

EFFECT OF ARUTPERUNJOTHI MANTRA ON SUBTLE ENERGY USING ELECTRO PHOTONIC IMAGING

Dissertation submitted by

ARCHANA DEVI P

Under the guidance of

Dr. JUDU ILLAVARASU V, PhD



Towards

Partial fulfilment of Master of Science in Yoga Therapy



Submitted to

SWAMI VIVEKANANDA YOGA ANUSANDHANA SAMATHANA

(Deemed to be University, Recognized by UGC)

19, Eknath Bhavan, Gavipuram Circle, Bengaluru - 560 019, India.

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CERTIFICATE

This is to certify that **ARCHANA DEVI** is submitting this Experimental research entitled **“EFFECT OF ARUTPERUNJOTHI MANTRA ON SUBTLE ENERGY USING ELECTRO PHOTONIC IMAGING”** in partial fulfilment of the requirement for the degree of Master of Science (Yoga) registered in Swami Vivekananda Yoga Anusandhana Samsthana (SVYASA University), Bengaluru. This is a bonafide work carried out by her under our guidance and supervision under the division of Life sciences and is a record of the work carried out by her in this institute.

Dr. Judu Illavarasu

(Guide)

Date:

Place: Prashanti Kutiram, Bengaluru

DECLARATION

I, hereby declare that this study was conducted by me at Swami Vivekananda Yoga Anusandhana Samsthana (S-VYASA), Bengaluru, under the guidance of Dr. Judu Illavarasu and Dr. Guru Deo from SVYASA University, Bengaluru.

I also declare that the subject matter of my dissertation entitled “**EFFECT OF ARUTPERUNJOTHI MANTRA ON SUBTLE ENERGY USING ELECTRO PHOTONIC IMAGING**” has not previously formed the basis of the award of any degree, diploma, associate-ship, fellowship or similar titles.

Date:

ARCHANA DEVI

Place: Prashanti Kutiram, Bengaluru

ACKNOWLEDGEMENT

I offer my humble salutations to the Divine Almighty without whose grace and blessings, it is impossible for me to accomplish this work. Just after God I would like to appreciate all my family members and my close friends who always have been an inspiration for me.

I would like to express the deepest gratitude to Thiru Aruprakasa Vallalar who made me an instrument to do this Divine work.

I would like to thank Mr. Saravanan from Salem Sanmaraga Sangam and Mr. Chandramouli for their guidance and support. Their contribution to this Divine work cannot be expressed in words.

I would like to thank my guides Dr. Judu Illavarasu and Dr. Guru Deo for their guidance and encouragement.

I would like to thank Thiru. Arutpa Govindaswamy Iyya, Mr. Ravikumar Mr.Ramkumar and Mr.Karthick Kanniappa for their guidance and support.

Also I would like to thank all Sanmarga Sangam People from Salem, Chennai and Bengaluru involved and supported in this Divine work as participants.

I will be always grateful to my university Swami Vivekananda Yoga Anusandhana Samsthana (S-VYASA) for its support in promoting my career.

God bless all with full of Divinity in their Physical, Mental, Emotional and Spiritual Life forever.

ARCHANA DEVI

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

a	=	अ	na	=	न	pa	=	प
ä	=	आ	ca	=	च	pha	=	फ
i	=	इ	cha	=	छ	ba	=	ब
é	=	ई	ja	=	ज	bha	=	भ
u	=	उ	jha	=	झ	ma	=	म
ü	=	ऊ	ña	=	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
aṁ	=	अं	tha	=	थ	ha	=	ह
aḥ	=	अः	da	=	द	kṣa	=	क्ष
ka	=	क	dha	=	ध	tra	=	त्र
kha	=	ख	na	=	न	jña	=	ज्ञ
			ga	=	ग			
			gha	=	घ			

STANDARD TAMIL TRANSLITERATION CODE

Vowels:

அ = a

ஆ = A,aa

இ = i

ஈ = I,ee

உ = u

ஊ = U,oo

எ = e

ஏ = E

ஐ = ai

ஓ = o

ஔ = O

ஔள = au,ou

ஃ = H (Aytham)

Consonants:

க = k,K,kh,g,G,gh

ங் = ~g

ச = c,ch,C,Ch

ஞ = ~j

ட = T,Th,D,Dh

ண் = N

த = t,th,d,dh

ந் = ~n

ப = p,P,ph,b,B,bh

ம் = m,M

ய் = y,Y

ர் = r

ல் = l

வ் = v,w

ழ் = zh,Lx

ள = L

ற் = R,rx

ன் = n

ஜ் = j,jh,J

ஷ் = Sh

ஸ் = s

ஹ் = h,~h

ABSTRACT

BACKGROUND

Chants (Mantra) helps in bringing the body, mind and soul in tune with each other. Compassion is an inherent human capacity which is invoked by chanting and meditation. *Arutperunjothi Maha Mantra* is the *Mantra* which helps to bring the inherent nature (Compassion) and positive health. This study has been conducted to evaluate the effect of this mantra on human subtle energy variables, measured using Electro Photonic Imaging technique.

MATERIALS AND METHODS

In this study 90 participants of both gender, mean age 46.69 ± 13.43 had participated. 47 were analysed after the study. Chanting group chanted *Arutperunjothi Maha Mantra* 108 times and meditation group meditated on *Arutperunjothi Maha Mantra*, for 48 days (45 min/day). Assessments for Subtle Energy were done 1st day prior to intervention, after immediate intervention and on the last day after intervention by using Electro photonic Imaging Technique.

RESULTS

Result showed that Chanting influenced the bio-energy pattern immediately than Meditation. Meditation more influenced the *Anja Chakra* than Chanting. Long-term interventions of both chanting and meditation influenced the bio-energy level includes Organs System and Chakra which showed the power around 90-100%. Even though it was, Meditative people get more benefited than chanting people.

CONCLUSION

Findings show that Chanting as well as Meditation on *Arutperunjothi Maha Mantra* may play a significant role on modifying the Bio-energy pattern along with other psycho-physiological parameters and Organs System including Chakras that in turn help in better improvement in health and lifestyle management.

KEYWORDS

Compassion, Electro photonic Imaging, *Arutperunjothi Maha Mantra*, Chanting, Meditation

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1. INTRODUCTION

1.1. THIRU ARUT PRAKASA VALLALAR

Thiru Arutprakasa Vallalar, The Embodiment of Supreme Compassion, A Messenger of Vast Grace Light *Arutperunjothi* , A Great ~*Jaana chiddhar, Chuttha chanmaarkki* is Swami Ramalingam. His Moto is Universal brother hood. He was born at Marudur on Sunday October 5th, 1823. This place is located at 15km northwest from Chidambaram in Tamilnadu.

Vallalar mentioned in *ThiruvuruTpa*, "*ChaakaathavanE chanmaarkki* - Those who can live forever without die, he is a real *Chanmaarki* (Ramalingam, 1999)" and his path is *Chuttha chanmaarkkam* which teaches us *Chaakaa kalvi* (Deathless Education), *Chaakaa kalvi* mentioned in whole volume of *ThiruvuruTpa*, made up of 5818 Divine songs which was delivered by Vallalar by the grace of *Arutperunjothi* .

1.2. MANTRA

A *Mantra* is a grouping of sound vibrations which have an effect on the mental and psychic consciousness of man. If the *mantra* is from the guru or in a dream, it is best. While chanting, if our mind fully merges with *mantra*, it will be effective. While chanting the *mantra* verbally or mentally, that *mantra*'s vibrations create a certain form within us. It also influences our psychic and physical level (Saraswati, 1983). The word *Mantra* has been defined as,

मननात् त्रायते इति मन्त्रः।

Mananāt trāyate iti mantraḥ |

"*Man* - mind, *trai* - to protect" That which protects the one who reflects upon it (Swaroopananda, 2010). In Sanskrit, '*Man*' means 'mind' and '*tra*' means 'release'. So a *mantra* is a combination of transcendental sounds meant to release the mind from all the anxieties of material life.

Mantra is also an energy which is composed of certain frequencies. It has own pattern and vibration which creates profound levels. These frequencies and positive vibration influence our nerves and brain. Fast chanting exhausts the mind, heart and breathes relaxation comes

after the chanting is over. Slow chanting relaxes the mind, heart and breathes while chanting it (Satyananda, 1979). *Mantra* chanting generates the creative force and brings one in tune with Divine by the principle of sympathetic vibrations (Govindan, 1991).

Mantra can be chanting in the following four ways (Prajna-aranya, 2011):

- **वैखारि (vaikhāri)** : Chanting begins loudly and gradually the pitch is lowered.
- **मध्यमा (madhyamā)** : Chanting is done silently within oneself. Even the lips are not moved.
- **पश्यन्ति (paśyanti)** : Chanting is done mentally. Mental chanting or chitta japa is considered the best but is the most difficult as the mind tends to wander.
- **परा (parā)** : Chanting is enjoyed and mind meets the god. The Upanishads describes that ānāhata nāda is continuously going within us but we are not able to listen because our minds are totally extroverted and impure.

1.3. MAHA MANTRA

Caitanya maha prabhu defined the *Maha-mantra*, "It cleanses the heart of all the dirt accumulated for many lifetimes and puts out the fire of material life, and repeated birth and death". According to Vedic literature, the reason of all suffering is because of we forgot our original, pure consciousness. There we do not need to suffer birth, death, disease, or old age. The true identity of our real nature presents within us. But we have temporarily forgotten it.

அருட்பெருஞ் ஜோதி அருட்பெருஞ் ஜோதி
தனிப்பெருங் கருணை அருட்பெருஞ் ஜோதி

AruTperu~jjOthi aruTperu~jjOthi

Thanipperu~gkaruNai aruTperu~jjOthi

Vast Grace Light Vast Grace Light
Supreme Compassion Vast Grace Light

Mercy, Compassion, Grace have the same sense, and indicate the same meaning. The knowledge that possesses Compassion is perfect and Integral Bliss itself. The Bliss is the supreme knowledge possessing Compassion. This is the meaning of *mantra* (Ramalingam, 2011). And the English translation was given by Thulasiram (Thulasiram, 1980).

Swami Ramalingam received this *mantra* directly from the divine in 1874 before dematerialising. When he gave this *mantra*, he had already transformed his body into *~Jaana dEkam* (Deathless body). *Arutperunjothi* directly represents God, Almighty, *Chachchithaana~ntham* and the source of all beings. *Thanipperu~gkaruNai* means the uniqueness of supreme compassion (Thulasiram, 1980). Swami Ramalingam mentioned about the benefits of being one with *Arutperunjothi* by chanting, meditating, remembering, hearing, writing in *Arutperunjothi Akaval* (1596 verses) (Ramalingam, 1873). Some of benefits are given below.

***Arutperunjothi Akaval* (verses 1449 - 1473) explains about the transformation of Physical body into *~Jaana dEkam* (Ramalingam, 1873).**

English Translation of *Akaval* was written by Swami Saravanananda, " ' The skin has become supple; nerves function intermittently; bone shave become soft and the tendons have lost their grip over the muscles; blood has congealed and semen has condensed into a solid ball; petals of the brain blossom and elixir fills up the body system; face glows and breath becomes peaceful; hairs rise on end and tears well up; mouth utters the name of the lord and the sound of OM pours into the ears; body becomes cooled and hands rise up in salutations; mind ripens and melts and wisdom fills up the mental frame; the ever pervading feeling has come to stay; egoism vanishes and the soul attains bliss; impurities get destroyed and purity alone remains; illusory tendency vanishes and a longing for god's grace swells up...'

'Thus the process of transmutation being completed and perfected, the aspirant becomes the possessor of a golden body. This body with shrunken skin has becomes ever youthful', an affirmation made by *Vallalar* himself. 'It has shaken off sleep, hunger, thirst, diseases from the system. It has been filled with divine light; it has developed immunity from all kinds of destructive forces.' " (Saravanananda, 2009).

1.4. SUBTLE ENERGY

Subtle Energy is a *Prana* which has two aspects those are Cosmic *Prana* and Individual *Prana*. Cosmic *prana* is very subtle and can only be perceived by the infinite mind but Individual *prana* related to the body is grosser and more tangible.

According to *Swara yoga* the body is the storehouse of vital energy, a dynamo with infinite electrical currents flowing throughout. The ordinary man sees this body as a combination of flesh, blood and bone. But the yogis and scientists have perceived a greater force behind the physical elements, and that is the force of energy or *prana* which is more subtle than the nucleus of an atom. There is an energy link between the physical and psychic bodies and that energy or *pranic* force is convertible into material force and that material force is convertible into *pranic* force. It is already proved by researchers. The Equation of Albert Einstein, $E=mc^2$ which also denotes that matter is energy in its potential state. Modern science also shows that the energy in the body emits an aura of light. The Vedas clearly state that every object has a *pranic* field which appears as an encompassing mass of light (Muktibodhananda, 1984).

Yogavāsiṣṭhaḥ depicts *Prāṇa* as an alive form of expanded cosmic existence, without limits or boundaries. The Ancient sage Vāsiṣṭha made it strong that there is some kind of personal *Prāṇa*, which encompasses about twelve inches around the body in all directions. He calls this personal *Prāṇa* "*Vadasanta*". This can be roughly correspond to what we usually know it today as the aura.

1.5. ENERGY BODY

Energy or *Pranic* body is a network of flowing energy in the shape of the physical body, but radiating outward just as light emanates beyond the bulb. Its form is not static; it expands and contracts. Decrease in the vital capacity of any *vayu* causes contraction of the *pranic* body, while increase causes expansion. The mind and emotions also utilize *prana* and the *pranic* body is greatly influenced by states of the mind. Negative thoughts lower the *prana* and exhaust your mind whereas positive thoughts enhance the *prana* and frame of mind. *Pranic* body is affected by our whole way of living and the *pranic* functions in turn affect our capacities and attitudes in life (Muktibodhananda, 1984).

Clairvoyants have observed that every person is surrounded and interpenetrated by luminous energy body called the bio-plasmic body which looks like the visible physical body. The word "bio-plasmic" comes from bio which means life and plasma which is the fourth state of

matter. The first three beings are solid, liquid, and gas. Plasma is ionized gas or gas with positive and negative charged particles. This is not the same as blood plasma. Bio-plasmic body means a living energy body made up of invisible subtle matter (Sui, 1998).

With the aid of Kirlian photography, scientists have been able to study, observe, and take pictures of small bio-plasmic articles like bio-plasmic fingers, leaves, etc. (Sui, 1998). Researchers have shown an aura like an electromagnetic field which can be measured and photographed. Measurements of changing frequency and amplitude of the electronic field confirm observation of the activities and changing colours of the aura (Muktibodhananda, 1984).

1.6. MANTRA AND SUBTLE ENERGY

Besides our gross and form based physical body, there is subtle energy body which made up of sound. Our higher Self or inner being, the *Purusha* of yogic thought is connected to the physical body through this body of sound. By chanting *Mantra*, we can harmonize this body of sound into physical body to insure the right flow of energy. The subtle body of sound vibration relates to the mental body and to the subtle or astral body in general, the site of the seven chakras. It creates and sustains the physical body, supporting health and wellbeing within it. Through changing the frequencies of the subtle body of sound, we can bring healing into the physical body and remove the negativities from the mind (Frawley, 2010).

1.7. ELECTRO PHOTONIC IMAGING

Electro photonic Imaging (EPI) also known as Gas Discharge Visualization is a novel technique which is based on Kirlian photography. Dr. Konstantin Korotkov is the founder of this technique which was 1995. It is also called EPI - Electro photonic Imaging Technique. The EPI system has been approved by Russian Health Authorities for general use, following clinical trials and the recommendation of the Russian Academy of Sciences (Korotkov, 2014b).

1.7.1. GDV BIO-WELL INSTRUMENT

Korotkov explained about the GDV Bio-Well Instrument, "Bio well is a revolutionary, non-intrusive way to measure Human Energy Field physiological, psychological, and conscious level. It is used for scanning the Human Energy Field by applying the electrical current less than a millisecond to the finger tips. Because of this stimulus, electronic cloud composed of light energy photons is formed with different variation. This electronic glow is invisible to the human eyes. It is captured by the camera system and then translated and transmitted back in graphical representations to show energy, stress and vitality evaluations. It is Non Invasive and easy to carry. There is no need much technical knowledge to handle this" (Korotkov, 2014a).

1.8. PURPOSE OF USING GDV

Thiru Arutprakasa Vallalar wrote about *Arutperunjothi* in *Arutperunjothi Akaval* (Ramalingam, 1873). But it is not proved scientifically. Evidence Based Research has not been done by chanting *Arutperunjothi mantra*. So GDV Instrument has been chosen to see the overall changes in Physical, Emotional and Energy level.

1.9. PURPOSE OF THE STUDY

Thiru Arutprakasa Vallalar, He is full of compassion. He attained *~Jaana dEkam*. There is a proverb "What you think that you are". If we think or study about God or Deathless education (*Chaakaa kalvi*) forever, we will become like that. Vallalar proved that. Vallalar gave this *mantra* which he got directly from God. In *Mantra Arutperunjothi* represents *Chachchithaana~ntham*/The Vast Grace Light/Source of all, we meditate directly towards the source of all beings. So this *mantra* is called *Maha Mantra*. I would like to expose the value of this *Maha Mantra* scientifically.

2. LITERATURE REVIEW

2.1. ANCIENT LITERATURE REVIEW

2.1.1. STUDIES ABOUT *PRĀNA*

Yogavāsiṣṭhaḥ

कीटादिष्वपि सर्वेषु मर्मस्थानं समाश्रिता ॥

भोगिवत् मण्डलाकारा सर्वदा स्पन्दरूपिणी।

पावनि परमा शिक्तः पवमानेन तिष्ठति ॥

Kīṭādiṣvapi sarvesu marmasthānaṁ samāśritā |

Bhogivat maṇḍalākārā sarvadā spandarūpiṇī |

Pāvani paramā śktiḥ pavamānena tiṣṭhati ||

In all beings, even in worms and the like, resorting to the vital part of the body there abides, along with the vital air (or bio-energy), a pure (or purifying) power, coiled in form like a snake and always vibratory in nature (*Yogavāsiṣṭhaḥ*, Ch : XXV, V : 27 -28).

साऽतः कुण्डलिनी प्रोक्ता नाडयो हृदयकोशगाः।

अस्यां समस्ताः सम्बद्धाः सैव प्राणमयी स्मृता ॥

प्राणापानस्वरूपतत्वात् अध ऊर्ध्वं व्रजत्यसौ।

Sā'taḥ kuṇḍalinī proktā nāḍayo hradayakośagāḥ |

Asyām samastāḥ sambaddhāḥ saiva prāṇamayī smratā ||

Prāṇāpānasvarūpatatvāt adha ūrdhvaṁ vrajatyasau |

Therefore, this power (or energy) is called Kundalinee (or the coiled one). All the Naadee-s (or channels of bio-energy) in (or going to) the receptacle of the heart are connected with

this. That alone is considered as consisting of Prāṇa (or bio-energy). On account of this inherent nature being Prāṇa and Apāna, it moves up and down (in the body) (*Yogavāsishṭhaḥ*, Ch : XXV, V : 29).

यधन्तः मारुतो रूद्धः व्याधिः जन्तोः न जायते ॥

देहदुःखं विदुः व्याधिम् आध्याख्यं वासनामयम् ।

Yadhantaḥ māruto rūddhaḥ vyādhiḥ jantoḥ na jāyate ||
Dehaduḥkham viduḥ vyādhim ādhyākhyam vāsanāmayam |

If the vital air bound with in, physical ailment is not produced in a living being. The distress of the body is known as disease, Mental affliction consists on mental impressions (or knowledge driven from memory agitating the human psyche) (*Yogavāsishṭhaḥ*, Ch : XXV, V : 30).

दुरन्नाभ्यवहारेण दुर्देशाक्रमणेन च ॥

दुष्कालव्यवहारेण दुर्जनासङ्गदोषतः ।

क्षीणत्वात् वाऽतिपूर्णात्वात् नाडीनां रन्ध्रसन्ततौ ॥

प्राणे विधुरतां याते व्याधिः देहे प्रवर्तते ।

Durannābhyavahāreṇa durdeśākramaṇena ca ||
Duṣkālavvyavahāreṇa durjanāsaṅgadoṣataḥ |
Kṣīṇatvāt vā'tipūrṇātvāt nāḍīnām randhrasantatau ||
Prāṇe vidhuratām yāte vyādhiḥ dehe pravartate |

Diseases occurs in the body when prāṇa (bio-energy) reaches deprivation in the series of the cavities of the Naadee-s (or channels of bio-energy such as nerves, arteries and veins), due to the eating of bad food, the occupation of bad places, the conduct of affairs in unsuitable time, the evil of association with bad people and by the diminution or overfilling (of the system with the necessities of life) (*Yogavāsishṭhaḥ*, Ch : XXV, V : 31 - 32).

चित्ते विधुरिते देहः सङ्क्षोधम् उपयाति हि।

सङ्क्षोभात् साम्यम् उत्स्रज्य दहन्ति प्राणवायवः ॥

Citte vidhurite dehaḥ saṅkṣodham upayāti hi |
Saṅkṣobhāt sām्यam utsrajya dahanti prāṇavāyavaḥ ||

When the mind is agitated, the body indeed goes to the state of agitation. On account of agitation, the vital airs (or current of bio-energy) flow, giving up evenness (*Yogavāsiṣṭhaḥ*, Ch : XXV, V : 35).

