mental State Examination (MMSE) | It is a powerful means to calming down the mind and enhance the memory. |
| Balaram Pradhan and Seema Godse Derle; 2012 | 60 | RCT | Gayatri Mantra(GM) and poem chanting | digit-letter substitution task (DLST) | GM improves attention than poem. |
| Neha Racca; | 30 | RCT | Gayatri Mantra chanting | Random Event Generator (REG) | Help to enhance the improvement of consciousness. |
| Kalyani BG. Et al; 2011 | 12 | Correlational design | “OM” chanting | functional Magnetic Resonance Imaging (fMRI) | Its vagus nerve stimulation; a potential role in clinical practice and indicate limbic deactivation. |

CHAPTER 4

AIM AND OBJECTIVES

4.1 Aim

To find the effect of mantra chanting on visual memory of college students using digit symbol substitution

4.2 Objectives:

To test the effect of mantra chanting on attention span of students.

To assess the improvement of visual memory with mantra chanting

4.3 Research Question

Can mantra chanting bring any effect on visual memory in college students?

4.4 Hypothesis

Mantra chanting will bring significant improvement on visual memory in college students.

4.5 Null Hypothesis

Mantra chanting will not bring any significant improvement on visual memory in college students.

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CHAPTER 5

METHODOLOGY OF EXPERIMENTAL RESEARCH

Sample size:

Thirty two subjects were studied, (26 male and 6 female), with a mean age group of (25.97±4.6). College students of S Vyasa University, Prasanati Kutiram. . Subjects who were doing MSc in yoga therapy in the same university were selected. The information about the study was given in prior to the initiation and the need for the study was explained and a signed informed consent was obtained from the subjects. The required sample size was calculated using G power.

Source of the subjects

Students doing MSc in SVYASA University, Bangalore

Inclusion Criteria

- All the students willing to participate in experiment of *mantra chanting*
- Both male and female
- Only college students

Exclusion criteria:

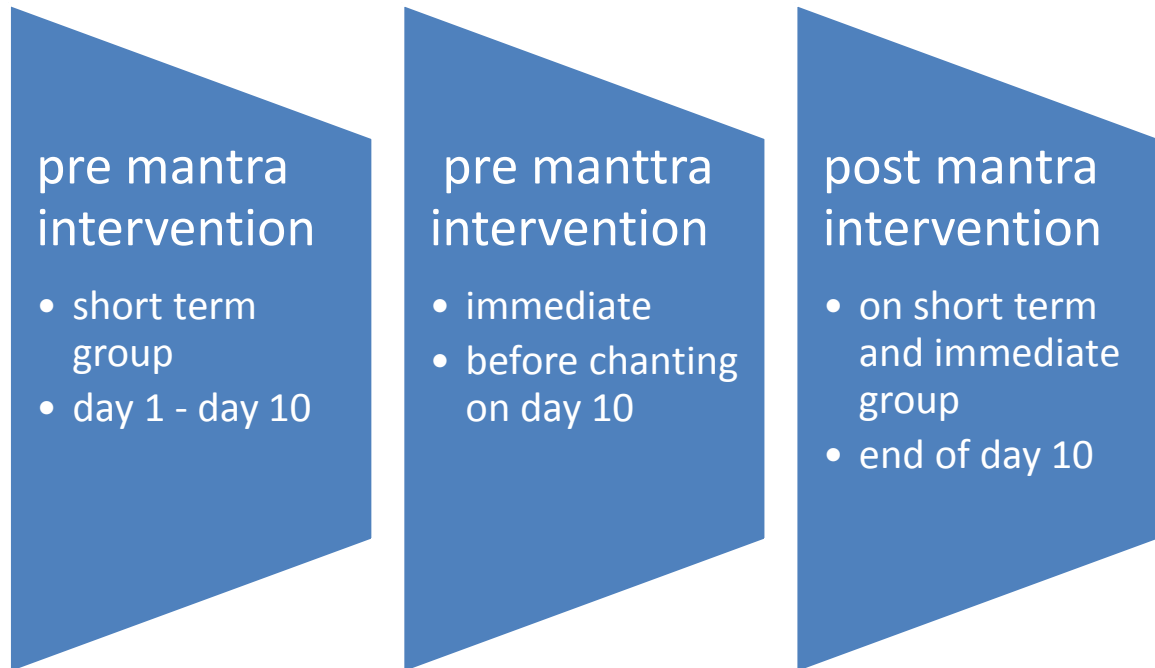
- Students who are not healthy
- Students Under medication.
- Those students who were not willing to participate.