असमे वहति प्राणे नाड्यो यान्ति विसंस्थितिम्।

कुजीर्णत्वम् अजीर्णत्वम् अतिजीर्णत्वमेव वा ॥

दोषायैव प्रयात्यन्नं नाडीप्राणविपर्ययात्।

Asame vahati prāṇe nāḍayo yānti viśamsthitim |
Kujīrṇatvam ajīrṇatvam atijīrṇatvamev vā ||
Doṣāyaiva prayātyannaṁ nādīprāṇaviparyayāt |

when the bio-energy flow unevenly, channels attain to an improper condition. The perverseness of the bio-energy currents in their channels causes the food wrong digestion, indigestion or over digestion (*Yogavāsiṣṭhaḥ*, Ch : XXV, V : 36).

सत्वशुद्ध्या वहन्त्येते क्रमेण प्राणवायवः ॥

जरयन्ति तथाऽन्नानि व्याधिः तेन विनश्यति।

Satvaśuddhyā vahantyeṭe krameṇa prāṇavāyavaḥ ||
Jarayanti tathā'nnāni vyādhiḥ tena vinaśyati |

By the purity of mind these vital airs flow in regular course which digests the food easily. Because of that, physical ailments parishes (*Yogavāsiṣṭhaḥ*, Ch : XXV, V : 40).

Haṭharatnāvalī

मकारेण मनः प्रोक्तं त्रकारः प्राण उच्यते।

मनः प्राणसमायोगाधोगो वै मन्त्रसञ्ज्ञकः ॥ १ - १९ ॥

Makāreṇa manaḥ proktaṁ trakāraḥ prāṇa ucyate |
Manah prāṇasamāyogādhogo vai mantrasañjñakaḥ || 1 - 19 ||

The letter 'Ma' is for *Manas* (mind) and the letter 'Tra' is said to be for *Prāṇa*. *Mantra* yoga is the yoga which connects *Manas* and *Prāṇa*.

चले वाते चलं सर्वं निश्चले हठबन्धनम् ॥ ३ - ७९ ॥

Cale Vāte Calam Sarva Niścale Haṭhabandhanam || 3 - 79 ||

When Vata (air) is not steady, everything is not steady. When vata becomes steady, then only mastery on Hatha is acquired.

प्रकर्षेण अनति इति प्राणः।

Prakarṣeṇa anati iti prāṇaḥ |

That which moves itself and makes other to move or activate in action is *Prāṇa*.

प्राणिति जीवति बहुकालमिति। प्र अन् अच्।

Prāṇiti jīvati bahukālamiti | pra an ac |

That which lives for long duration - living beings in general

शरीरान्तस्सञ्चारी वायुः प्राणः।

Śarīrāntassañcārī Vāyuh Prāṇaḥ |

The air flowing inside the body is called *Prāṇa*.

प्राणस्येदं वशे सर्वं त्रिदिवे यत् प्रतिष्ठितम्।

मातेव पुत्रान् रक्षस्व श्रीश्च प्रज्ञां च विधेहिन इति ॥ १३ ॥

Prāṇasyedaṁ vaśe sarvaṁ tridive yat pratiṣṭhitam |
Māteva putrān rakṣasva śrīśca prajñāṁ ca vidhehina iti ||13||

All that exists here is under control of *Prāṇa* and also what exists in heaven. Protect us as a mother her sons; bestow upon us prosperity and wisdom.

2.1.2. STUDIES ABOUT MANTRA

Bhagavad Gita

महर्षीणां भृगुरहम् गिरामस्ययेकमकक्षरम्।

यज्ञानां जपयज्ञोऽस्मि स्थावराणां हिमालयः ॥ १०-२५ ॥

Maharṣīṇāṁ bhṛguraham girāmasyayekamakakṣaram |
Yajñānām japayajño'smi sthāvarāṇām himālayaḥ || 10-25||

Repetition of *Mantra* is regarded as the best of all *yajñas* or sacrifices. There is no loss or injury in this *yajña*. Manu says: "Whatever else the *brahmana* may or may not do, he attains salvation by japa lone" (Shivananda, 2000).

Patanjali Yoga Sutra

जन्मौषधिमन्त्रतपःसमाधिजाः सिद्धयः ॥ ४-१ ॥

Janmauṣadhimantratapaḥsamādhijāḥ siddhayaḥ ||4-1||

Siddhi can also be acquired from other factors like *Janma*, *Auṣadhi*, *Mantrāḥ* (Prasad, 2010).

ततः प्रत्यचकेतनाधिगमोऽप्यन्तरायाभावश्च ॥ १ - २९ ॥

Tataḥ pratyacaketanādhigamo'apyantarāyābhāvaśca || 1 - 29 ||

The word 'Antaraya' denotes the obstacles one may experience while trying to attain Samadhi. *Japa* and devotion to God will help to overcome these obstacles. Once a Yogi conquers these obstacles, he can turn his sensory organs inward and see the Purusa residing within (Padiki Naaogaraj, 2015).

Rig Veda

सुप्तबीजाश्च ये मन्त्रा न दास्यन्ति फलम् प्रिये।

मन्त्रचैतन्यसहिताः सर्वसिद्धिकराः स्मृताः ॥ १५-६० ॥

Suptabījāśrca ye mantrā na dāsyanti phalam priye |

Mantracaitanyasahitāḥ sarvasiddhikarāḥ smṛtāḥ || 15-60 ||

All *Mantra* have own powers with embeded consciousness. Its power become awaked when it is practiced with intense focusing and sincere sacrifice. The proper awaking can be gain by *Guru* who truely communicate with *Mantra*. *The two aspects, proper guideness from Guru and power of Mantra lead a sādhana to perfection* (Pandit, 1973).

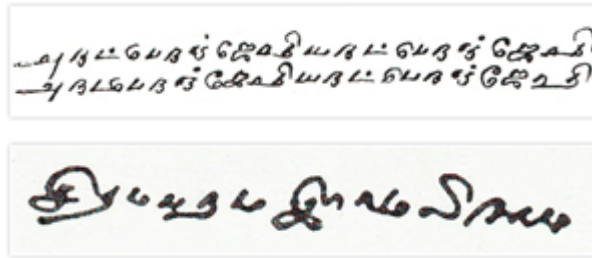
2.2. MODERN LITERATURE REVIEW

2.2.1. STUDIES ABOUT CHANTING MANTRA

The result of chanting *Maha Mantra* which was studied by Thulasiram, "While Doing Meditation on direct *mantra Arutperunjothi* , Gangadharan (who was a great *sadhak* in Sri Aurobindo Ashram) experienced the Vast Light of Supreme Grace linked the Truth-world of Super mind with the whole universal manifestation and the vast nether Realm of the Darkness. During Chanting he felt the graceful presence of Swami Ramalingam and he was surrounded by the white Light of Grace and Om Kara Sound and Bliss. His soul-consciousness joined with the Self and ascended to the Truth-world of Super mind, seeing the pure white Light of Grace everywhere on his way. In the ascent into the Truth-World he entered into the Golden Truth-world of Golden Light and then reached the summit Truth-world of the pure white Light of Supreme Grace (*Arutperunjothi*). He became identified with the Supreme Divine of the vast Grace-Light and experienced the whole universal manifestation in its formless form and as an expression of Supreme Compassion (*Thanipperu~gkaruNai*). Then, by a power of the Grace-*Sakti* he came down into the Golden Truth-World and saw *Siva-Sakti* Dance in their subtle or formless form of union, and after descending through several planes, came back to the earth which appeared illumined by Golden Red Light. His soul-consciousness returned into the physical body through *Brahmarandhra*, the hole in the top head. But before so entering, Golden Red Light rushed into his physical body filling up all its cells, and then Golden Light similarly entered into his whole *adhara*. His whole body appeared luminous in golden red, and even the roots of hair shone likewise. Indescribable Bliss overwhelmed the depth of his heart. Now the Golden Light rushed into the vast nether Realm of the Darkness and pervaded it making it luminous Golden. Then, It was filled up with the White Light of Grace, and with it, came the tangible experience of micro-atomic, luminous and conscious white particles of Substance radiating Light-the same particles as were seen before by Gangadharan in 1978 in his rare vision of dematerialisation of the luminous golden, transformed-living-body of Swami Ramalingam and there was also the experience of the Supreme Divine inhabiting it with Love and Grace and Compassion. This revealed concretely that the Supreme Divine of Vast Grace-Light (*Arutperunjothi*) has become the Darkness for the play of a slow evolutionary Manifestation. Gangadharan heard a blissful Sound of Grace, hitherto unheard of ever before. He sensed a Fragrance of Grace. After two hours of continuous experience he woke up with eyes open.

The vibrations of the Presence of the Supreme Divine with the Light of Supreme Grace were felt concretely and tangibly in the physical cells of the body too and it continued for long hours. He felt his heartfelt gratitude to the God of *Arutperunjothi* for providing him this supreme experience" (Thulasiram, 1980).

2.2.2. STUDIES ABOUT IMAGE OF MANTRA



This is the picture of "Arutperunjothi " Mantra written by Vallalar in his own hand writing.

According to Research Review of Thulasiram, "While touching this image of *Mantra* with our fingers or placing the cursor of computer on this image of *Mantra*, the Grace Light Vibrations at our Gross Physical body level can be felt".

2.2.3. STUDIES ABOUT IMAGE OF VALLALAR



SWAMI RAMALINGAM (alias Arut Prakasa Vallalar) (1823 - 1874)

Vast Grace-Light (*Arutperunjothi*) Deathless Transformative *Mantra* given by Vallalar

According to Research Review of Thulasiram, "While touching this image of Vallalar with our fingers or placing the cursor of computer on this image of *Mantra*, the Grace Light Vibrations at our Gross Physical body level can be felt".

2.2.4. COLOUR THERAPY USING IMAGES

By touching the image of *mantra* using one hand and touching the colour ribbon using other hand Person is getting healed. For Example, deep rosy-red cures in the long run nervous pains, rheumatic disorders, spondylitis, arthritis etc. and deep blue cures imbalanced *vata* of excessive nervous vibrations and energy. Green gives cooling effect and cures *pitta* state of excess heat and fever. Greenish-golden relieves nausea and biliousness. Based on deficiency, person uses the colour to treat himself.

2.2.5. STUDIES ABOUT ELECTRO PHOTONIC IMAGING TECHNIQUE

EPI/GDV Technique has been used to study about various populations worldwide such as Cancer, Asthma, Pregnancy, Diabetes, Obesities and also healthy people. A study which showed that Gas Discharge Visualization (GDV) technique is one of the biometric tools that have the potential to identify deviations from the normal functional state at early stages and in real time (Kostyuk, Cole, Meghanathan, Isokpehi, & Cohly, 2011). Another study which proved the ability of identifying patients with tumours of the colon using EPI technology, as well as use it for differential diagnosis of tumours of the colon by their morphology, size and quantity (Yakovleva et al., 2016). Another study was done by Assessing biophysical energy transfer mechanisms in living systems: the basis of life processes, which showed that GDV techniques provide indirect judgment about the level of energy resources at the molecular level of functioning in structural-protein complexes (Korotkov, Williams, & Wisneski, 2004).

Table 2.2.1: Studies using GDV/EPI in various Clinical Cases

No	Name of Author	Title	Parameter	Result/conclusion
1	(Kushwah, Srinivasan, Nagendra, & Ilavarasu, 2016a)	Development of normative data of electro photonic imaging technique for healthy population in India: A normative study	In this study activation coefficient (stress level), integral area (IA) (general health), and integral entropy (disorderliness in energy) parameters were analyzed.	As compared to EU population, Indian population had different range of Integral Area values and narrower range for values of other variables. EPI Studies in India should also adjust for factors such as age and gender.
2	(Kushwah, Srinivasan, Nagendra, & Ilavarasu, 2016b)	Effect of yoga based techniques on stress and health indices using electro photonic imaging technique in managers	EPI parameters, including Activation Coefficient, Integral Area left and right and Integral Entropy, left and right	Cyclic Meditation practice reduces stress and improves psychosomatic health indices more effectively
3	(Haun, Patel, Schwartz, & Ritenbaugh, 2015)	Evaluating the use of gas discharge visualization to measure massage therapy outcomes	Area, Symmetry, Entropy, Form Coefficient of Front, Right and Left Projection	GDV parameters may be used to indicate significant bioenergetic change from pre- to post-massage and also it shows that GDV subscale measures are correlated with traditional self-report measures of pain and stress;
4	(Nagendra Indira Rao, 2014)	The effect of active and silent music interventions on patients with Type 2 diabetes measured with electron photonic imaging technique	Integral area (deviation of the image from the ideal image), activation coefficient (balance of sympathetic and parasympathetic systems), entropy (disorderliness) and form coefficient (harmonious working of the inner systems together)	Both the interventions showed significant effect on GDV parameters. But, there was a significant difference in the effect between the two types of intervention. It appears that silent music intervention lead to boredom compared to active music intervention
5	(Cioca, Giacomoni, & Rein, 2004)	A correlation between GDV and heart rate variability measures: A new measure of well being	Statistical significance was observed between certain GDV parameters and spectral analysis of HRV	Result showed that GDV measures can be used as a measure of well-being in different physiological conditions.
6	(Korotkov et al., 2012)	Stress Reduction with Osteopathy Assessed with GDV Electrophotonic Imaging: Effects of Osteopathy Treatment	normalized area, brightness, and right- and left-hand integrals	Most of the recipients of these osteopathic treatments experienced increase in fingertip florescence area and average intensity, reduction in stress levels, and improved blood pressure measurements.
7	(Korotkov et al., 2004)	Assessing Biophysical Energy Transfer Mechanisms in Living Systems: The Basis of Life Processes	Geometric parameters: image area, number of fragments, level of noise, Spectral distribution, Fractality parameters: form coefficient and fractality, Entropy probability, Statistical parameters.	GDV techniques provide indirect judgment about the level of energy resources at the molecular level of functioning in structural-protein complexes. Several years of GDV research have provided clinical correlations with well-accepted physiologic parameters.

8	(Drozdovski, Gromova, Korotkov, Shelkov, & Akinagbe, 2012)	Express-evaluation of the psycho-physiological condition of Paralympic athletes	Energy potential, Stress level, and psycho-emotional tension	Evaluation of PET, EP, and SL through GSR and GDV offers a fast, highly precise, non-invasive method to assess an athlete's level of readiness during both training and at the time of competition.
9	(Sharma, Hankey, & Ramarao Nagendra, 2014)	Gas Discharge Visualization characteristics of an Indian Diabetes population	Integral area, cardiovascular system, Immune system, and epiphysis, right eye, right ear, nose & maxillary sinus, Jaw & Teeth right side, left eye, coccyx & pelvis minor zone, liver, thorax & respiratory system, cerebral zone, uro-genital system, thyroid gland, hypophysis, mammary glands, and coronary vessels	Significant differences were observed between the two groups which was divided based on pathology in the cardiovascular, endocrine, immune and uro-genital systems.
10	(Deo, Itagi, Thaiyar, & Kuldeep, 2015)	Effect of anapanasati meditation technique through electro photonic imaging parameters: A pilot study	Integral area (deviation of the image from the ideal image), activation coefficient (balance of sympathetic and parasympathetic systems), entropy (disorderliness) and form coefficient (harmonious working of the inner systems together)	Results show significant changes in EPI parameter integral area with filter (physiological) in both right and left side, which reflects the availability of high functional energy reserve in meditators. The researchers observed similar trends without filter (psycho-physiological) indicating high reserves of energy at psycho-physiological level also. Activation coefficient, another parameter of EPI, reduced showing more relaxed state than earlier, possibly due to parasympathetic dominance. Integral entropy decreased in the case of psycho-physiological parameters left-side without filter, which indicates less disorder after meditation, but these changes were not significant. The study showed a reversed change in integral entropy in the right side without filter; however, the values on both sides with filter increased, which indicates disorder.
11	(Korotkov, Konstantin Bundzen, Pavel Bronnikov, Vjacheslav Lognikova, 2005)	Bio-electrographic Correlates of the Direct Vision Phenomenon	Energy emission of left ring finger - Inclination angle of dynamic GDV-curve	In multiple trials it was found that with the perception of information by DV, curves of GDV versus time exhibited specific dynamics, confirming the phenomenon of DV. At least three types of GDV characteristics can be distinguished in this state. This study also identified improvements in the psychosomatic state of children during the 7-month course of training in DV

3. AIM AND OBJECTIVES

3.1. AIM OF THE STUDY

The aim of this study is to validate the immediate and Long-term effect of Chanting *as well as* Meditating on *Arutperunjothi Mantra* on Subtle Energy of healthy people using Electro Photonic Imaging.

3.2. OBJECTIVES OF THE STUDY

- To validate the immediate and Long-term effect of Chanting and Meditation in Energy Centres as well as Organs Systems.

3.3. RESEARCH QUESTIONS

- What are the benefits of chanting as well as meditating on *Arutperunjothi Mantra*?

3.4. HYPOTHESIS

- Immediate as well as Long-term Chanting and Meditation will influence the Bio-energy pattern as well as Human System immediately.

3.5. NULL HYPOTHESIS

- Immediate as well as Long-term Chanting and Meditation will not influence the Bio-energy pattern as well as Human System immediately.

4. METHODOLOGY

4.1. SUBJECTS

4.1.1. SOURCE OF SUBJECTS

- Participants were recruited from *Sanmaarga Sangam*, Salem, Tamilnadu for both chanting and Meditation.

4.1.2. SAMPLE SIZE

- Sample Size : 90
 - ✓ Chanting : 61
 - ✓ Meditation : 29

4.1.3. INCLUSION CRITERIA

- Normal Healthy People based on General Questionnaire
- Age : 20 - 65 of both Male and Female
- People who signed Informed Consent form

4.1.4. EXCLUSION CRITERIA

- People who could not able to sit minimum 30min
- Any Cut in fingers

4.2. ETHICAL CONSIDERATION

The participants were briefed about the study and a voluntary signed informed consent was obtained from them.

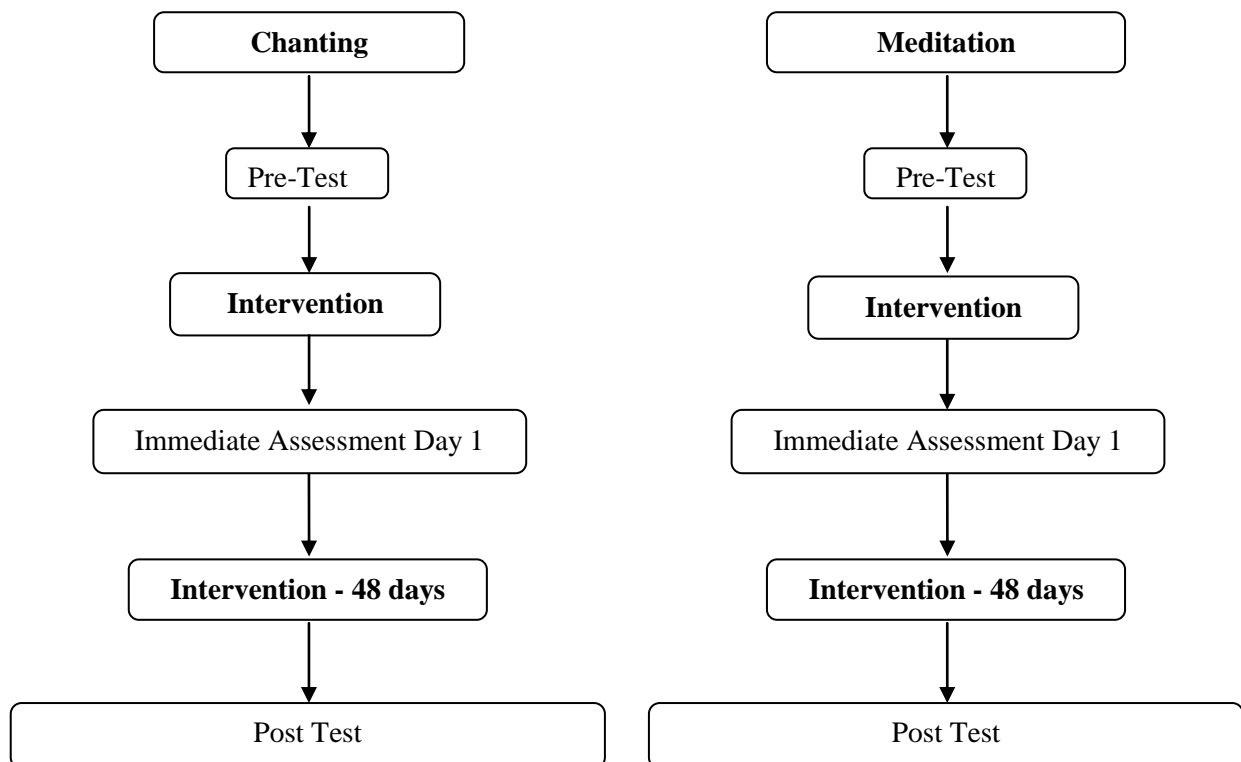
4.3. SAMPLING

- Convenience Sampling

4.4. DESIGN

In this study Between Group and Single group Pre-Post Experimental design was chosen as the researcher attempted to test the effectiveness of Chanting and Meditation in community.