Ethical consideration:

All subjects were informed about the current research and an informed consent was obtained from each subject participants before the experiment.

Design

Single group pre post design



INTERVENTION:

Intervention of mantra chanting was given to the students of S VYASA who were studying MSc (yoga). The intervention was chanting of Mantras for a period of ten days, and for a duration of one hour every day. DSST questionnaire were given before the test on day one , before the intervention on day ten, and post to the intervention of mantra chanting on day ten.

The One hour intervention for ten days included three different Mantras. These three Mantras were selected from the scriptures for better results. These mantras were trained to the students a week before the intervention. The three mantras were :

- 1) MAHAMRITYUNJAYA MANTRA
- 2) GAYATRI MANTRA
- 3) DURGA MANTRA

These three mantras were chanted by the students all together continuously by closing their eyes. Both loud chanting and silent chanting were included.

Procedure of the intervention:

Mahamrityunjaya Mantra :

**“Om trayambakam yajamahe sugandhim pushtivardhanam uruvarukamiva
bandhanaat mrityormukshiya maamritaat”**

This mantra was chanted by the students for 108 rounds by closing their eyes. 54 rounds of loud chanting followed by 27 rounds of chanting with lip movement and followed by 27 rounds of mental chanting .

Gayatri Mantra

**“Om bhoorbhuvah svaha tatsaviturvarenyam bhargodevasya dheemahi dhiya yo nah
prachodayaat”**

After chanting the Mahamrityunjaya Mantra, the Gayatri mantra was chanted for 27 times.

Durga mantra

This mantra was chanted at the last for three rounds and silence was maintained.

“Om Durga durgaarti-shamani durga-padvinivaarinee

Durgama-chchhedinee durga-saadhinee durga-naashinee

Durgatod-dhaarinee durga-nihantree durga-maa-paha

Durgama-jaana-daa durga-dyitya-loka-davaanala

Durga-maa durgamaa-lokaa durga maatma-svaroopinee

Durga-maarga-pradaa durgama vidyaa durga-maashritaa

Durgama-jnaana-samshaanaa durgama-dhyaana-bhaasinee

Durga-mohaa durga-maagaa durga-maartha-svaroopinee

Durgamaa-sura-samhantree durgamaa-yudha-dhaarinee

Durga-maangee durgamataa durgamyaa durgameshvaree

Durga-bheemaa durga-bhaamaa durgabhaa durga-daarinee”

ASSESSMENT TOOL

Digit Symbol Substitution Test (DSST)

This test consists of an array of nine numbers, each paired with a symbol. Beneath the array is a set of numbers alone, and the subject's task is to write the correct symbol under each of these numbers as rapidly as possible. The raw score is computed by counting the number of correct responses made in 120 seconds. This is a powerful test of cognitive function because it places a demand on speed, attention, visual scanning and memory.

Subject population limits the degree to which results can be generalized to other settings, thus weakening the external validity of the ... Test- retest, single trial intra class reliability for SRT and CRT, as determined in a pilot study (N = 20), was .85.

CHAPTER 6

DATA EVTRACTION AND ANALYSIS

Data for mantra chanting intervention on visual memory was taken on the day 1, before initiating the intervention and on the day 10, post data was collected from the same subjects after the intervention, for assessing the short term effect of mantra chanting. Also immediate effect of mantra chanting was assessed by collecting data before intervention on day 10 and after intervention of the same day.

Data collection.

The data was collected using DSST questionnaire. Data entry was done in Microsoft excel.

Data Analysis.

Normality test on the pre and post data of short term intervention group and immediate effect group were done using Shapiro-Wilk test. Levene's test for variance was used to find the homogeneity of variance between the two groups.