Flowchart



4.5. INTERVENTION

The intervention, Loud Chanting of *Maha Mantra* - 108 times using *Jeba Mala* and sit in silence for 10 min was given for Chanting group, and Guided Meditation on *Maha Mantra* was given for Meditative group. Both groups spent around 30 - 45minutes daily for 48 days. Guided Meditation was recorded and given to the participants for continuing the practice in home.

4.6. ASSESSMENTS

4.6.1. GAS DISCHARGE VISUALIZATION (GDV) TECHNIQUE

GDV Technique is the computer registration analysis of electro photonic emissions of different objects, including biological, resulting from placing the object in the high-intensity electromagnetic field on the device lens. When a scan is conducted, a weak electrical current is applied to the fingertips for less than a millisecond. The object's response to this stimulus is the formation of a variation of an "electron cloud" composed of light energy photons. The electronic glow of this discharge, which is invisible to the human eye, is captured by the camera system and then translated and transmitted back in graphical representation to show energy, stress and vitality evaluation. The images are mapped to different organs and systems of the body, tapping into Chinese energy meridians (Krishnamadappa, 2017).

4.6.2. DATA TAKING PROCEDURE

An established guideline (Alexandrova, Fedoseev, Korotkov, Philippova, Zayzev, Magidov, 2002) was followed to obtain reliable and reproducible data. It is recommended to collect data after 3 hours of food intake and after 5 hours of any prescribed medications. No other diagnostic procedure was to be held at the same time. They were assessed before and after the respective intervention, and the GDV readings were taken by the same expert, at the same place. There were identical conditions of psychological and physical comfort for all subjects in a quiet and calm environment. Calibration was done as per the guidelines. Subjects were instructed about finger placement on the glass at 45⁰ angles with a gentle but firm touch. They were asked to remove all metallic ornaments that they do not wear for the entire 24 hours a day. Further, a few more things were followed for acquiring consistent readings: (1) The subjects stand on an electrically isolated surface while making a measurement; (2) Glass plate was cleaned after every subject; (3) A distance of three feet was maintained between GDV and laptop while collecting data (Yakovleva, Korotkov, 2015).

5. DATA EXTRACTION AND ANALYSIS

5.1. DATA COLLECTION

All data were collected using GDV instrument attached with laptop with installed software. Demographic data and consent forms were obtained using written forms.

5.2. DATA EXTRACTION

There is in build software program of EPI technique was used to extract the raw data into Excel Sheet. It provides all parameters which were taken into consideration for analysis.

5.3. DATA ANALYSIS

Data analysis was carried out using "R statistical package" (Team, 2014). Normality test on the pre and post data of Chanting and Meditation group were done using Shapiro-Wilk test. Levene's test was used to find the homogeneity of variance between the groups. Based on the result from Normality test Paired t - test was used for Parametric and Wilcoxon signed rank test was used for Non parametric in within group validation. For Between group validations, Two Sample t-test was used for Parametric and Wilcoxon rank sum test with continuity correction was used for Non parametric. Differences were considered significant only if P value < 0.05 from the tests. An alpha was fixed as 0.05 for all statistical tests.

6. RESULT

6.1. STUDY PROFILE

There were two groups those were Chanting group as well as Meditation group and There were 5 validation those were Immediate effect of Chanting, Immediate effect of Meditation, Effect of long-term Chanting and Effect of long-term Meditation and Comparison of changes between Chanting and Mediation group after long-term intervention. Table 6.1.1.1 and 6.1.1.1 present the characteristics for all subjects.

Table 6.1.1.1: Participant's Characteristics

Variables		Count	%
Location	Salem	33	35.87
	Meicheri	28	30.43
	Neikarapati	31	33.7
Gender	Male	56	60.87
	Female	36	39.13
Marital Status	Married	77	83.7
	Unmarried	15	16.3
Education	Educated (College Level)	52	56.52
	Educated (School Level)	32	34.78
	Uneducated	8	8.7

Table 6.1.1.2: Participant's Characteristics

Variables	Male		Female		Total	
	Mean	SD	Mean	SD	Mean	SD
Age	49.08	13.77	43.14	12.25	46.69	13.43
Height	168.6	7.59	158.58	8.01	164.46	9.17
Weight	65.21	12.29	60.53	11.41	63.37	12.1
Body Mass Index	23.22	4.21	24	4.32	23.53	4.24
Respiratory Rate	16.71	5.38	18.15	3.55	17.28	4.76
Pulse Rate	80.52	10.8	87.74	12.16	83.37	11.83
Brahmari	13.65	4.99	11.85	3.35	12.93	4.47
Oxygen Level	96.65	1.28	97.26	1.6	96.9	1.44
Happiness Index	54.62	20.63	54.62	20.63	53.51	18.95

For immediate validation, among those 90 subjects who attended the first day session, only 47 healthy subjects were considered for analysis and For the validation of long-term effect, intervention was given for 48 days, out of 90, only 46 healthy subjects were considered for analysis. Table 6.1.2 presents the Study Profile for Immediate Intervention and Table 6.1.3 presents the Study Profile for long-term Intervention.

Table 6.1.2: Study Profile for Immediate Intervention

Immediate Change									
Place		Pre		Intervention		Post		Rejected	
		MMM	MMC	MMM	MMC	MMM	MMC	Meditation	Chanting
YC	32	20	12	20	12	13	7	8 - Time Concern	35 - Time Concern
NKP	30	0	30	0	30	0	15		
MC	28	9	19	9	19	8	4		
		29	61	29	61	21	26		
Total	90	90		90		47			

Table 6.1.3: Study Profile for long-term Intervention

Long-term Intervention									
Place		Pre		Intervention		Post		Rejected	
		MMM	MMC	MMM	MMC	MMM	MMC	Meditation	Chanting
YC	32	20	12	20	12	11	8	13 -They didn't appear for post data	31 -They didn't appear for post data
NKP	30	0	30	0	30	0	14		
MC	28	9	19	9	19	5	8		
		29	61	29	61	16	30		
Total	90	90		90		46			

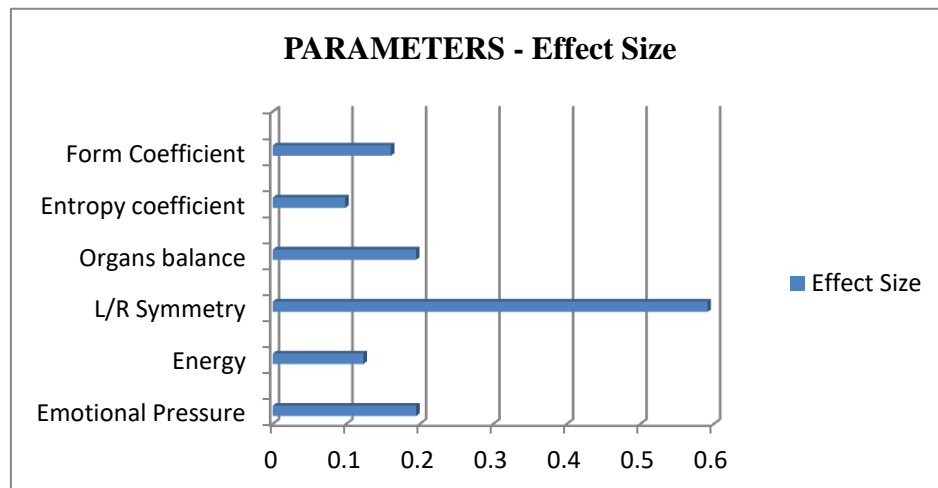
6.2. IMMEDIATE EFFECT OF CHANTING *ARUTPERUNJOTHI MANTRA*

To find the immediate effect of chanting *Arutperunjothi Mantra*, Initial assessment using GDV was taken as pre data and after chanting *Arutperunjothi Mantra* 108 times, within 30 min intervals, next assessment was taken for post data.

Table 6.2.1 presents the immediate effect of chanting *Arutperunjothi Mantra* at both Psycho-physiological Levels. Where L/R Symmetry which represents the right and left balances, showed significant changes ($p = 0.031$) from 95.03 ± 2.96 to 96.74 ± 2.82 .

Table 6.2.1: Immediate Effect of Chanting *Arutperunjothi Mantra* at both Psycho-physiological Levels

Parameters	Variables	Mean	SD	Effect Size	Power in %	P Value
Emotional Pressure	Pre_EP	3.29	0.34	0.19	15.4	0.712
	Post_EP	3.39	0.59			
Energy	Pre_Energy	47.34	5.02	0.12	9.28	0.343
	Post_Energy	47.91	4.08			
L/R Symmetry	Pre_LRS	95.03	2.96	0.59	82.56	0.031
	Post_LRS	96.74	2.82			
Organs balance	Pre_OB	88.59	3.53	0.19	15.39	0.321
	Post_OB	89.37	4.35			
Entropy coefficient	Pre_EC	2.18	0.22	0.09	7.71	0.427
	Post_EC	2.16	0.18			
Form Coefficient	Pre_FC	2.8	0.45	0.16	12.36	0.173
	Post_FC	2.73	0.42			



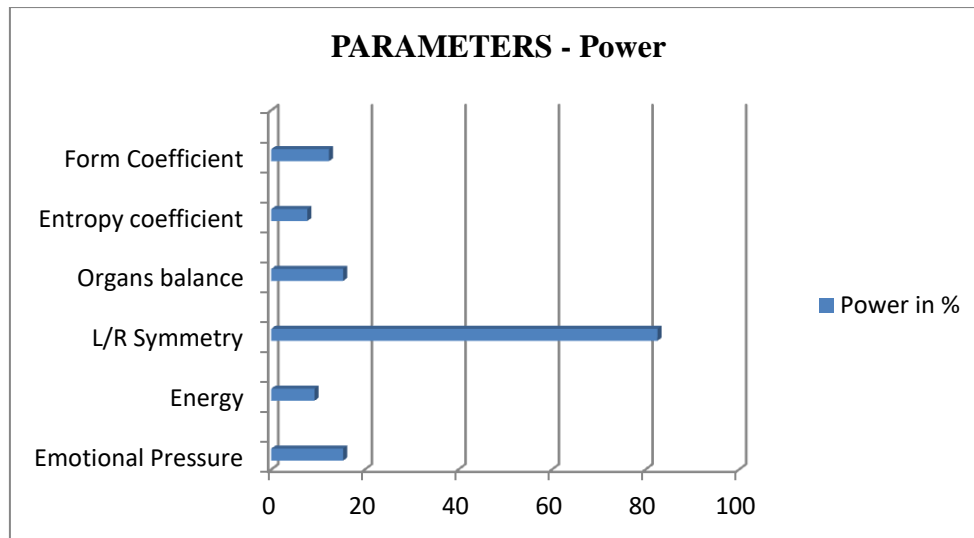


Table 6.2.2 presents the immediate effect of chanting *Arutperunjothi Mantra* at Energy Field. There were changes in Energy Field but not significant.

Table 6.2.2: Immediate Effect of Chanting *Arutperunjothi Mantra* at Energy Field

Energy Field	Variables	Mean	SD	Effect Size	Power in %	P Value
Area_Left	Pre_Larea	60064.23	5231.18	0.18	14.46	0.244
	Post_Larea	61120.42	6264.9			
Energy_Left	Pre_Lenergy	21.38	2.94	0.05	5.71	0.756
	Post_Lenergy	21.23	2.98			
Area_Front	Pre_Farea	58881	5776.59	0.16	12.99	0.280
	Post_Farea	59941.77	6792.81			
Energy_Front	Pre_Fenergy	20.76	3.19	0.05	5.78	0.751
	Post_Fenergy	20.59	3.23			
Area_Right	Pre_Rarea	60249.73	6450.6	0.18	14.84	0.287
	Post_Rarea	61426.54	6261.22			
Energy_Right	Pre_Renergy	21.61	3.52	0.002	5	0.980
	Post_Renergy	21.62	3.11			

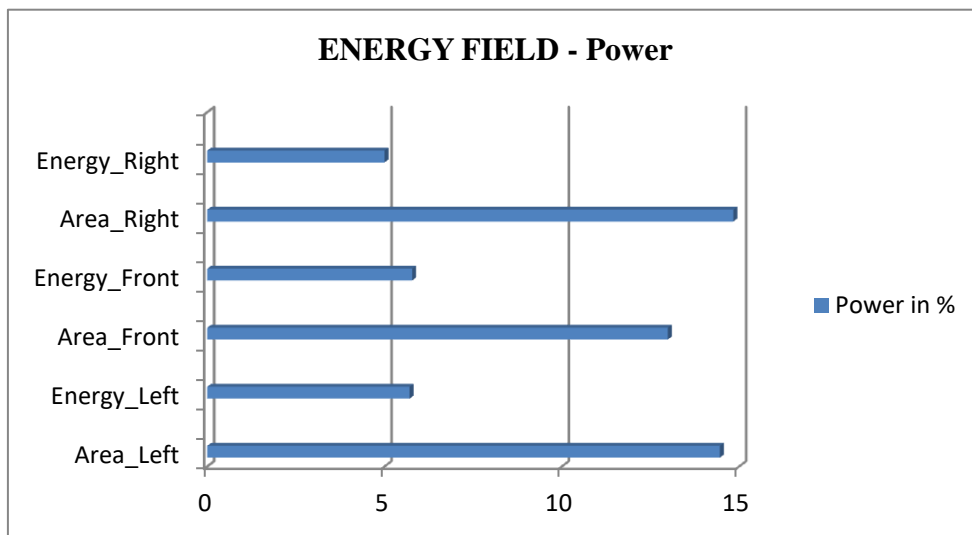
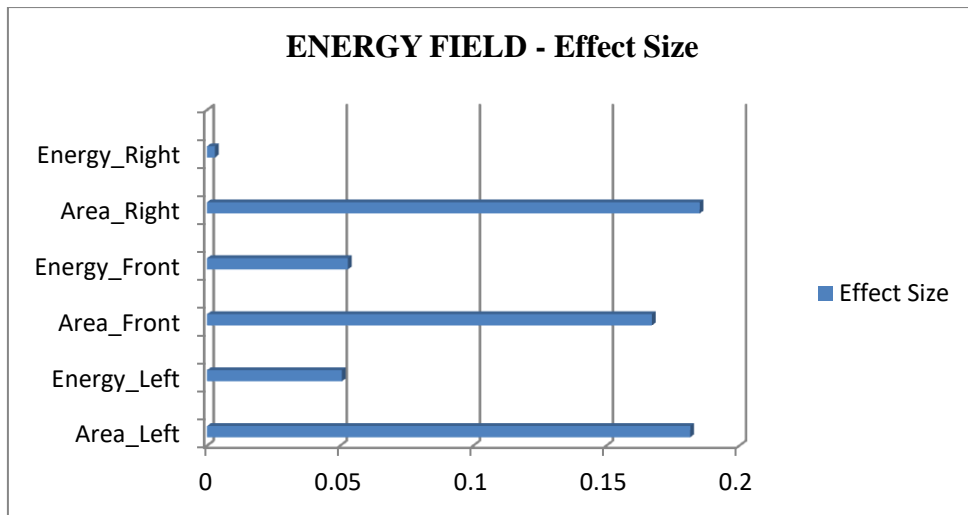
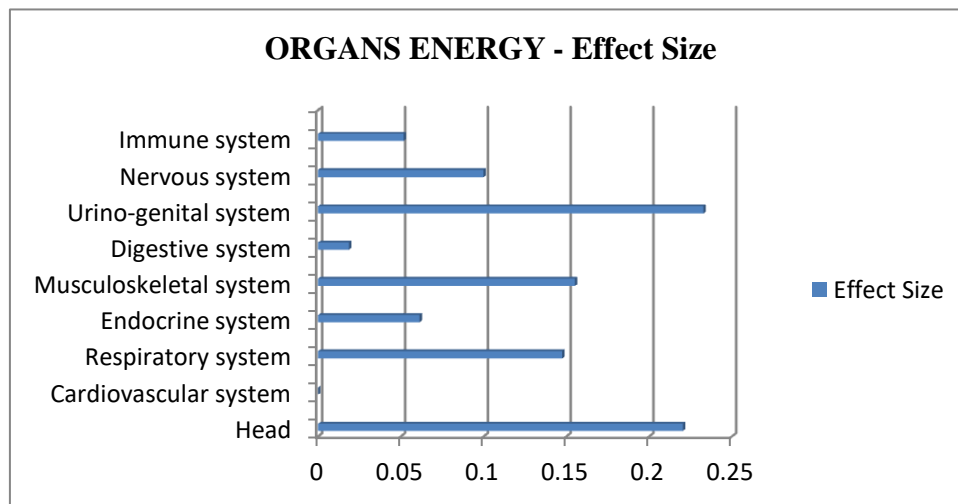


Table 6.2.3 presents the immediate effect of chanting *Arutperunjothi Mantra* at organs Energy. There were changes in Organs Energy but not significant.

Table 6.2.3: Immediate Effect of Chanting *Arutperunjothi Mantra* at Organs Energy

Organs Energy	Variables	Mean	SD	Effect Size	Power in %	P Value
Head	Pre_Head	3.6	0.58	0.22	19.09	0.145
	Post_Head	3.72	0.5			
Cardiovascular system	Pre_CS	3.49	0.47	0	5	0.973
	Post_CS	3.49	0.5			
Respiratory system	Pre_RS	4.37	0.73	0.14	14.75	0.247
	Post_RS	4.47	0.61			
Endocrine system	Pre_ES	3.69	0.52	0.06	6.05	0.683
	Post_ES	3.72	0.45			
Musculoskeletal system	Pre_MS	3.86	0.53	0.15	11.51	0.431
	Post_MS	3.94	0.5			
Digestive system	Pre_DS	3.82	0.55	0.01	5.1	0.784
	Post_DS	3.83	0.52			
Urino-genital system	Pre_UGS	4.56	0.74	0.23	20.76	0.084
	Post_UGS	4.73	0.72			
Nervous system	Pre_NS	3.15	0.76	0.09	7.8	0.570
	Post_NS	3.08	0.62			
Immune system	Pre_IS	3.12	0.62	0.05	5.74	0.786
	Post_IS	3.15	0.53			



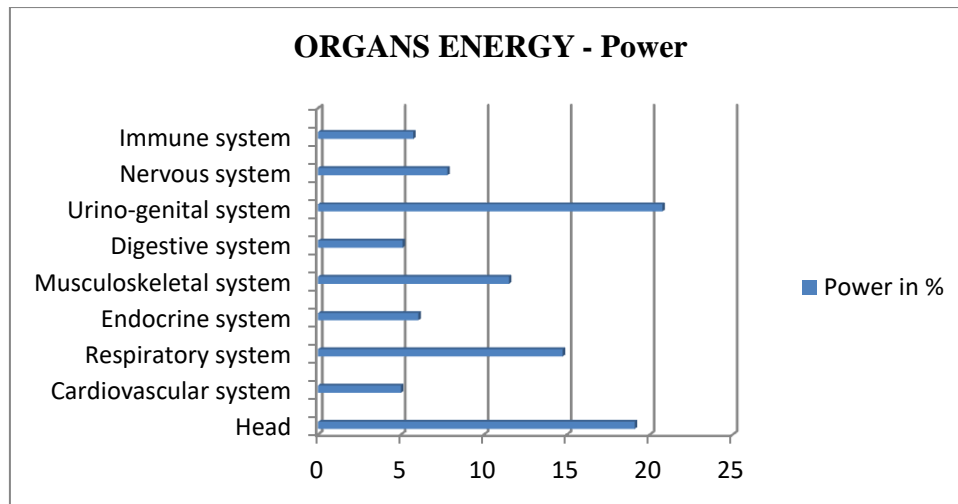


Table 6.2.4 presents the immediate effect of chanting *Arutperunjothi Mantra* at Organs Balance. There was a change in Endocrine System which represents the Hormone balances in this system. Result showed significant changes ($p = 0.024$) from 91.59 ± 5.93 to 95.14 ± 4.22 .

Table 6.2.4: Immediate Effect of Chanting *Arutperunjothi Mantra* at Organs Balance

Organs Balance	Variables	Mean	SD	Effect Size	Power in %	P Value
Head	Pre_Head	93.06	4.54	0.10	8.12	0.632
	Post_Head	92.5	5.84			
Cardiovascular system	Pre_CS	91.39	6.6	0.05	5.8	0.286
	Post_CS	91.93	11.27			
Respiratory system	Pre_RS	92.93	4.14	0.06	6.27	0.803
	Post_RS	93.25	5.15			
Endocrine system	Pre_ES	91.59	5.93	0.67	90.82	0.024
	Post_ES	95.14	4.22			
Musculoskeletal system	Pre_MS	90.85	7.81	0.24	21.93	0.542
	Post_MS	88.04	13.04			
Digestive system	Pre_DS	89.54	8.86	0.08	6.98	0.784
	Post_DS	90.28	8.74			
Urino-genital system	Pre_UGS	89.3	8.16	0.03	5.4	0.869
	Post_UGS	89.67	10.93			
Nervous system	Pre_NS	76.9	19.28	0.11	9.01	0.648
	Post_NS	79.17	18.76			
Immune system	Pre_IS	81.68	13.76	0.19	15.49	0.492
	Post_IS	84.32	13.2			

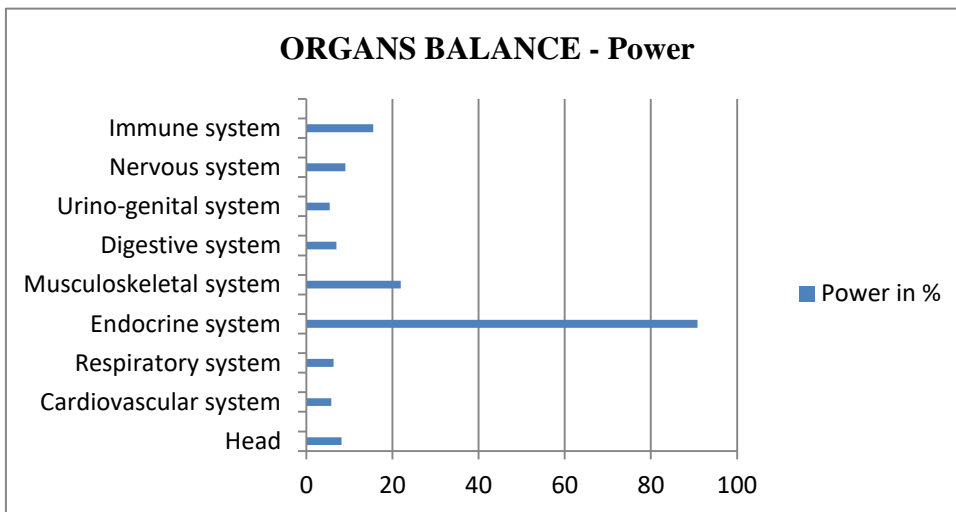
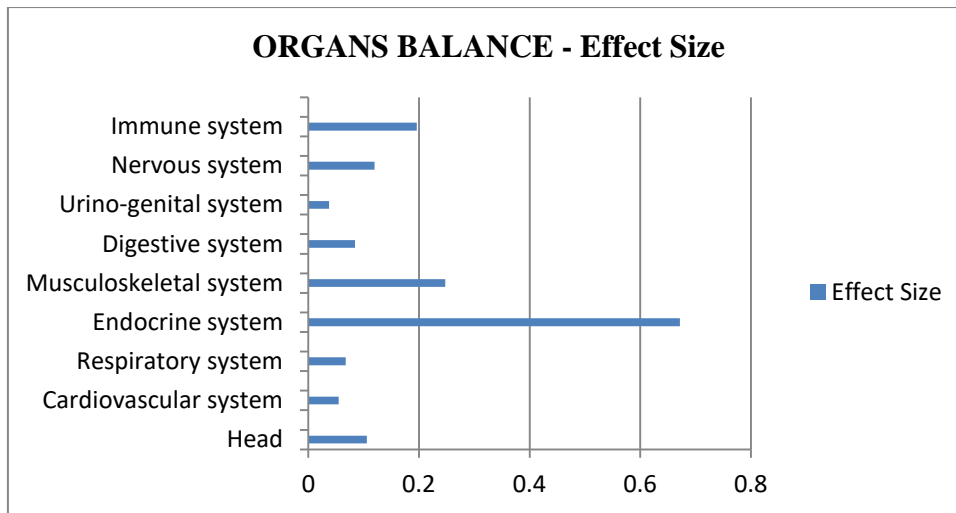
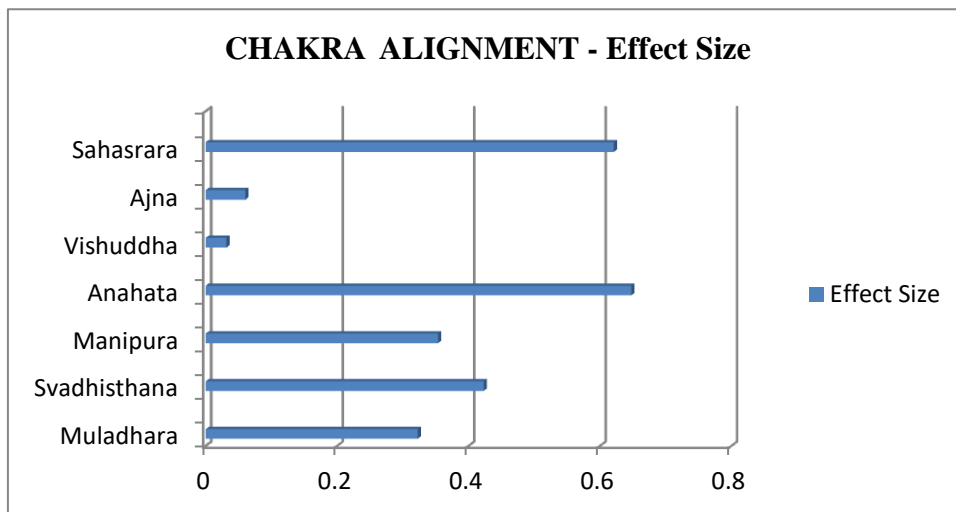


Table 6.2.5 presents the immediate effect of chanting *Arutperunjothi Mantra* at *Chakra* Alignment. Result showed significant changes ($p = 0.012$) from 87.94 ± 9.08 to 93.27 ± 6.97 in *Anahata Chakra* which aligned towards the centre and also it showed significant changes ($p = 0.017$) from 91.75 ± 7.39 to 95.73 ± 3.37 in *Sahasrara chakra* which aligned towards the centre.

Table 6.2.5: Immediate Effect of Chanting *Arutperunjothi Mantra* at *Chakra Alignment*

Chakra Alignment	Variables	Mean	SD	Effect Size	Power in %	P Value
Muladhara	Pre_Muladhara	93.95	4.75	0.32	35.32	0.286
	Post_Muladhara	92.42	4.73			
Svadhithana	Pre_Svadhithana	91.22	6.62	0.42	54.55	0.139
	Post_Svadhithana	93.76	5.09			
Manipura	Pre_Manipura	92.07	6.04	0.35	41.09	0.12
	Post_Manipura	94.1	5.38			
Anahata	Pre_Anahata	87.94	9.08	0.64	87.17	0.012
	Post_Anahata	93.27	6.97			
Vishuddha	Pre_Vishuddha	95.26	4.13	0.03	5.28	0.912
	Post_Vishuddha	95.14	3.3			
Ajna	Pre_Ajna	96.2	4.36	0.06	5.97	0.576
	Post_Ajna	95.95	3.86			
Sahasrara	Pre_Sahasrara	91.75	7.39	0.62	86.06	0.017
	Post_Sahasrara	95.73	3.37			



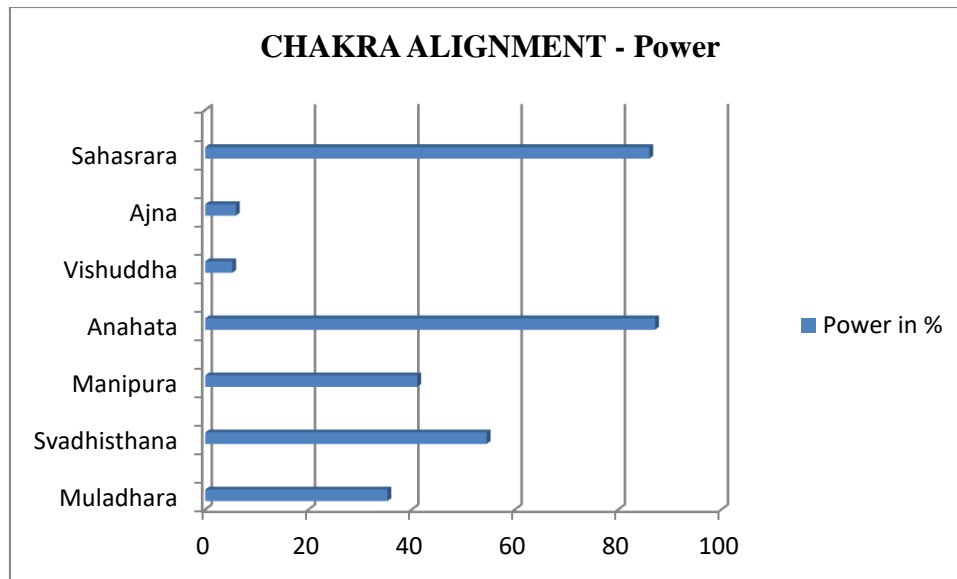


Table 6.2.6 presents the immediate effect of chanting *Arutperunjothi Mantra* at *Chakra* Value. There were changes in *Chakra* value but not significant.

Table 6.2.6: Immediate Effect of Chanting *Arutperunjothi Mantra* at *Chakra* Value

Chakra Value	Variables	Mean	SD	Effect Size	Power in %	P Value
Muladhara	Pre_Muladhara	4.08	0.65	0.22	20.18	0.086
	Post_Muladhara	4.22	0.57			
Svadhisthana	Pre_Svadhisthana	3.9	0.57	0.28	28.5	0.053
	Post_Svadhisthana	4.07	0.62			
Manipura	Pre_Manipura	4.04	0.63	0.07	6.73	0.534
	Post_Manipura	3.99	0.64			
Anahata	Pre_Anahata	4.14	0.66	0.01	5.07	0.902
	Post_Anahata	4.13	0.57			
Vishuddha	Pre_Vishuddha	3.93	0.8	0.31	33.43	0.067
	Post_Vishuddha	4.16	0.65			
Ajna	Pre_Ajna	3.33	0.42	0.02	5.39	0.837
	Post_Ajna	3.34	0.47			
Sahasrara	Pre_Sahasrara	3.56	0.5	0.02	5.12	0.927
	Post_Sahasrara	3.57	0.47			

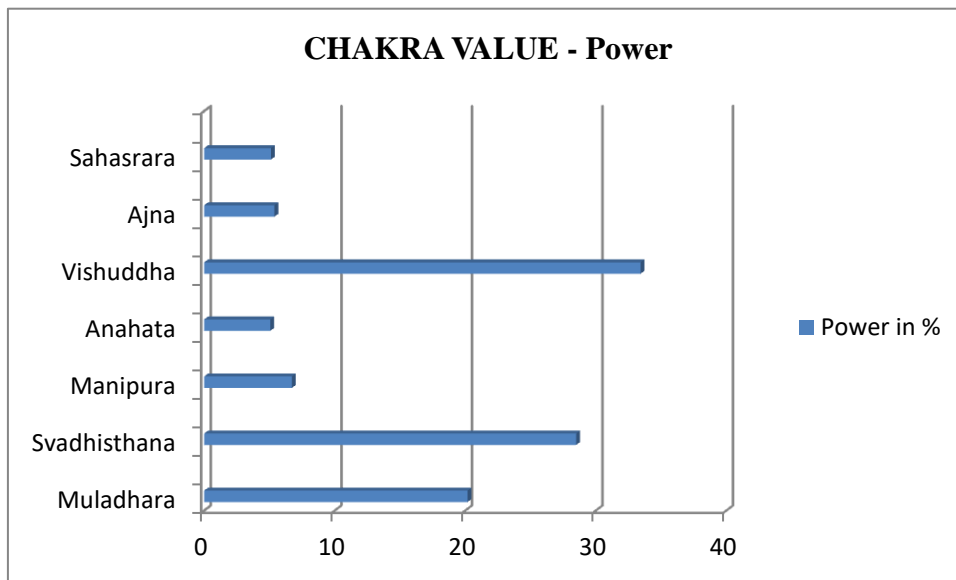
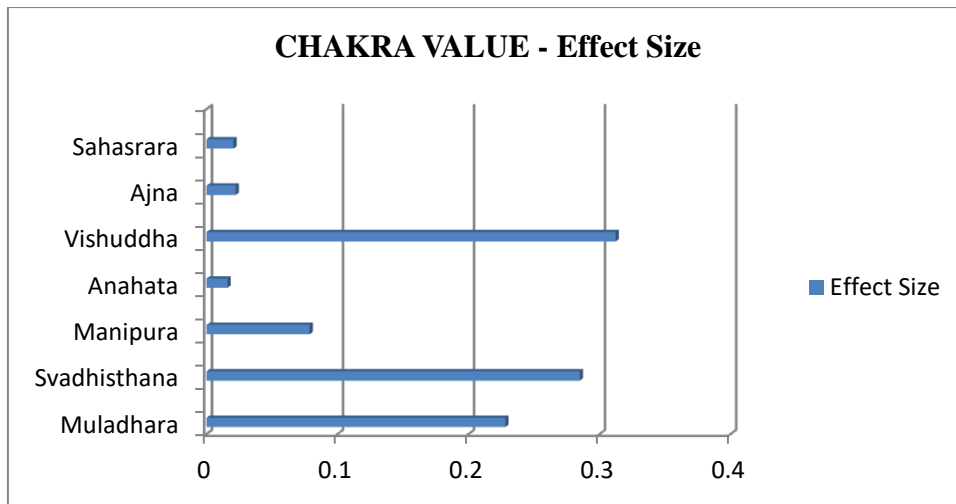
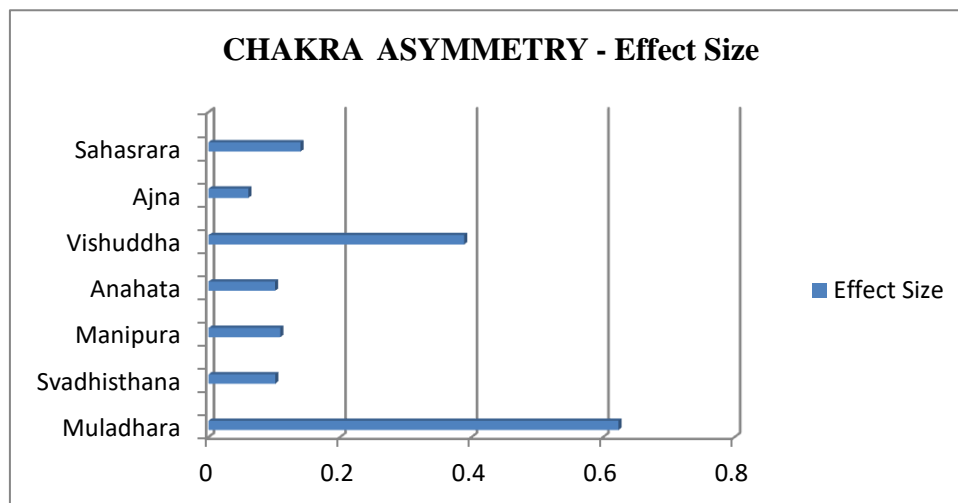


Table 6.2.7 presents the immediate effect of chanting *Arutperunjothi Mantra* at *Chakra* Asymmetry. There were changes in *Chakra* Asymmetry but not significant.

Table 6.2.7: Immediate Effect of Chanting *Arutperunjothi Mantra* at *Chakra Asymmetry*

Chakra Asymmetry	Variables	Mean	SD	Effect Size	Power in %	P Value
Muladhara	Pre_Muladhara	-0.05	0.23	0.62	86.31	0.053
	Post_Muladhara	0.1	0.25			
Svadhithana	Pre_Svadhithana	-0.01	0.33	0.10	7.89	0.702
	Post_Svadhithana	-0.04	0.24			
Manipura	Pre_Manipura	0.02	0.3	0.10	8.18	0.935
	Post_Manipura	-0.01	0.24			
Anahata	Pre_Anahata	0.07	0.45	0.10	7.87	0.658
	Post_Anahata	0.03	0.29			
Vishuddha	Pre_Vishuddha	-0.07	0.18	0.38	47.88	0.219
	Post_Vishuddha	0	0.18			
Ajna	Pre_Ajna	-0.03	0.17	0.06	5.97	0.542
	Post_Ajna	-0.04	0.16			
Sahasrara	Pre_Sahasrara	-0.06	0.33	0.13	10.55	0.519
	Post_Sahasrara	-0.02	0.17			



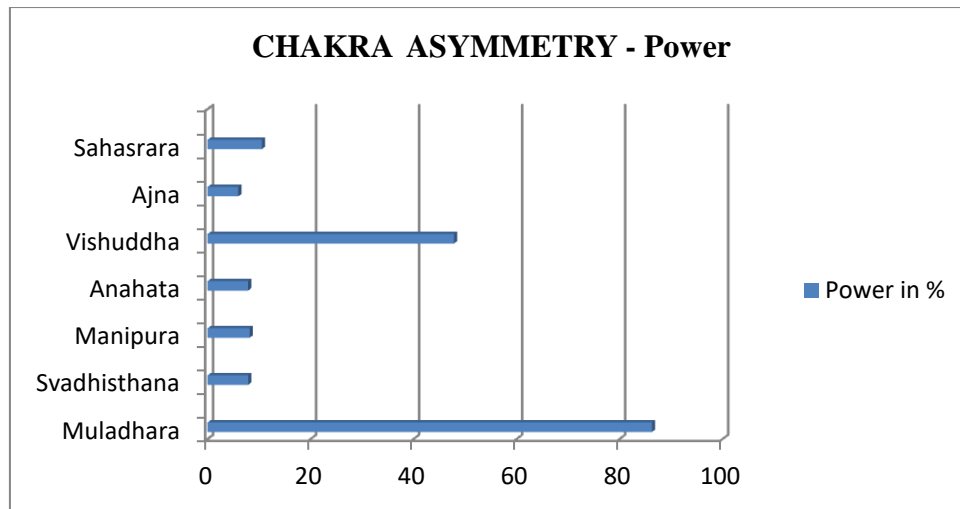


Table 6.2.8 presents over all significant changes in chanting *Arutperunjothi Mantra* for immediate effect.

Table 6.2.8: Significant Changes in Chanting *Arutperunjothi Mantra* - Immediate Effect

Parameters	Variables	Mean	SD	Effect Size	Power in %	P Value
L/R Symmetry	Pre_LRS	95.03	2.96	0.59	82.56	0.031
	Post_LRS	96.74	2.82			
Organs Energy	Variables	Mean	SD	Effect Size	Power in %	P Value
Endocrine system	Pre_ES	91.59	5.93	0.67	90.82	0.024
	Post_ES	95.14	4.22			
Chakra Alignment	Variables	Mean	SD	Effect Size	Power in %	P Value
Anahata	Pre_Anahata	87.94	9.08	0.64	87.17	0.012
	Post_Anahata	93.27	6.97			
Sahasrara	Pre_Sahasrara	91.75	7.39	0.62	86.06	0.017
	Post_Sahasrara	95.73	3.37			

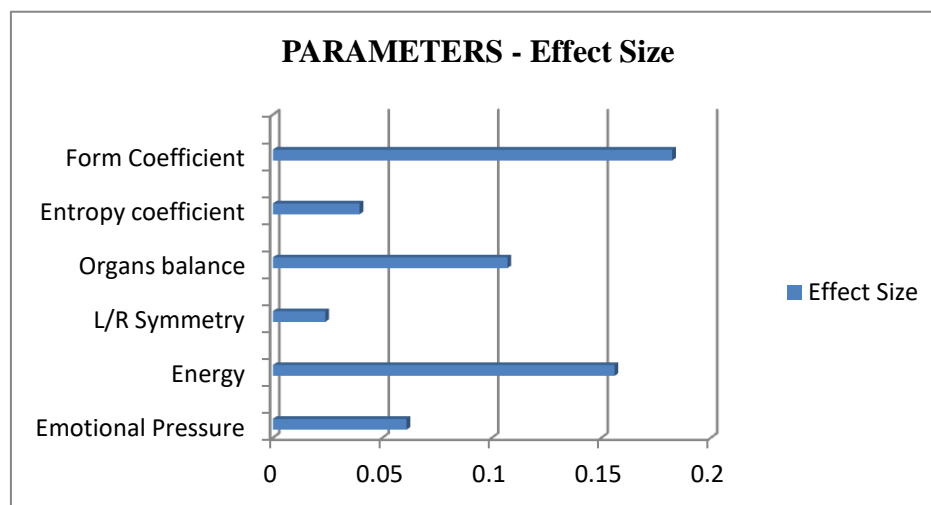
6.3. IMMEDIATE EFFECT OF MEDITATION ON *ARUTPERUNJOTHI MANTRA*

To find the immediate effect of meditation on *Arutperunjothi Mantra*, Initial assessment using GDV was taken as pre data and after meditation on *Arutperunjothi Mantra*, within 30min interval, next assessment was taken for post data.

Table 6.3.1 presents the immediate effect of meditation on *Arutperunjothi Mantra* at both Psycho-physiological Levels. There were changes in both level but not significant.