Collected data was assessed in R studio (version 3.2) Wilcoxon Signed Rank test for within group observations on immediate intervention group was done, as one data was not found as normally distributed. An alpha level of .05 was fixed for all statistical tests. Paired t test was done on short term intervention group, as the data was found to be normally distributed.

CHAPTER 7

RESULT

Comparison between Immediate effect pre data and post data (end of 10 days) done using Digit symbol substitution test (DSST):

Statistical test (Wilcoxon signed rank test was done, as one of the data was not normally distributed) performed by within the group test (pre immediate and post immediate group) showed the improvement as got observed in the DSST score which was found statistically significant

($p < 0.05$).

Comparison between Short-term effect of pre data and post data (end of 10 days) done using Digit symbol substitution test:

Statistical test (paired t-test, as both the data are normally distributed) performed within the group (pre and post short term) showed an improvement as observed in the DSST score which was found statistically significant ($p < .05$).

Then results observed are given below in tabular format

Table: A DSST (Pre and post immediate group - within group)

| Within group analysis (Wilcoxon signed rank test) | | | |
|--|---------------------------|----------------------------|----------|
| | Pre (n = 32) | Post (n = 32) | |
| | Pre Immediate (Day 10) | Post Immediate (Day 10) | <i>P</i> |
| DSST Rating | 60.97 ± 9.99 | 64.88 ± 8.32 | .013 |

Table: B DSST profile (Pre - post values - within group)

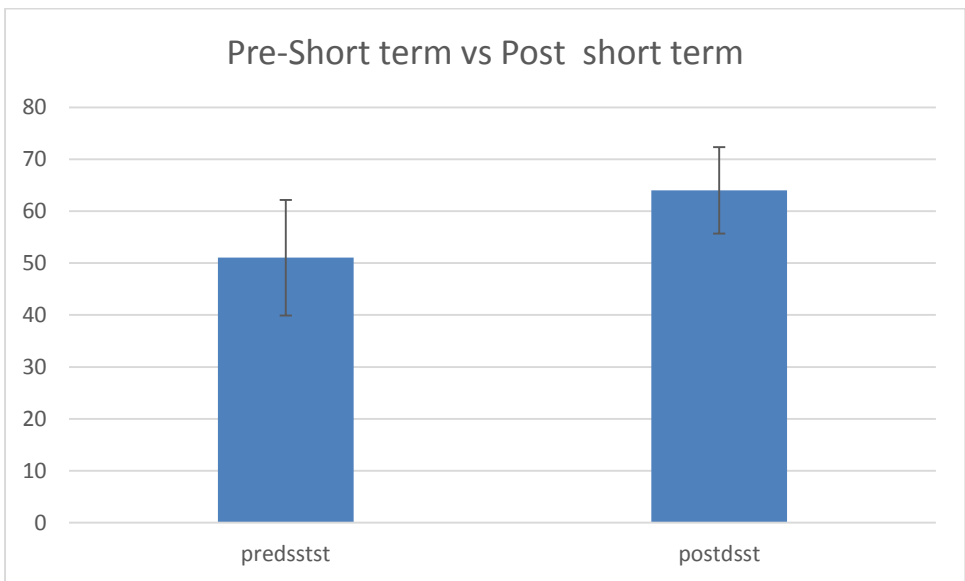
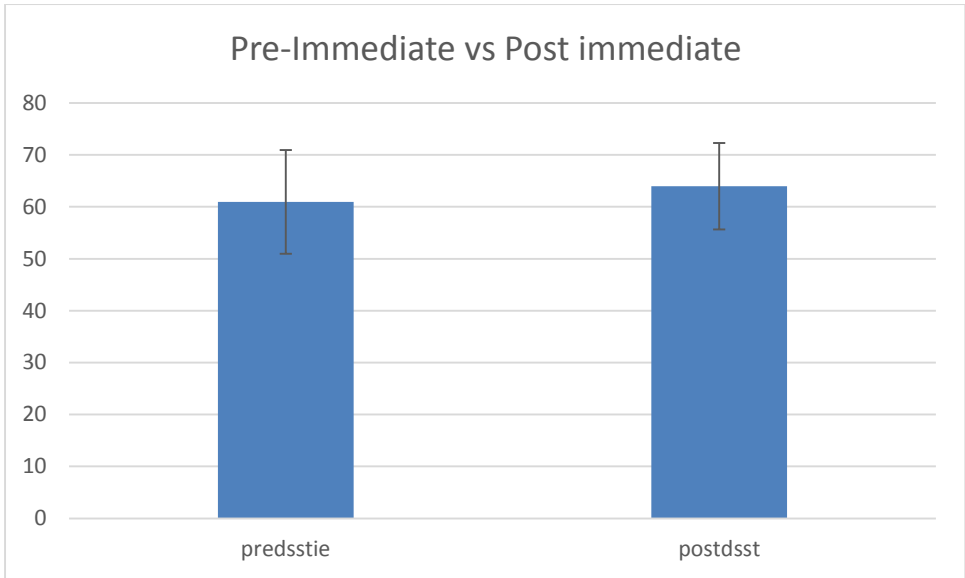
| Within group analysis (paired t-test) | | | |
|---|--------------|---------------|----------|
| | Pre (n = 32) | Post (n = 32) | |
| | Pre (Day 1) | Post (Day 10) | <i>P</i> |
| DSST Rating | 51.62 ± 9.65 | 64.88 ± 8.32 | .001** |