Table 6.3.1: Immediate Effect of Meditation on *Arutperunjothi Mantra* at both Psycho-physiological Levels

Parameters	Variables	Mean	SD	Effect Size	Power in %	P Value
Emotional Pressure	Pre_EP	3.09	0.51	0.06	5.82	0.622
	Post_EP	3.06	0.47			
Energy	Pre_Energy	55.82	3.74	0.15	10.47	0.505
	Post_Energy	55.3	2.65			
L/R Symmetry	Pre_LRS	97.73	1.74	0.02	5.13	0.908
	Post_LRS	97.69	1.59			
Organs balance	Pre_OB	91.09	2.75	0.10	7.54	0.627
	Post_OB	91.38	2.66			
Entropy coefficient	Pre_EC	2.26	0.27	0.03	5.34	0.807
	Post_EC	2.25	0.23			
Form Coefficient	Pre_FC	2.56	0.24	0.18	12.52	0.579
	Post_FC	2.52	0.19			



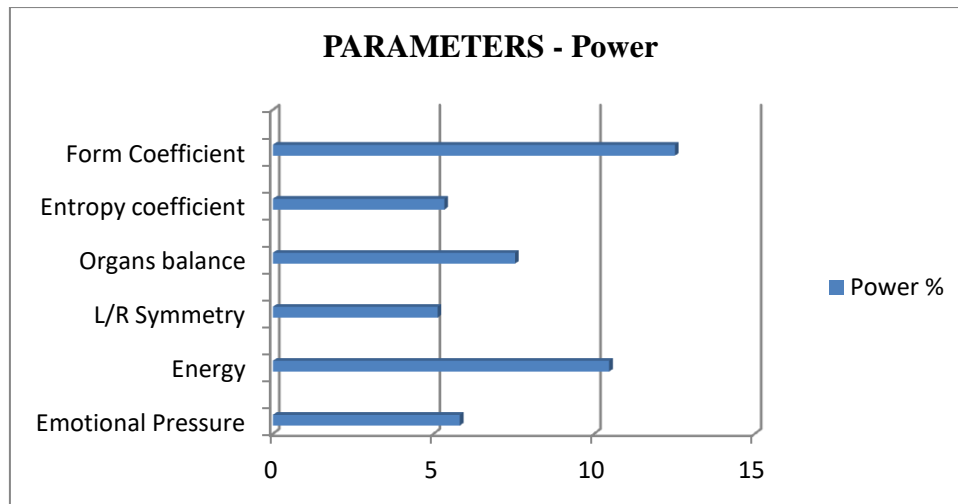


Table 6.3.2 presents the immediate effect of meditation on *Arutperunjothi Mantra* at Energy Field. There were changes in Energy Field but not significant.

Table 6.3.2: Immediate Effect of Meditation on *Arutperunjothi Mantra* at Energy Field

Energy Field	Variables	Mean	SD	Effect Size	Power in %	P Value
Area_Left	Pre_Larea	69777.19	6924.53	0.25	19.55	0.147
	Post_Larea	71448.05	6315.15			
Energy_Left	Pre_Lenergy	26.8	4.41	0.04	5.41	0.799
	Post_Lenergy	26.62	3.83			
Area_Front	Pre_Farea	68883.95	7212.74	0.13	8.79	0.409
	Post_Farea	69729.14	5321.32			
Energy_Front	Pre_Fenergy	26.22	4.45	0.09	6.99	0.568
	Post_Fenergy	25.84	3.28			
Area_Right	Pre_Rarea	70610.1	7379.44	0.05	5.67	0.749
	Post_Rarea	70965.48	4461.36			
Energy_Right	Pre_Renergy	27.17	4.25	0.11	7.79	0.577
	Post_Renergy	26.75	2.82			

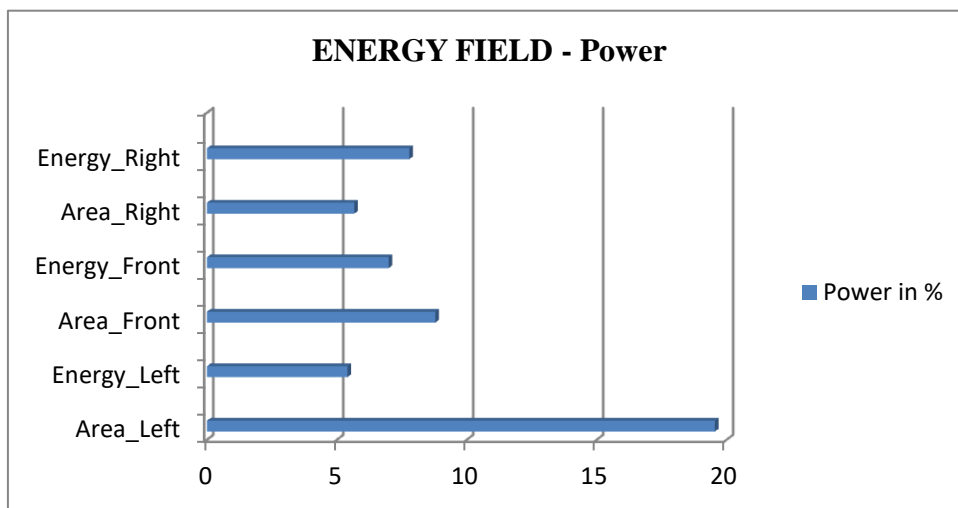
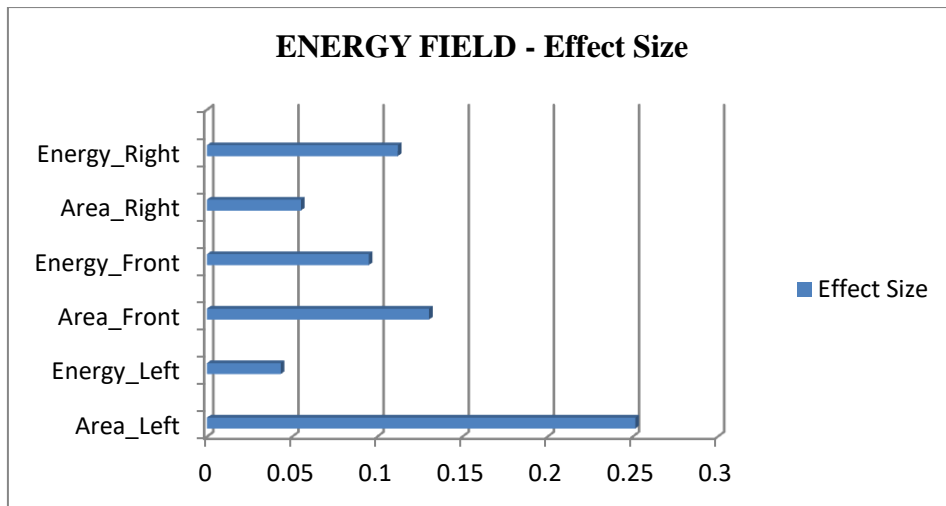
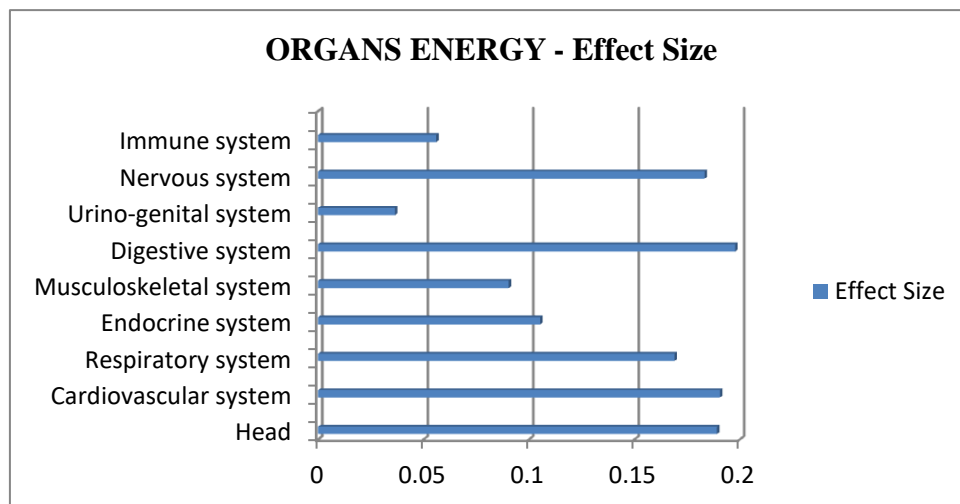


Table 6.3.3 presents the immediate effect of meditation on *Arutperunjothi Mantra* at Organs Energy. There were changes in Organs Energy but not significant.

Table 6.3.3: Immediate Effect of Meditation on Arutperunjothi Mantra at Organs Energy

Organs Energy	Variables	Mean	SD	Effect Size	Power in %	P Value
Head	Pre_Head	4.62	0.4	0.18	13.12	0.425
	Post_Head	4.55	0.33			
Cardiovascular system	Pre_CS	4.23	0.35	0.19	13.23	0.472
	Post_CS	4.17	0.26			
Respiratory system	Pre_RS	5.48	0.56	0.16	11.43	0.403
	Post_RS	5.39	0.5			
Endocrine system	Pre_ES	4.49	0.43	0.10	7.46	0.631
	Post_ES	4.45	0.29			
Musculoskeletal system	Pre_MS	4.73	0.5	0.09	6.81	0.732
	Post_MS	4.69	0.34			
Digestive system	Pre_DS	4.59	0.46	0.19	13.88	0.372
	Post_DS	4.51	0.3			
Urino-genital system	Pre_UGS	5.55	0.58	0.03	5.3	0.865
	Post_UGS	5.57	0.51			
Nervous system	Pre_NS	3.84	0.56	0.18	12.6	0.368
	Post_NS	3.74	0.53			
Immune system	Pre_IS	3.8	0.53	0.05	5.69	0.804
	Post_IS	3.77	0.54			



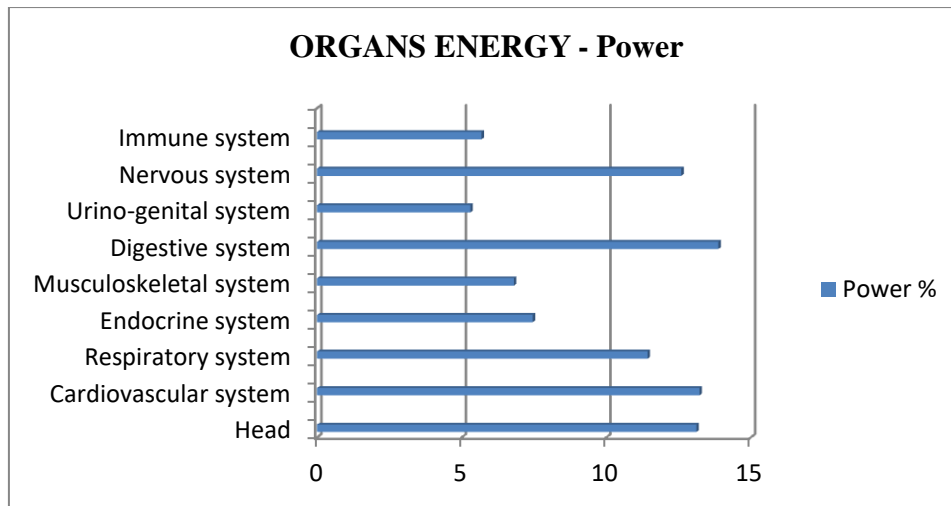


Table 6.3.4 presents the immediate effect of meditation on *Arutperunjothi Mantra* at Organs Balance. There were changes in Organs Balance but not significant.

Table 6.3.4: Immediate Effect of Meditation on *Arutperunjothi Mantra* at Organs Balance

Organs Balance	Variables	Mean	SD	Effect Size	Power in %	P Value
Head	Pre_Head	93.56	4.2	0.13	8.8	0.650
	Post_Head	94.08	3.73			
Cardiovascular system	Pre_CS	95.94	3.84	0.09	7.14	0.730
	Post_CS	96.28	2.85			
Respiratory system	Pre_RS	93.73	4.55	0.01	5.05	0.960
	Post_RS	93.65	5.66			
Endocrine system	Pre_ES	94.74	4.73	0.08	6.64	0.657
	Post_ES	95.11	3.22			
Musculoskeletal system	Pre_MS	93.19	6.12	0.18	12.58	0.615
	Post_MS	92.18	4.6			
Digestive system	Pre_DS	91.25	6.93	0.05	5.7	0.849
	Post_DS	90.88	6.1			
Urino-genital system	Pre_UGS	91.95	6.32	0.18	12.69	0.287
	Post_UGS	93.25	7.32			
Nervous system	Pre_NS	83.65	11.59	0.05	5.55	0.811
	Post_NS	82.84	17.9			
Immune system	Pre_IS	81.85	17.72	0.15	10.12	0.510
	Post_IS	84.2	11.39			

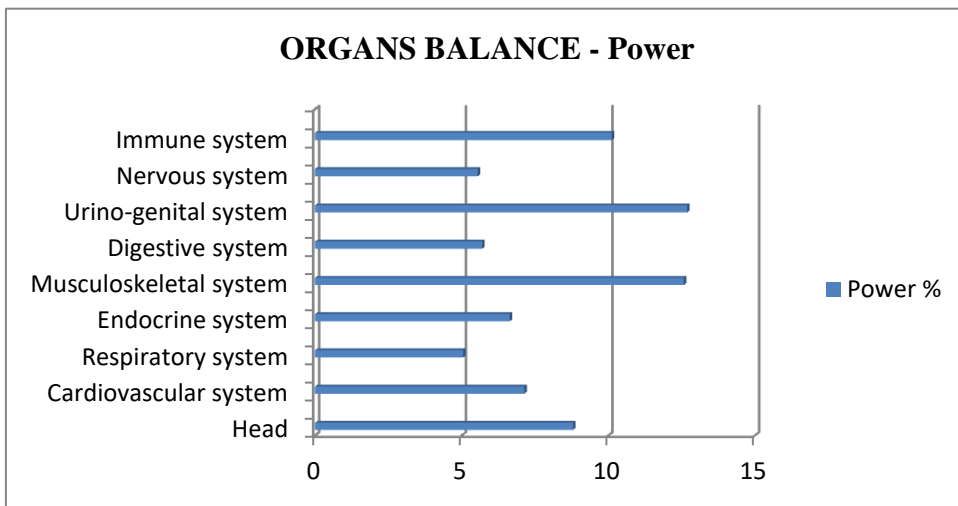
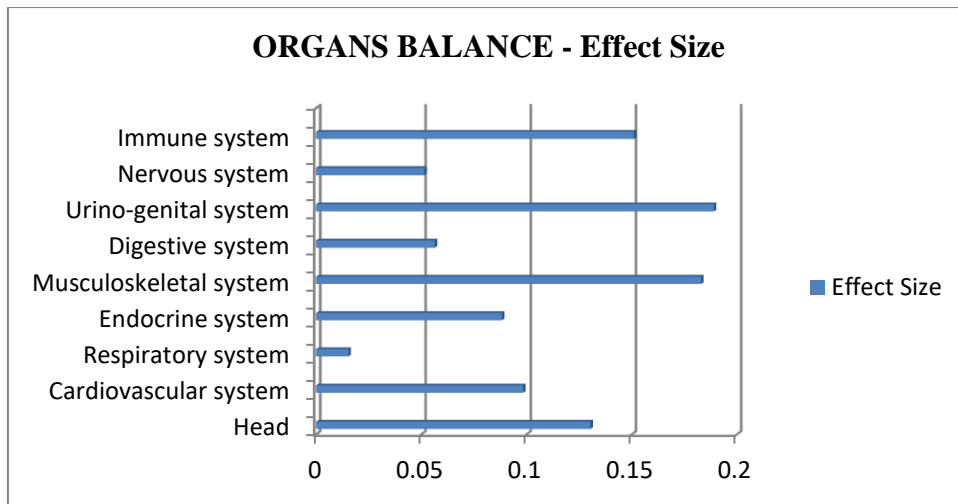
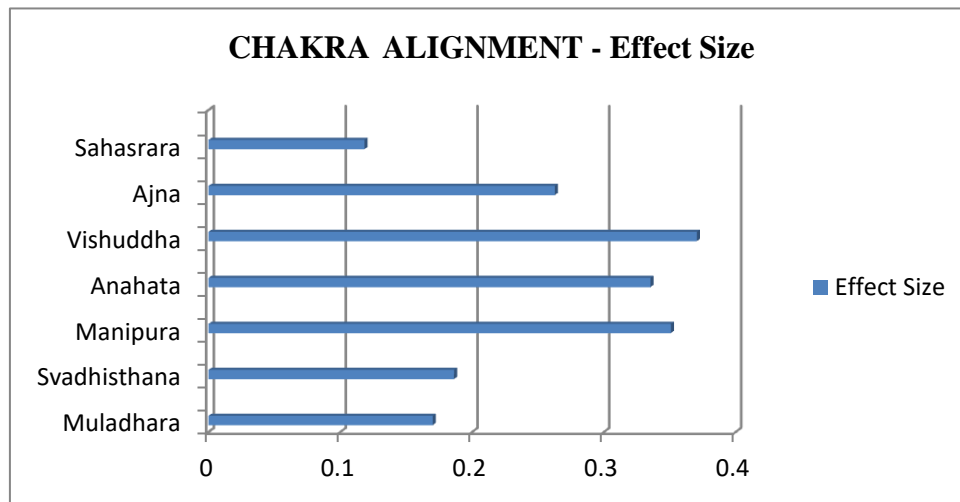


Table 6.3.5 presents the immediate effect of meditation on *Arutperunjothi Mantra* at *Chakra* Alignment. There were changes in *Chakra* Alignment but not significant.

Table 6.3.5: Immediate Effect of Meditation on Arutperunjothi Mantra at Chakra Alignment

Chakra Alignment	Variables	Mean	SD	Effect Size	Power in %	P Value
Muladhara	Pre_Muladhara	92.12	6.95	0.17	11.53	0.494
	Post_Muladhara	90.83	8.08			
Svadhithana	Pre_Svadhithana	92.13	5.35	0.18	12.85	0.456
	Post_Svadhithana	91.05	6.16			
Manipura	Pre_Manipura	92.41	5.41	0.35	33.42	0.270
	Post_Manipura	94.14	4.24			
Anahata	Pre_Anahata	89.82	7.29	0.33	31	0.244
	Post_Anahata	86.61	10.84			
Vishuddha	Pre_Vishuddha	92.44	5.97	0.37	36.58	0.236
	Post_Vishuddha	94.58	5.56			
Ajna	Pre_Ajna	91.89	6.6	0.26	20.9	0.328
	Post_Ajna	93.54	5.9			
Sahasrara	Pre_Sahasrara	91.03	7.87	0.11	11.84	0.668
	Post_Sahasrara	91.95	7.67			



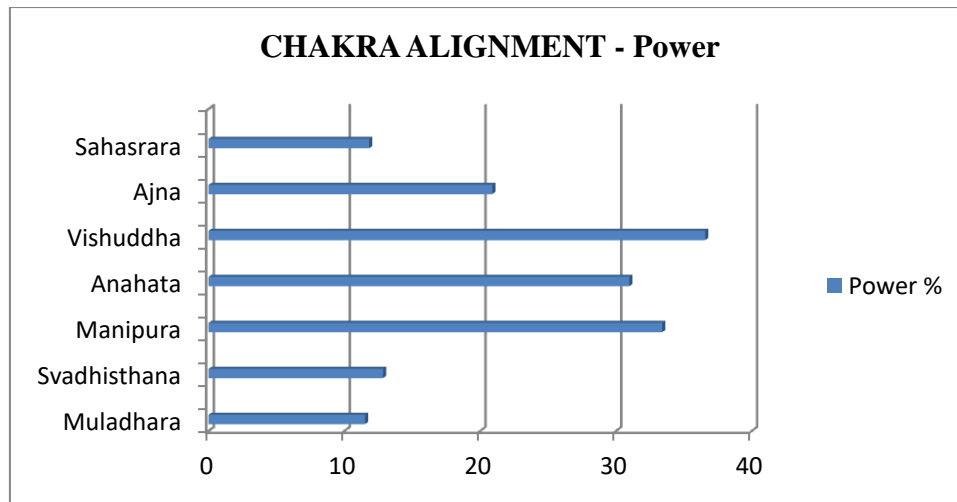


Table 6.3.6 presents the immediate effect of meditation on *Arutperunjothi Mantra* at *Chakra* Value. There were changes in *Chakra* Value but not significant.

Table 6.3.6: Immediate Effect of Meditation on *Arutperunjothi Mantra* at *Chakra* Value

Chakra Value	Variables	Mean	SD	Effect Size	Power in %	P Value
Muladhara	Pre_Muladhara	5.07	0.57	0.11	8.14	0.588
	Post_Muladhara	5.01	0.39			
Svadhisthana	Pre_Svadhisthana	4.8	0.45	0.09	6.97	0.694
	Post_Svadhisthana	4.84	0.39			
Manipura	Pre_Manipura	4.84	0.47	0.20	15.03	0.356
	Post_Manipura	4.75	0.37			
Anahata	Pre_Anahata	4.92	0.5	0.20	14.83	0.228
	Post_Anahata	4.82	0.46			
Vishuddha	Pre_Vishuddha	5.2	0.53	0.17	11.62	0.467
	Post_Vishuddha	5.11	0.52			
Ajna	Pre_Ajna	4.12	0.36	0.09	6.82	0.716
	Post_Ajna	4.09	0.29			
Sahasrara	Pre_Sahasrara	4.35	0.39	0.14	9.61	0.549
	Post_Sahasrara	4.3	0.28			

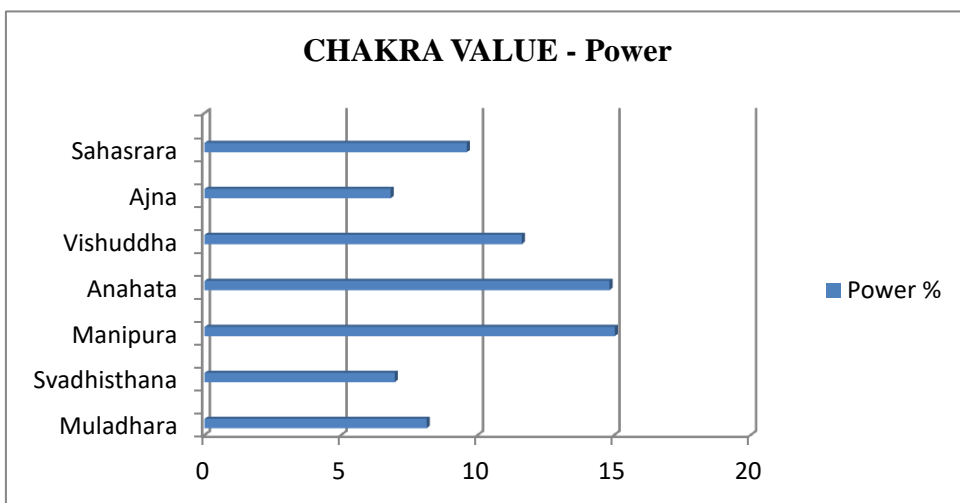
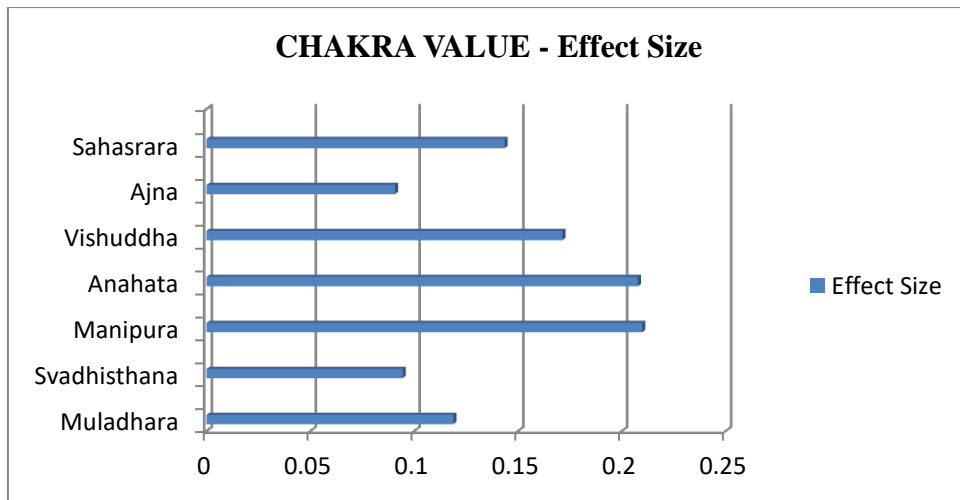
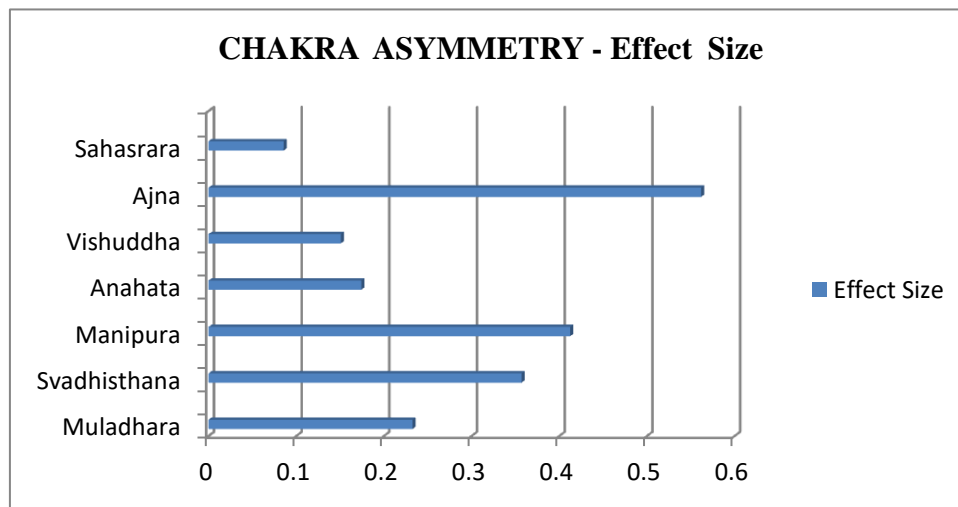


Table 6.3.7 presents the immediate effect of meditation on *Arutperunjothi Mantra* at *Chakra* Asymmetry. Result showed significant changes ($p = 0.019$) from 0.08 ± 0.25 to -0.08 ± 0.25 in *Ajna Chakra* which aligned towards the centre.

Table 6.3.7: Immediate Effect of Meditation on Arutperunjothi Mantra at Chakra Asymmetry

Chakra Asymmetry	Variables	Mean	SD	Effect Size	Power in %	P Value
Muladhara	Pre_Muladhara	0.07	0.31	0.23	16.76	0.733
	Post_Muladhara	-0.01	0.37			
Svadhithana	Pre_Svadhithana	-0.06	0.28	0.35	34.41	0.282
	Post_Svadhithana	0.05	0.33			
Manipura	Pre_Manipura	0.1	0.26	0.41	43.61	0.193
	Post_Manipura	0	0.22			
Anahata	Pre_Anahata	-0.02	0.38	0.17	11.85	0.468
	Post_Anahata	-0.1	0.51			
Vishuddha	Pre_Vishuddha	-0.01	0.29	0.15	10.1	0.578
	Post_Vishuddha	-0.05	0.23			
Ajna	Pre_Ajna	0.08	0.31	0.56	68.78	0.019
	Post_Ajna	-0.08	0.25			
Sahasrara	Pre_Sahasrara	-0.04	0.36	0.08	6.62	0.751
	Post_Sahasrara	-0.01	0.34			



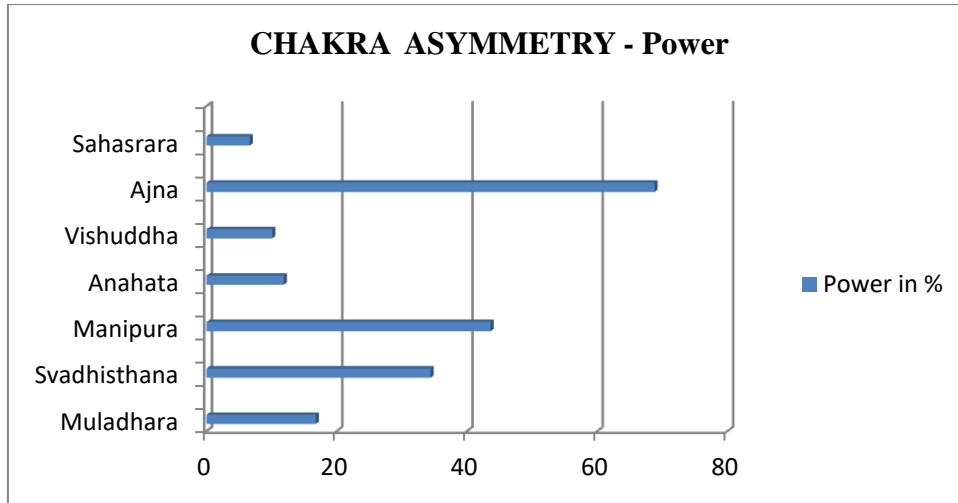


Table 6.3.8 presents over all significant changes in meditation on *Arutperunjothi Mantra* which represents that there were no much changes.

Table 6.3.8: Significant Changes in Meditation on *Arutperunjothi Mantra* - Immediate Effect

Chakra Asymmetry	Variables	Mean	SD	Effect Size	Power in %	P Value
Ajna	Pre_Ajna	0.08	0.31	0.56	68.78	0.019
	Post_Ajna	-0.08	0.25			

6.4. EFFECT OF LONG-TERM CHANTING *ARUTPERUNJOTHI MANTRA*

To validate the Long-term effect of chanting *Arutperunjothi Mantra*, *Intervention* was given for 48 days. Where Initial assessment was taken prior to the Intervention as pre data and last day assessment was taken after intervention for post data.

Table 6.4.1 presents the effect of long-term chanting *Arutperunjothi Mantra* at both Psycho-physiological Levels. Where L/R Symmetry which represents the right and left balances, showed significant changes ($p = 0.032$) from 95.43 ± 3.97 to 97.47 ± 1.92 . It showed the significant improvements in Energy Level ($p < 0.001$) from 45.9 ± 3.85 to 52.06 ± 4.27 and Organs Balance ($p < 0.001$) from 88.86 ± 4.23 to 92.03 ± 2.41 . Result also showed the significant changes in Entropy Coefficient ($p = 0.002$) from 2.22 ± 0.17 to 2.17 ± 0.19 where the reduction in mean which showed that the disorderliness was reduced and Form Coefficient ($p < 0.001$) from 2.81 ± 0.51 to 2.51 ± 0.21 where the reduction in mean which showed the improvement in harmonious of inner system which works together.

Table 6.4.1: Effect of long-term Chanting *Arutperunjothi Mantra* at both Psycho-physiological Levels

Parameters	Variables	Mean	SD	Effect Size	Power in %	P Value
Emotional Pressure	Pre_EP	3.38	0.64	0.21	19.73	0.289
	Post_EP	3.25	0.57			
Energy	Pre_Energy	45.9	3.85	1.51	100	< 0.001
	Post_Energy	52.06	4.27			
L/R Symmetry	Pre_LRS	95.43	3.97	0.59	86.5	0.032
	Post_LRS	97.47	1.92			
Organs balance	Pre_OB	88.86	4.23	0.86	99.54	< 0.001
	Post_OB	92.03	2.41			
Entropy coefficient	Pre_EC	2.22	0.17	0.27	31.04	0.002
	Post_EC	2.17	0.19			
Form Coefficient	Pre_FC	2.81	0.51	0.67	93.69	< 0.001
	Post_FC	2.51	0.21			

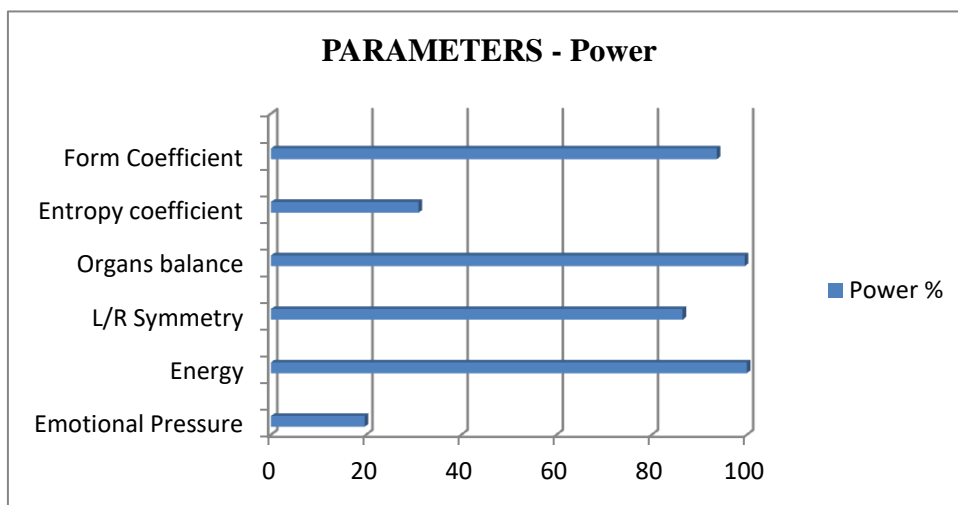
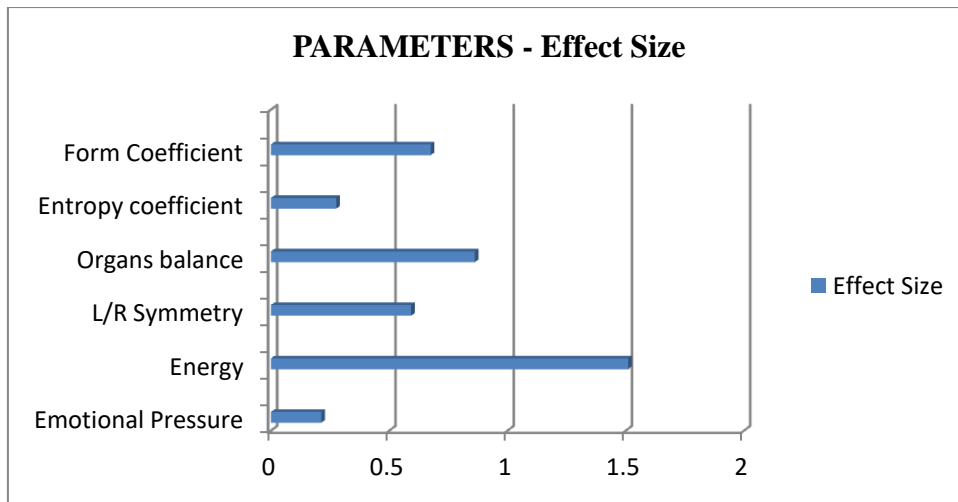


Table 6.4.2 presents the effect of long-term chanting *Arutperunjothi Mantra* at Energy Field. Result showed the significant changes in Area of Left side ($p < 0.001$) from 60586.5 ± 6945.25 to 67191.6 ± 6477.6 and Energy of Left side ($p < 0.001$) from 21.99 ± 4.13 to 24.2 ± 4.05 , Area of Front side ($p < 0.001$) from 59349.5 ± 6790.13 to 65523.1 ± 5819.18 and Energy of Front side ($p = 0.002$) from 21.35 ± 4.09 to 23.28 ± 3.66 , Area of Right side ($p < 0.001$) from 61089.7 ± 6365.32 to 66750 ± 6417.39 and Energy of Right side ($p = 0.010$) from 22.41 ± 3.87 to 24.21 ± 3.71 .

Table 6.4.2: Effect of long-term Chanting *Arutperunjothi Mantra* at Energy Field

Energy Field	Variables	Mean	SD	Effect Size	Power in %	P Value
Area_Left	Pre_Larea	60586.5	6945.25	0.98	99.94	< 0.001
	Post_Larea	67191.6	6477.6			
Energy_Left	Pre_Lenergy	21.99	4.13	0.54	81.59	< 0.001
	Post_Lenergy	24.2	4.05			
Area_Front	Pre_Farea	59349.5	6790.13	0.97	99.93	< 0.001
	Post_Farea	65523.1	5819.18			
Energy_Front	Pre_Fenergy	21.35	4.09	0.49	74.69	0.002
	Post_Fenergy	23.28	3.66			
Area_Right	Pre_Rarea	61089.7	6365.32	0.88	99.68	< 0.001
	Post_Rarea	66750	6417.39			
Energy_Right	Pre_Renergy	22.41	3.87	0.47	70.98	0.010
	Post_Renergy	24.21	3.71			

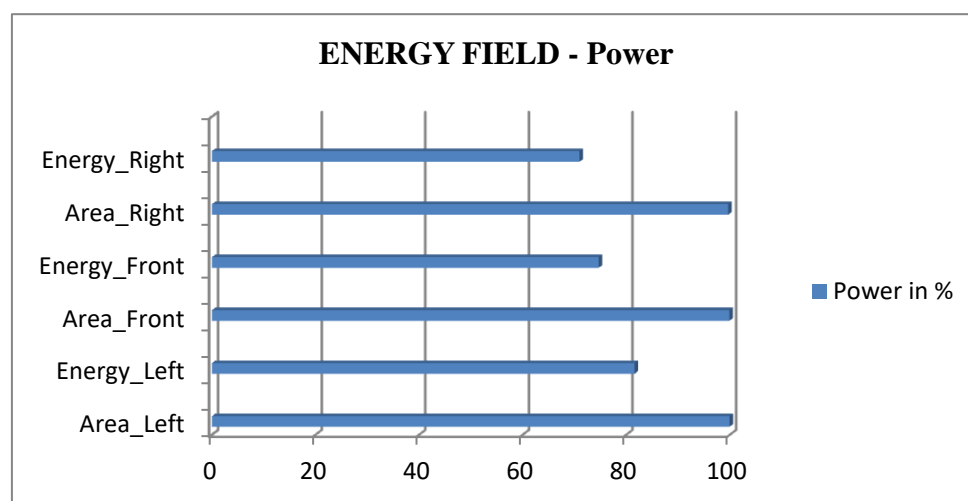
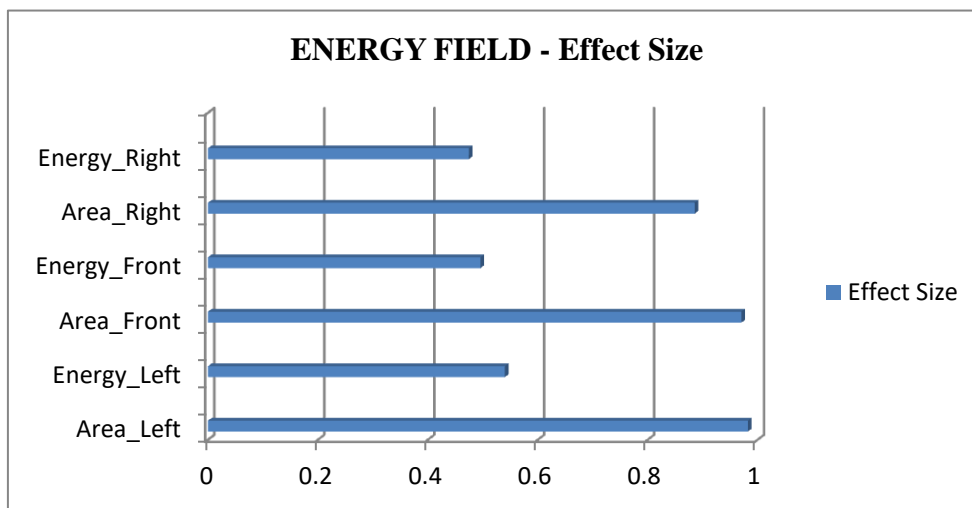
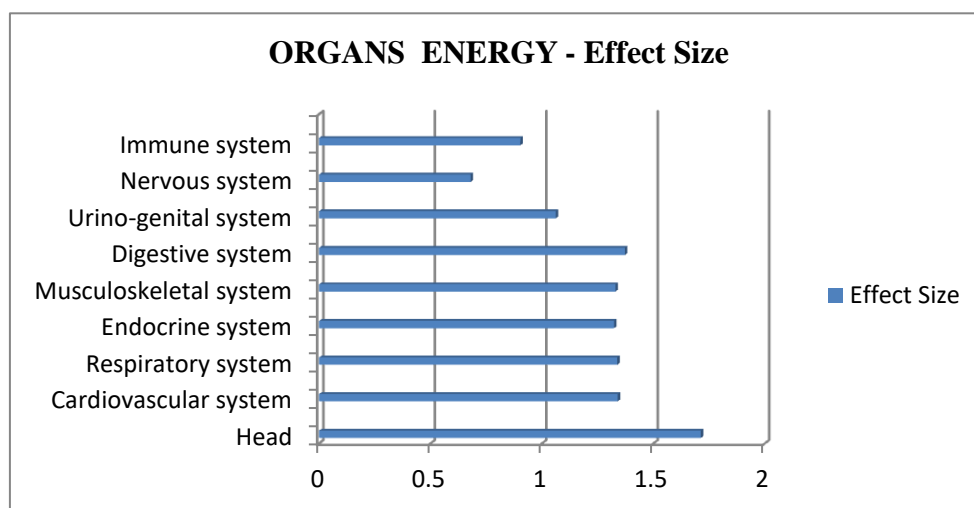


Table 6.4.3 presents the effect of long-term chanting *Arutperunjothi Mantra* at Organs Energy. Result showed the significant changes in all systems which represents that the Energy level increased in all Organs.