** *Highly significant*

Descriptive Statistics

| Measure | n | Mean | SD | Min | Max | Range | Std-Error |
|-----------|----|-------|-------|-----|-----|-------|-----------|
| Pre DSST | 32 | 60.97 | 9.99 | 46 | 77 | 31 | 1.77 |
| Pre DSST | 32 | 51.04 | 11.12 | 38 | 75 | 37 | 1.71 |
| Post DSST | 32 | 64 | 8.32 | 43 | 82 | 39 | 1.47 |

| Comparison | | t | df | P |
|------------|-----------|--------|----|-------|
| Pre DSST | Post DSST | -2.64 | 31 | 0.013 |
| Pre DSST | Post DSST | -10.38 | 31 | 0.001 |



CHAPTER 8

DISCUSSION

The study used a within group comparison between the pre-post outcomes of the short term mantra intervention group which showed a very significant reading and immediate mantra intervention group showed a less significant reading.

In a study, the result shows that chanting mantra relaxes body-mind complex and can stabilize brain and by its practice one enters deeper into the own natural state, and that can act as an energy medicine for bringing stress under control and to bring good sleep. (Gurjar, Ladhake, & Thakare, 2009). The present study enlightens the effect of mantra chanting on improving the visual memory in college going students.

The vibrations of mantra chanting is found to bring a positive influence on the energy levels of the individuals. Meditation and mantra chanting is found to harmonize the sympathetic and parasympathetic systems (Yoga Federation of Serbia, 2010).

The mantra chanting in short term intervention group done for a period of ten days showed better results than the immediate effect intervention group, which was done only for one day. This indicates that, mantra chanting for ten days have a great impact on the improvement of visual memory.

CHAPTER 8

CONCLUSION

CONCLUSION

Significant of mantra chanting on improving the visual memory of college going students have been understood by the marking done by the subjects. Its also been understood that short term effect is much significant than immediate effect of mantra chanting. The study concludes that the mantra chanting should be included in the course career curriculum of college students for an improvement in their visual memory.

CHAPTER 10

APPRAISALS

IMPLICATION OF THE STUDY

Previous studies on meditation has reported a reduction in stress and anxiety levels as well as an improved emotional balance. This study found that regular practice of mantra chanting for a short term duration can improve the visual memory scale in college going students.

STRENGTH OF THE STUDY

This is the first study that attempted to find the immediate and short term effects of mantra chanting on college students.

All the subjects were quiet co-operative and excited to know their pre and post visual memory status as shown by DSST questionnaire.

LIMITATION OF THE STUDY

The sample size was very less.

The intervention period was less.