Table 6.4.3: Effect of long-term Chanting *Arutperunjothi Mantra* at Organs Energy

Organs Energy	Variables	Mean	SD	Effect Size	Power in %	P Value
Head	Pre_Head	3.48	0.41	1.71	100	< 0.001
	Post_Head	4.26	0.49			
Cardiovascular system	Pre_CS	3.29	0.4	1.34	99.99	< 0.001
	Post_CS	3.84	0.42			
Respiratory system	Pre_RS	4.19	0.48	1.33	99.99	< 0.001
	Post_RS	5	0.68			
Endocrine system	Pre_ES	3.53	0.46	1.32	99.99	< 0.001
	Post_ES	4.12	0.43			
Musculoskeletal system	Pre_MS	3.77	0.42	1.32	99.99	< 0.001
	Post_MS	4.46	0.58			
Digestive system	Pre_DS	3.65	0.49	1.37	99.99	< 0.001
	Post_DS	4.28	0.42			
Urino-genital system	Pre_UGS	4.46	0.56	1.06	99.99	< 0.001
	Post_UGS	5.2	0.78			
Nervous system	Pre_NS	3.07	0.67	0.68	94.95	0.004
	Post_NS	3.54	0.71			
Immune system	Pre_IS	2.97	0.57	0.90	99.76	< 0.001
	Post_IS	3.46	0.51			



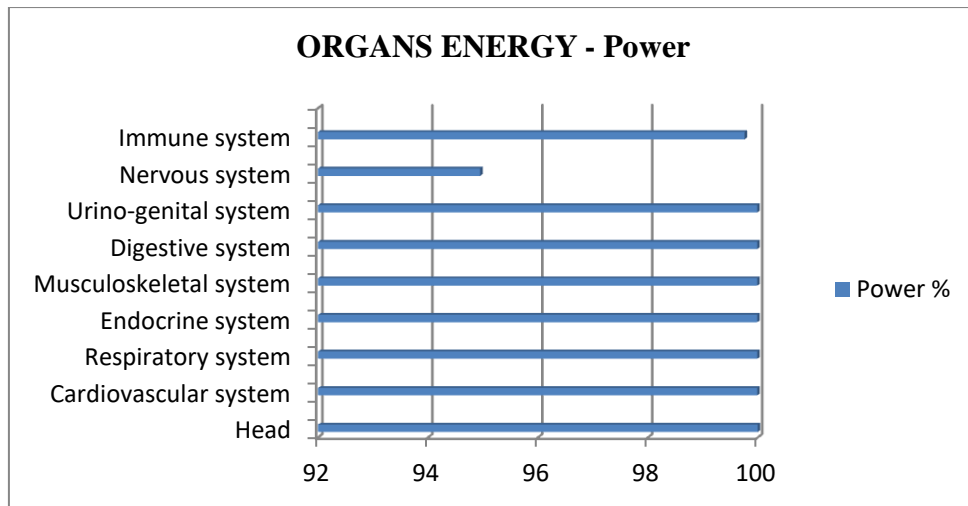


Table 6.4.4 presents the effect of long-term chanting *Arutperunjothi Mantra* at Organs Balance. Result from the Table 6.4.3 showed that the Energy level was increased in all Organs. Even though the Energy level was increased in all Organs, It influenced only the Head ($p = 0.027$) from 90.15 ± 5.78 to 92.95 ± 4.05 , Respiratory System ($p = 0.010$) from 89.61 ± 9.3 to 94.79 ± 4.41 , and musculoskeletal system ($p = 0.021$) from 87.25 ± 11.18 to 92.98 ± 5.11 . It also influenced the Endocrine System but it did not show the significant result.

Table 6.4.4: Effect of long-term Chanting *Arutperunjothi Mantra* at Organs Balance

Organs Balance	Variables	Mean	SD	Effect Size	Power in %	P Value
Head	Pre_Head	90.15	5.78	0.54	82.24	0.027
	Post_Head	92.95	4.05			
Cardiovascular system	Pre_CS	93.23	5.17	0.22	21.93	0.225
	Post_CS	94.6	6.56			
Respiratory system	Pre_RS	89.61	9.3	0.64	91.3	0.010
	Post_RS	94.79	4.41			
Endocrine system	Pre_ES	93.58	4.21	0.46	68.9	0.104
	Post_ES	95.51	4.12			
Musculoskeletal system	Pre_MS	87.25	11.18	0.59	87.88	0.021
	Post_MS	92.98	5.11			
Digestive system	Pre_DS	90.97	7.29	0.23	23.25	0.415
	Post_DS	92.53	5.99			
Urino-genital system	Pre_UGS	90.57	9.98	0.15	12.7	0.502
	Post_UGS	91.93	7.29			
Nervous system	Pre_NS	79.9	20.25	0.32	39.38	0.249
	Post_NS	85.64	10.68			
Immune system	Pre_IS	84.5	13.87	0.21	21.01	0.473
	Post_IS	87.34	12.1			

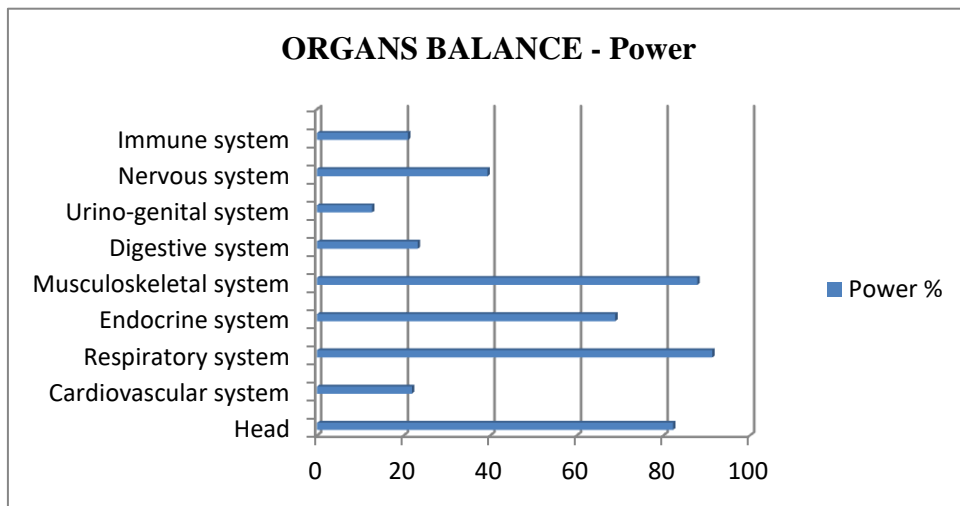
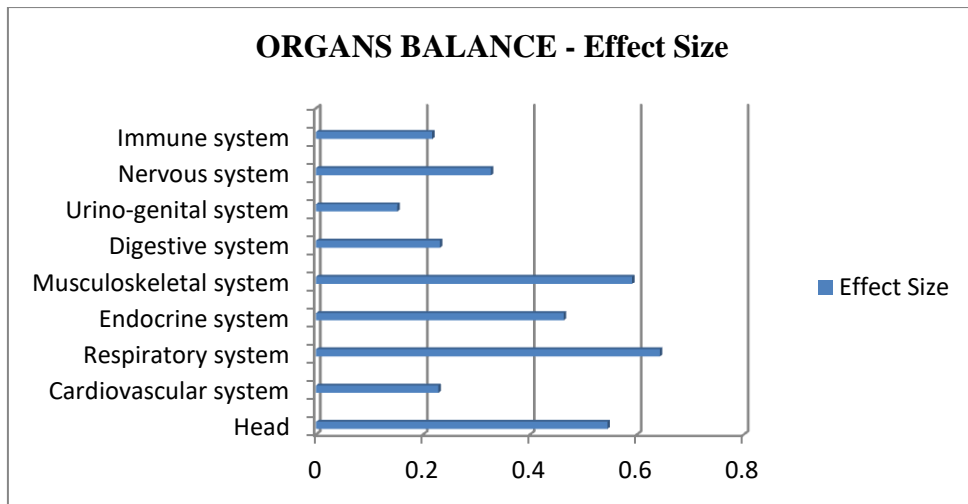
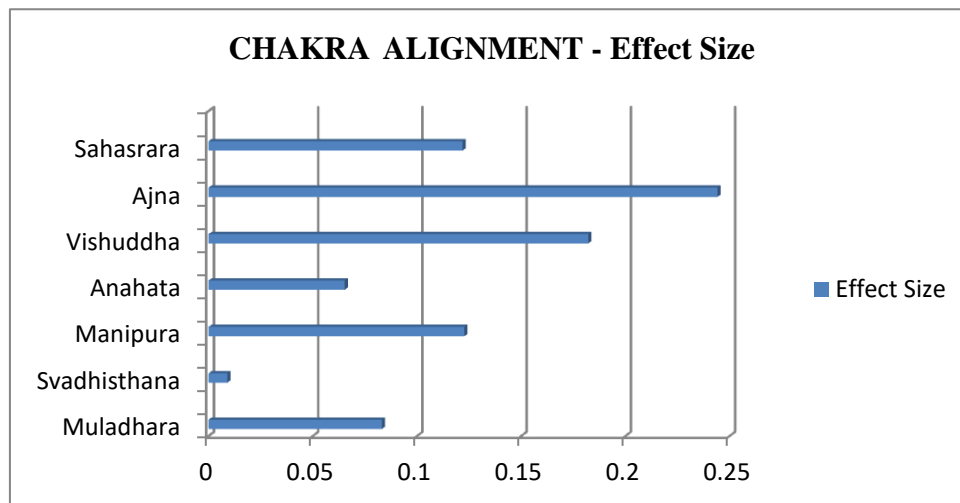


Table 6.4.5 presents the effect of long-term chanting *Arutperunjothi Mantra* at *Chakra* Alignment. Result showed the changes in all *Chakra* but it was not significant.

Table 6.4.5: Effect of long-term Chanting *Arutperunjothi Mantra* at *Chakra Alignment*

Chakra Alignment	Variables	Mean	SD	Effect Size	Power in %	P Value
Muladhara	Pre_Muladhara	92.29	6.64	0.08	7.25	0.738
	Post_Muladhara	91.75	6.33			
Svadhithana	Pre_Svadhithana	91.79	7.51	0.009	5.03	0.399
	Post_Svadhithana	91.69	12.66			
Manipura	Pre_Manipura	93.23	6.9	0.12	9.72	0.537
	Post_Manipura	94	5.36			
Anahata	Pre_Anahata	88.7	12.48	0.06	6.32	0.934
	Post_Anahata	89.44	9.6			
Vishuddha	Pre_Vishuddha	93.02	6.01	0.18	16.17	0.483
	Post_Vishuddha	94.03	4.91			
Ajna	Pre_Ajna	95.74	4	0.24	25.31	0.324
	Post_Ajna	94.64	4.88			
Sahasrara	Pre_Sahasrara	93.72	5.35	0.12	9.67	0.869
	Post_Sahasrara	92.35	12.91			



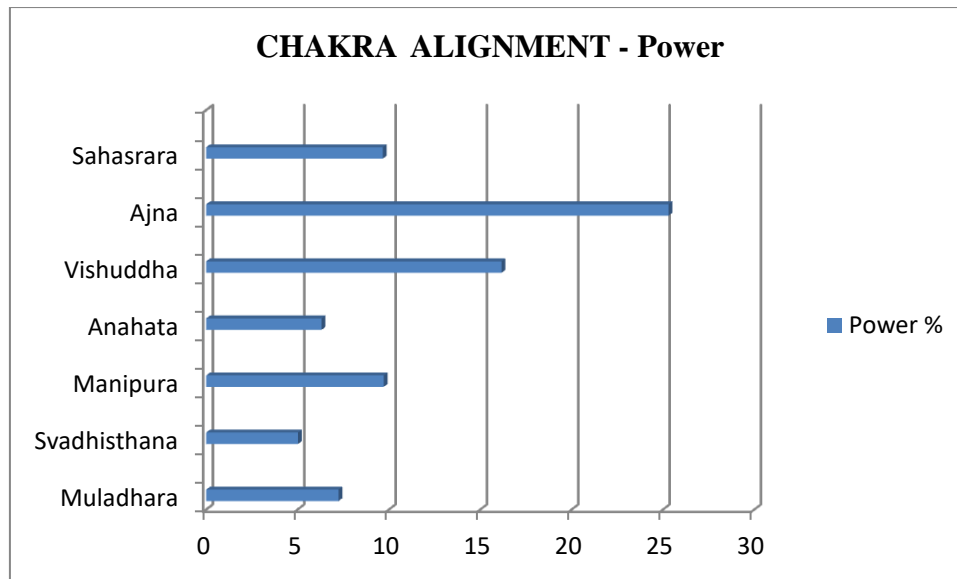


Table 6.4.6 presents the effect of long-term chanting *Arutperunjothi Mantra* at *Chakra* Value. Result showed the significant changes in all *Chakra*.

Table 6.4.6: Effect of long-term Chanting *Arutperunjothi Mantra* at *Chakra* Value

Chakra Value	Variables	Mean	SD	Effect Size	Power in %	P Value
Muladhara	Pre_Muladhara	3.92	0.46	1.62	100	< 0.001
	Post_Muladhara	4.76	0.56			
Svadhisthana	Pre_Svadhisthana	3.85	0.5	1.14	99.99	< 0.001
	Post_Svadhisthana	4.43	0.51			
Manipura	Pre_Manipura	3.84	0.56	1.21	99.99	< 0.001
	Post_Manipura	4.52	0.56			
Anahata	Pre_Anahata	3.96	0.6	0.90	99.75	< 0.001
	Post_Anahata	4.48	0.55			
Vishuddha	Pre_Vishuddha	3.75	0.57	1.65	100	< 0.001
	Post_Vishuddha	4.84	0.72			
Ajna	Pre_Ajna	3.23	0.34	1.32	99.99	< 0.001
	Post_Ajna	3.75	0.43			
Sahasrara	Pre_Sahasrara	3.44	0.42	1.13	99.99	< 0.001
	Post_Sahasrara	3.93	0.44			

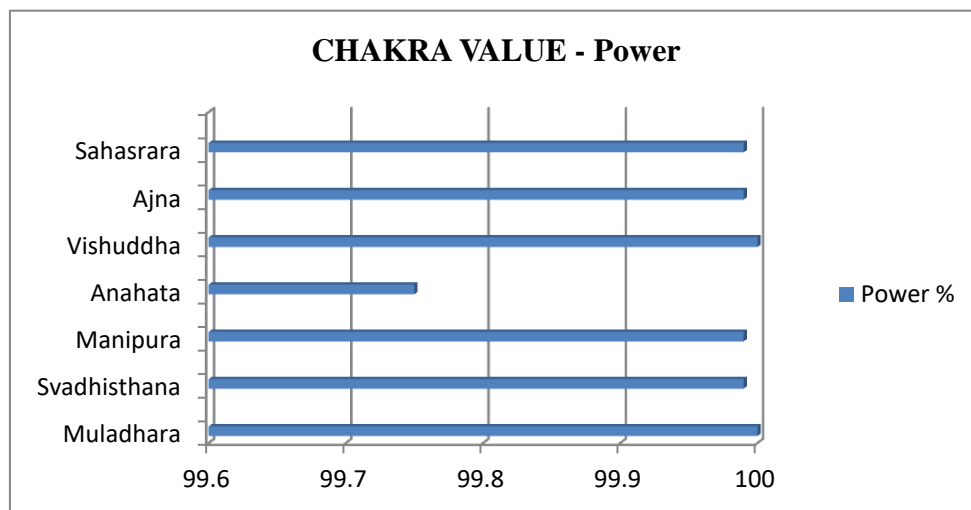
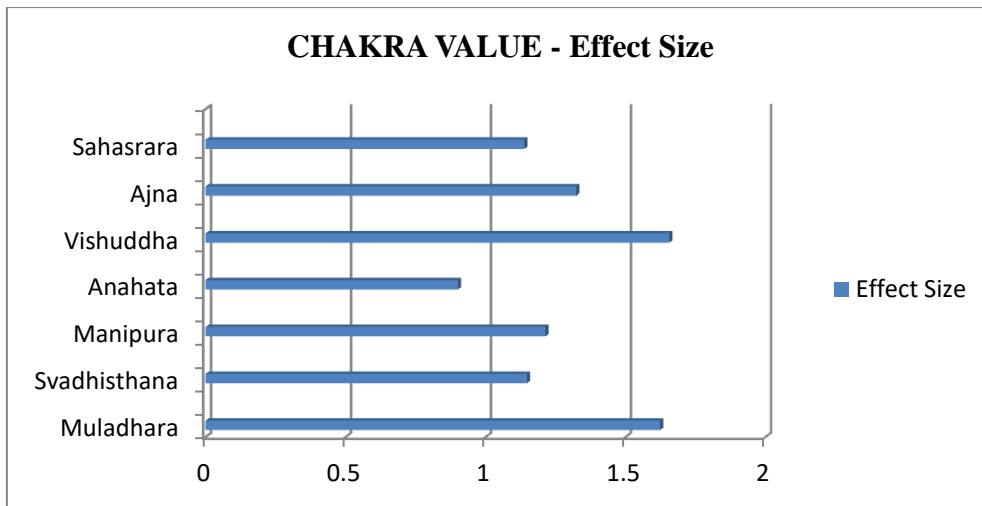
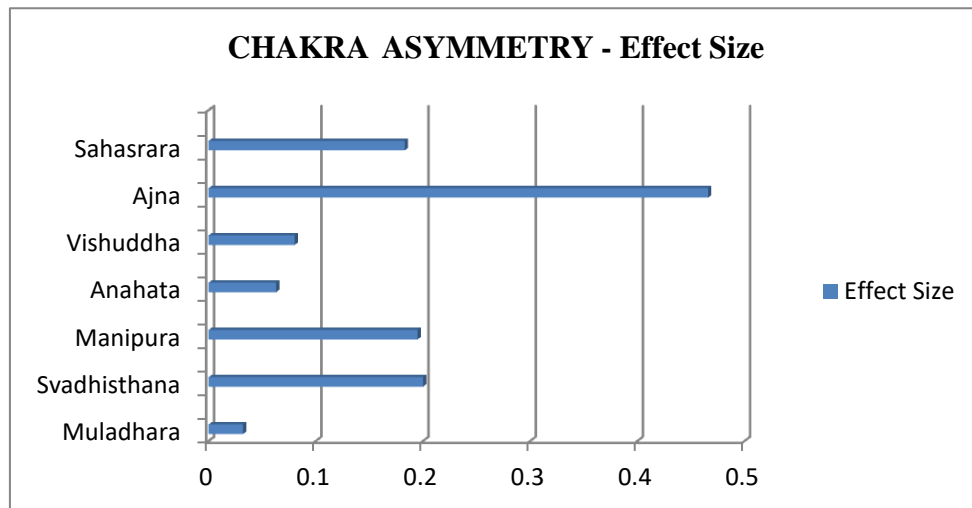


Table 6.4.7 presents the effect of long-term chanting *Arutperunjothi Mantra* at *Chakra* Asymmetry. Result showed the significant changes in Ajna Chakra ($p = 0.041$) from 0.03 ± 0.17 to -0.06 ± 0.21 .

Table 6.4.7: Effect of long-term Chanting *Arutperunjothi Mantra* at *Chakra Asymmetry*

Chakra Asymmetry	Variables	Mean	SD	Effect Size	Power in %	P Value
Muladhara	Pre_Muladhara	0.04	0.31	0.03	5.32	0.346
	Post_Muladhara	0.03	0.31			
Svadhithana	Pre_Svadhithana	-0.02	0.34	0.20	17.88	0.393
	Post_Svadhithana	-0.1	0.44			
Manipura	Pre_Manipura	0.1	0.27	0.19	17.84	0.461
	Post_Manipura	0.05	0.24			
Anahata	Pre_Anahata	0.05	0.51	0.06	6.23	0.523
	Post_Anahata	0.08	0.43			
Vishuddha	Pre_Vishuddha	-0.05	0.27	0.08	7.1	0.670
	Post_Vishuddha	-0.07	0.22			
Ajna	Pre_Ajna	0.03	0.17	0.46	69.4	0.041
	Post_Ajna	-0.06	0.21			
Sahasrara	Pre_Sahasrara	-0.02	0.25	0.18	15.72	0.967
	Post_Sahasrara	-0.09	0.44			



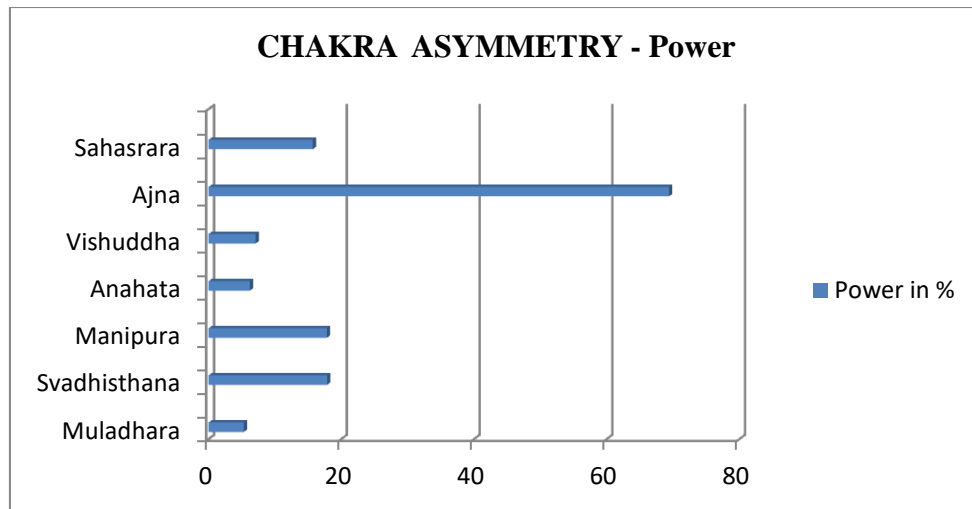


Table 6.4.8 presents over all significant changes for long-term chanting *Arutperunjothi Mantra*.