The time chosen for the intervention was 3pm, which is a sleep inducing time, this might have made the subjects to lose their flow of mental chanting

SUGGETIONS FOR THE FUTURE STUDY

Future studies should be done in other student groups from different parts of India to establish the generalizability.

Long-term studies to assess long term impact of mantra chanting.

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APPENDICES

CONSENT FORM

INFORMED CONSENT

S-VYASA University, #19, Ekanath Bhavan, K.G. Nagar, Bangalore – 560019.

You are being invited to participate in a research study. This form is designed to provide you with information about this study. The principal investigator or representative will describe this study to you and answer of your questions. If you have any questions or complaints about the informed consent process or the research study, please contact the institution or principal investigator.

1. Name of the subject:
2. Title of research study: “Immediate and short term effect of mantra chanting on visual memory of college students using digit symbol substitution”
3. Principal investigator: Annu Kumari
4. The purpose of the study:
To study the “Immediate and short term effect of mantra chanting on visual memory of college students using digit symbol substitution”
5. Period of intervention:
You will be given a sessions for the duration of 1 hour for 10 days.
6. Procedure for measurement:
The variable will assessed by the questionnaire DSST.
7. Potential health risks or discomforts:
The mantra chanting sessions will cause no harm to you. If you wish to discuss these or any other discomforts you may experience, you may call the researcher.
The mantra chanting sessions will ultimately lead you to better visual memory.
8. Compensation for research related injury:
The Nature of intervention or assessment may not cause any injury. In case of untoward events preliminary first aid will be provided by principle investigator or researcher.
9. Conflict of interest:
Participation in this study is purely voluntary. However before giving your consent please see that no conflict of interest arises. Your name and personal information will be kept strictly confidential.
10. Alternative to participating in this research study:
Since, Participation in this study is purely voluntary and if you choose to participate, you are free to withdraw your consent and discontinue participation in this research study at any time by giving it in writing, without this decision affecting your medical care and health insurance provided to you during the study. If you have any question regarding your rights as a subject you may contact the researcher on annubuzz@gmail.com.
11. Withdrawal from this research study:
If you wish to stop this research study for any reason, you should contact with the principal investigator Annu kumari.
12. Confidentiality:
Anvesana, S-VYASA University will protect the confidentiality of your records to the extent provided by Law. You understand that the study sponsor and the institution have the right to review your records.
13. Signature
The principal investigator or representative has explained the nature and purpose of the above describe procedure and the benefits and risks that are involved in this research protocol.

I have given my permission consciously for participation in this study.

(Signature of the Subject)

DIGIT SYMBOLE SUBSTITUTION TEST

Name :

Date :

Age :

Instructions :

1. Substitute the symbol with the corresponding digit as per the given key.
2. Substitute as many possible symbols within the given time.
3. Start and stop only when told.

| | | | | | | | | | |
|--------|---|---|---|---|---|---|---|---|---|
| Digit | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Symbol | × | L | ○ | Π | ⊥ | ^ | - | = | o |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| 2 | 1 | 9 | 7 | 4 | 9 | 9 | 6 | 3 | 3 | 7 | 6 | 2 | 1 | 7 | 4 | 4 | 6 | 4 | 8 | 9 | 6 | 4 | 9 | 1 | |
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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| 4 | 4 | 7 | 3 | 9 | 1 | 6 | 7 | 6 | 9 | 7 | 9 | 3 | 1 | 4 | 5 | 1 | 3 | 2 | 9 | 7 | 1 | 7 | 1 | 3 | |
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| 4 | 1 | 1 | 5 | 9 | 7 | 3 | 6 | 6 | 5 | 2 | 2 | 7 | 5 | 7 | 4 | 6 | 2 | 4 | 9 | 8 | 9 | 2 | 1 | 4 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | |

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| 7 | 8 | 1 | 5 | 3 | 8 | 7 | 8 | 5 | 4 | 2 | 3 | 2 | 3 | 8 | 6 | 5 | 1 | 9 | 2 | 7 | 7 | 6 | 5 | 5 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | |

Total Substitution:

Wrong Substitution:

Net Score:

RAW DATA

| Immediate mantra group | | | | |
|------------------------|---------------------|-----|--------|------|
| SINo | Name | Age | Gender | DSST |
| 1 | Anirudh | 24 | M | 62 |
| 2 | Arakshit sahani | 27 | M | 40 |
| 3 | Archana devi | 31 | F | 66 |
| 4 | Bishal ranashat | 27 | M | 54 |
| 5 | B.rajasekhar | 25 | M | 39 |
| 6 | Baishakhi baneerjee | 23 | M | 53 |
| 7 | Deepak.P | 24 | M | 61 |
| 8 | Ganesh Gaine | 40 | M | 50 |
| 9 | Ganesh Prasad | 24 | M | 51 |
| 10 | D.Yuva Kishore | 21 | M | 50 |
| 11 | J.Chandra Mouli | 28 | M | 68 |
| 12 | Manoj Kumar | 30 | M | 50 |
| 13 | Rajashree Maily | 23 | M | 55 |
| 14 | Narendra Bablu | 24 | M | 60 |
| 15 | Nirbhay Singh | 23 | M | 38 |
| 16 | Narotam Kumar | 24 | M | 43 |
| 17 | Pankaj kamal | 21 | M | 40 |
| 18 | Ravi Kromandat | 22 | M | 57 |
| 19 | Rajat Chaudhary | 24 | M | 49 |
| 20 | Sanaton Basu | 24 | M | 39 |
| 21 | Ram Prakash jha | 21 | M | 39 |
| 22 | Rennu | 28 | F | 50 |
| 23 | Sujit Kumar | 23 | M | 43 |
| 24 | Pooja Soni | 22 | F | 55 |
| 25 | Xuwen | 30 | M | 57 |
| 26 | Raju | 37 | M | 62 |
| 27 | Amit Kumar | 23 | M | 40 |
| 28 | Abhay | 32 | M | 46 |
| 29 | ken | 30 | M | 62 |
| 30 | M.sowjaiye | 22 | F | 46 |
| 31 | Supriya | 24 | F | 52 |
| 32 | Shunosuke | 30 | M | 75 |

| Short term mantra group | | | | |
|-------------------------|---------------------|-----|--------|------|
| Sl No | Name | Age | Gender | DSST |
| 1 | Anirudh | 24 | M | 75 |
| 2 | Arakshit sahani | 27 | M | 54 |
| 3 | Archana devi | 30 | F | 71 |
| 4 | Bishal ranashat | 26 | M | 68 |
| 5 | B.rajasekhar | 32 | M | 50 |
| 6 | Baishakhi baneerjee | 23 | M | 49 |
| 7 | Deepak.P | 24 | M | 69 |
| 8 | Ganesh Gaine | 40 | M | 63 |
| 9 | Ganesh Prasad | 24 | M | 54 |
| 10 | D.Yuva Kishore | 22 | M | 65 |
| 11 | J.Chandra Mouli | 28 | M | 75 |
| 12 | Manoj Kumar | 30 | M | 49 |
| 13 | Rajashree Maily | 23 | M | 65 |
| 14 | Narendra Bablu | 24 | M | 67 |
| 15 | Nirbhay Singh | 23 | M | 46 |
| 16 | Narotam Kumar | 25 | M | 56 |
| 17 | Pankaj kamal | 21 | M | 64 |
| 18 | Ravi Kromandat | 22 | M | 66 |
| 19 | Rajat Chaudhary | 24 | M | 50 |
| 20 | Sanaton Basu | 24 | M | 48 |
| 21 | Ram Prakash jha | 21 | M | 48 |
| 22 | Rennu | 28 | F | 62 |
| 23 | Sujit Kumar | 23 | M | 58 |
| 24 | Pooja Soni | 22 | F | 68 |
| 25 | Xuwen | 30 | M | 73 |
| 26 | Raju | 37 | M | 75 |
| 27 | Amit Kumar | 23 | M | 46 |
| 28 | Abhay | 30 | M | 66 |
| 29 | Ken | 32 | M | 55 |
| 30 | M.sowjaiye | 22 | F | 77 |
| 31 | Supriya | 24 | F | 49 |
| 32 | Shunosuke | 30 | M | 70 |