Table 6.4.8: Significant Changes in Chanting *Arutperunjothi Mantra* - long-term Intervention

Parameters	Variables	Mean	SD	Effect Size	Power in %	P Value
Energy	Pre_Energy	45.9	3.85	1.51	100	< 0.001
	Post_Energy	52.06	4.27			
L/R Symmetry	Pre_LRS	95.43	3.97	0.59	86.5	0.032
	Post_LRS	97.47	1.92			
Organs balance	Pre_OB	88.86	4.23	0.86	99.54	< 0.001
	Post_OB	92.03	2.41			
Entropy coefficient	Pre_EC	2.22	0.17	0.27	31.04	0.002
	Post_EC	2.17	0.19			
Form Coefficient	Pre_FC	2.81	0.51	0.67	93.69	< 0.001
	Post_FC	2.51	0.21			
Organs Energy	Variables	Mean	SD	Effect Size	Power in %	P Value
Head	Pre_Head	3.48	0.41	1.71	100	< 0.001
	Post_Head	4.26	0.49			
Cardiovascular system	Pre_CS	3.29	0.4	1.34	99.99	< 0.001
	Post_CS	3.84	0.42			
Respiratory system	Pre_RS	4.19	0.48	1.33	99.99	< 0.001
	Post_RS	5	0.68			
Endocrine system	Pre_ES	3.53	0.46	1.32	99.99	< 0.001
	Post_ES	4.12	0.43			
Musculoskeletal	Pre_MS	3.77	0.42	1.32	99.99	< 0.001

al system	Post_MS	4.46	0.58			
Digestive system	Pre_DS	3.65	0.49	1.37	99.99	< 0.001
	Post_DS	4.28	0.42			
Urino-genital system	Pre_UGS	4.46	0.56	1.06	99.99	< 0.001
	Post_UGS	5.2	0.78			
Nervous system	Pre_NS	3.07	0.67	0.68	94.95	0.004
	Post_NS	3.54	0.71			
Immune system	Pre_IS	2.97	0.57	0.90	99.76	< 0.001
	Post_IS	3.46	0.51			
Organs Balance	Variables	Mean	SD	Effect Size	Power in %	P Value
Head	Pre_Head	90.15	5.78	0.54	82.24	0.027
	Post_Head	92.95	4.05			
Respiratory system	Pre_RS	89.61	9.3	0.64	91.3	0.010
	Post_RS	94.79	4.41			
Musculoskeletal system	Pre_MS	87.25	11.18	0.59	87.88	0.021
	Post_MS	92.98	5.11			
Chakra Value	Variables	Mean	SD	Effect Size	Power in %	P Value
Muladhara	Pre_Muladhara	3.92	0.46	1.62	100	< 0.001
	Post_Muladhara	4.76	0.56			
Svadhithana	Pre_Svadhithana	3.85	0.5	1.14	99.99	< 0.001
	Post_Svadhithana	4.43	0.51			
Manipura	Pre_Manipura	3.84	0.56	1.21	99.99	< 0.001
	Post_Manipura	4.52	0.56			
Anahata	Pre_Anahata	3.96	0.6	0.90	99.75	< 0.001
	Post_Anahata	4.48	0.55			
Vishuddha	Pre_Vishuddha	3.75	0.57	1.65	100	< 0.001
	Post_Vishuddha	4.84	0.72			
Ajna	Pre_Ajna	3.23	0.34	1.32	99.99	< 0.001
	Post_Ajna	3.75	0.43			
Sahasrara	Pre_Sahasrara	3.44	0.42	1.13	99.99	< 0.001
	Post_Sahasrara	3.93	0.44			
Chakra Asymmetry	Variables	Mean	SD	Effect Size	Power in %	P Value
Ajna	Pre_Ajna	0.03	0.17	0.46	69.4	0.041
	Post_Ajna	-0.06	0.21			
Energy Field	Variables	Mean	SD	Effect Size	Power in %	P Value
Area_Left	Pre_Larea	60586.5	6945.25	0.98	99.94	< 0.001
	Post_Larea	67191.6	6477.6			
Energy_Left	Pre_Lenergy	21.99	4.13	0.54	81.59	< 0.001
	Post_Lenergy	24.2	4.05			

Area_Front	Pre_Farea	59349.5	6790.13	0.97	99.93	< 0.001
	Post_Farea	65523.1	5819.18			
Energy_Front	Pre_Fenergy	21.35	4.09	0.49	74.69	0.002
	Post_Fenergy	23.28	3.66			
Area_Right	Pre_Rarea	61089.7	6365.32	0.88	99.68	< 0.001
	Post_Rarea	66750	6417.39			
Energy_Right	Pre_Renergy	22.41	3.87	0.47	70.98	0.010
	Post_Renergy	24.21	3.71			

6.5. EFFECT OF LONG-TERM MEDITATION ON *ARUTPERUNJOTHI MANTRA*

To validate the effect of long-term effect of meditation on *Arutperunjothi Mantra*, Intervention was given for 48 days. Where Initial assessment was taken prior to the Intervention as pre data and last day assessment was taken after intervention for post data.

Table 6.5.1 presents the effect of long-term meditation on *Arutperunjothi Mantra* at both Psycho-physiological Levels. It showed the significant improvements in Energy Level ($p < 0.001$) from 45.89 ± 2.8 to 54.91 ± 2.14 and Organs Balance ($p = 0.013$) from 89.07 ± 3.69 to 91.46 ± 2.86 . Result also showed the significant changes in Entropy Coefficient ($p = 0.015$) from 2.33 ± 0.19 to 2.19 ± 0.21 where the reduction in mean which showed that disorderliness was reduced and Form Coefficient ($p = 0.001$) from 2.9 ± 0.39 to 2.48 ± 0.2 where the reduction in mean which showed the improvement in harmonious of inner system which works together.

Table 6.5.1: Effect of long-term Meditation on *Arutperunjothi Mantra* at both Psycho-physiological Levels

Parameters	Variables	Mean	SD	Effect Size	Power in %	P Value
Emotional Pressure	Pre_EP	3.07	0.54	0.42	36.03	0.190
	Post_EP	3.31	0.58			
Energy	Pre_Energy	45.89	2.8	3.55	100	< 0.001
	Post_Energy	54.91	2.14			
L/R Symmetry	Pre_LRS	96.58	2.76	0.52	48.12	0.070
	Post_LRS	97.85	1.76			
Organs balance	Pre_OB	89.07	3.69	0.71	73.74	0.013
	Post_OB	91.46	2.86			
Entropy coefficient	Pre_EC	2.33	0.19	0.69	74.14	0.015
	Post_EC	2.19	0.21			
Form Coefficient	Pre_FC	2.9	0.39	1.24	99.63	0.001
	Post_FC	2.48	0.2			

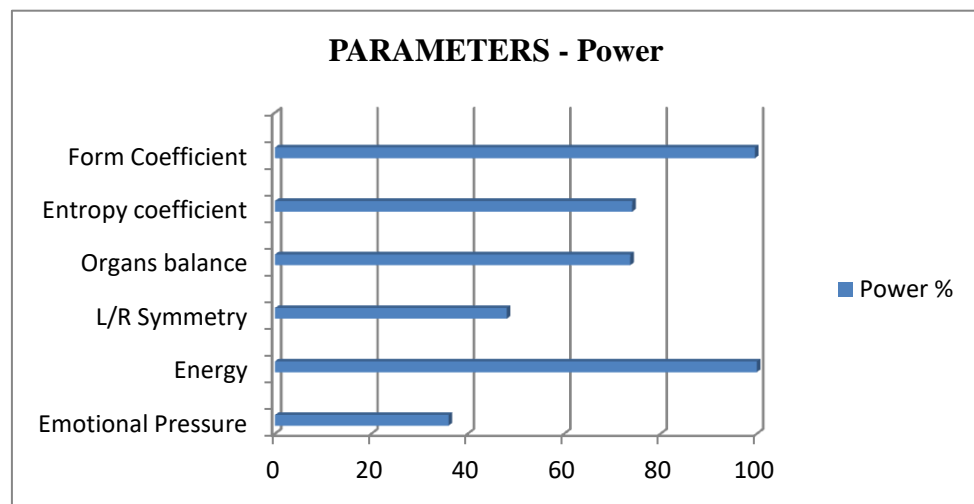
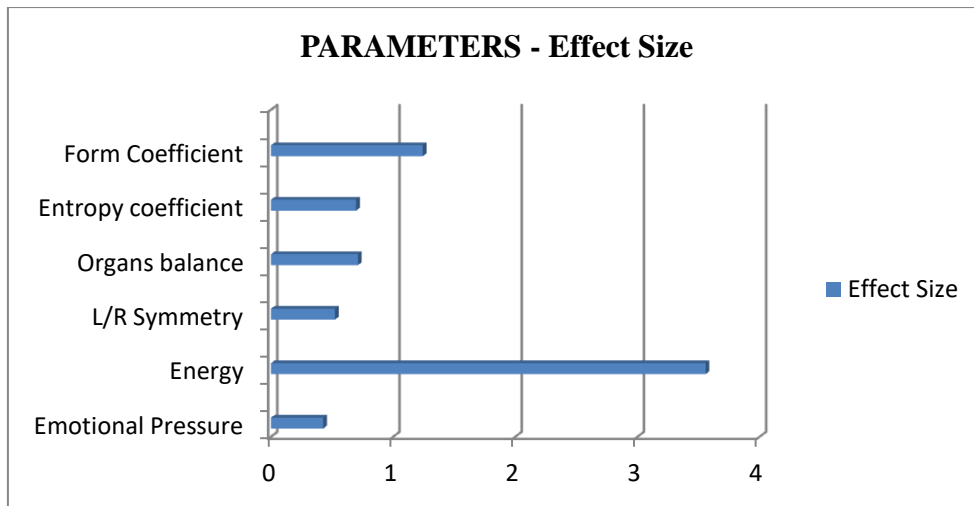


Table 6.5.2 presents the effect of long-term meditation on *Arutperunjothi Mantra* at Energy Field. Result showed the significant changes in Area of Left side ($p = 0.001$) from 61915.44 ± 6900.36 to 69083.94 ± 5901.36 , Area of Front side ($p < 0.001$) from 60305.38 ± 7197.48 to 67996.81 ± 4815.29 and Area of Right side ($p = 0.001$) from 62760.31 ± 5783.58 to 69400.12 ± 3929.37 .

Table 6.5.2: Effect of long-term Meditation on Chanting *Arutperunjothi Mantra* at Energy Field

Energy Field	Variables	Mean	SD	Effect Size	Power in %	P Value
Area_Left	Pre_Larea	61915.44	6900.36	1.10	98.54	0.001
	Post_Larea	69083.94	5901.36			
Energy_Left	Pre_Lenergy	24.03	4.15	0.32	23.1	0.2358
	Post_Lenergy	25.31	3.65			
Area_Front	Pre_Farea	60305.38	7197.48	1.21	99.47	< 0.001
	Post_Farea	67996.81	4815.29			
Energy_Front	Pre_Fenergy	23.04	4.1	0.47	43.02	0.095
	Post_Fenergy	24.81	3.14			
Area_Right	Pre_Rarea	62760.31	5783.58	1.29	99.8	0.001
	Post_Rarea	69400.12	3929.37			
Energy_Right	Pre_Renergy	24.36	3.43	0.48	44.25	0.124
	Post_Renergy	25.89	2.78			

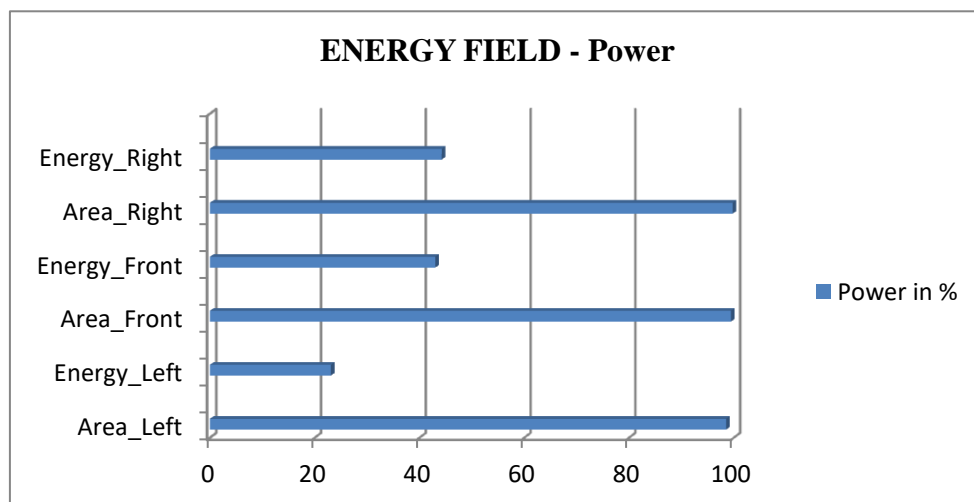
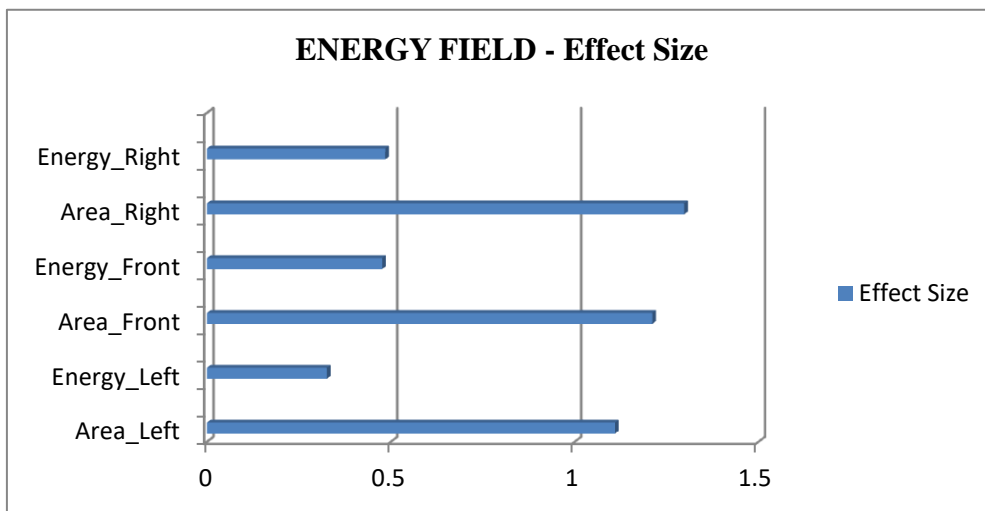
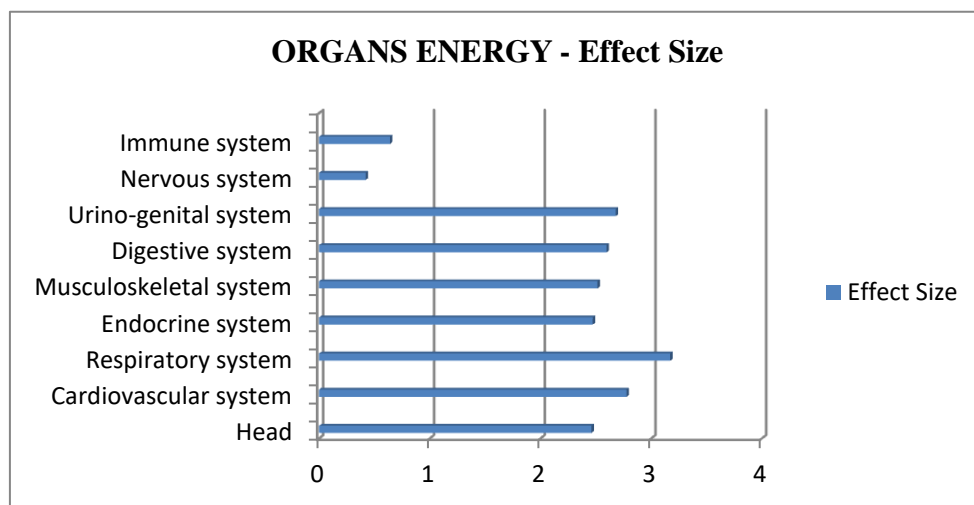


Table 6.5.3 presents the effect of long-term meditation on *Arutperunjothi Mantra* at Organs Energy. Result showed the significant changes in all systems which represents that the Energy level increased in all Organs. But there were no significant changes in Nervous system.

Table 6.5.3: Effect of long-term Meditation on Chanting *Arutperunjothi Mantra* at Organs Energy

Organs Energy	Variables	Mean	SD	Effect Size	Power in %	P Value
Head	Pre_Head	3.52	0.45	2.46	100	< 0.001
	Post_Head	4.52	0.34			
Cardiovascular system	Pre_CS	3.39	0.27	2.77	100	< 0.001
	Post_CS	4.14	0.27			
Respiratory system	Pre_RS	4.02	0.5	3.17	100	< 0.001
	Post_RS	5.52	0.44			
Endocrine system	Pre_ES	3.56	0.36	2.47	100	< 0.001
	Post_ES	4.35	0.25			
Musculoskeletal system	Pre_MS	3.69	0.46	2.51	100	< 0.001
	Post_MS	4.7	0.28			
Digestive system	Pre_DS	3.6	0.36	2.59	100	< 0.001
	Post_DS	4.43	0.25			
Urino-genital system	Pre_UGS	4.1	0.65	2.68	100	< 0.001
	Post_UGS	5.68	0.5			
Nervous system	Pre_NS	3.3	0.51	0.42	35.09	0.296
	Post_NS	3.5	0.43			
Immune system	Pre_IS	3.25	0.53	0.64	64.69	0.024
	Post_IS	3.59	0.53			



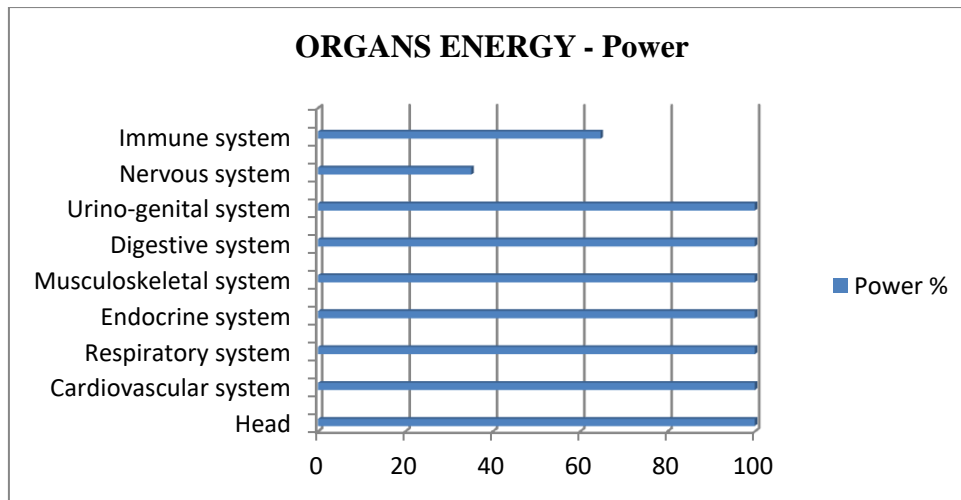


Table 6.5.4 presents the effect of long-term meditation on *Arutperunjothi Mantra* at Organs Balance. Result from the Table 6.4.3 showed that the Energy level increased in all Organs except Nervous system. Even though the Energy level increased, it didn't influence organ system.

Table 6.5.4: Effect of long-term Meditation on Chanting *Arutperunjothi Mantra* at Organs Balance

Organs Balance	Variables	Mean	SD	Effect Size	Power in %	P Value
Head	Pre_Head	90.38	9.9	0.42	33.93	0.632
	Post_Head	94.04	3.88			
Cardiovascular system	Pre_CS	93.48	4.68	0.43	37.69	0.222
	Post_CS	95.3	3.19			
Respiratory system	Pre_RS	89.93	9.34	0.51	49.21	0.202
	Post_RS	94.17	5.89			
Endocrine system	Pre_ES	95.36	4.24	0.10	6.67	0.802
	Post_ES	94.96	3.6			
Musculoskeletal system	Pre_MS	90.06	10.11	0.27	17.99	0.322
	Post_MS	92.49	5.43			
Digestive system	Pre_DS	90.62	8.04	0.11	6.98	0.784
	Post_DS	91.44	6.68			
Urino-genital system	Pre_UGS	88	11.14	0.42	35.57	0.209
	Post_UGS	92.21	7.88			
Nervous system	Pre_NS	81.94	11.71	0.07	5.79	0.596
	Post_NS	83.26	21.18			
Immune system	Pre_IS	81.86	12.34	0.29	20.02	0.331
	Post_IS	85.26	10.21			

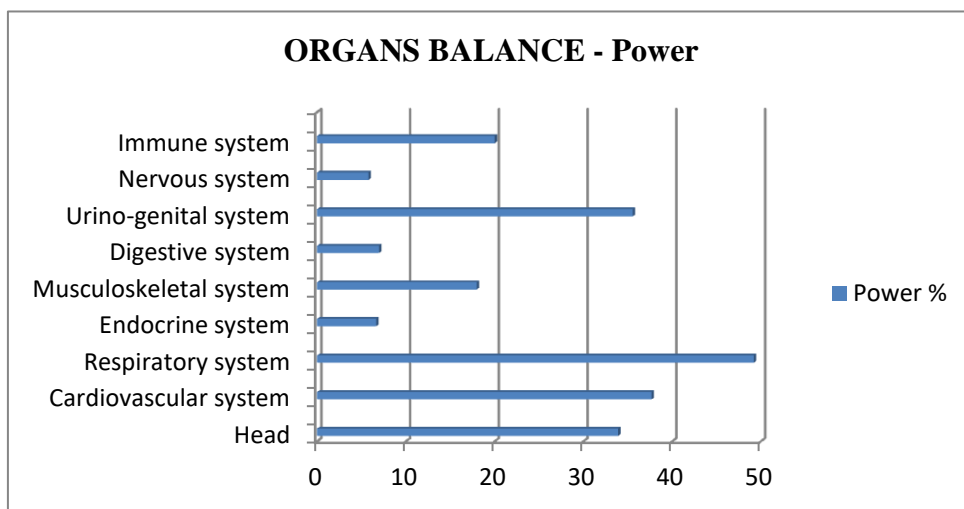
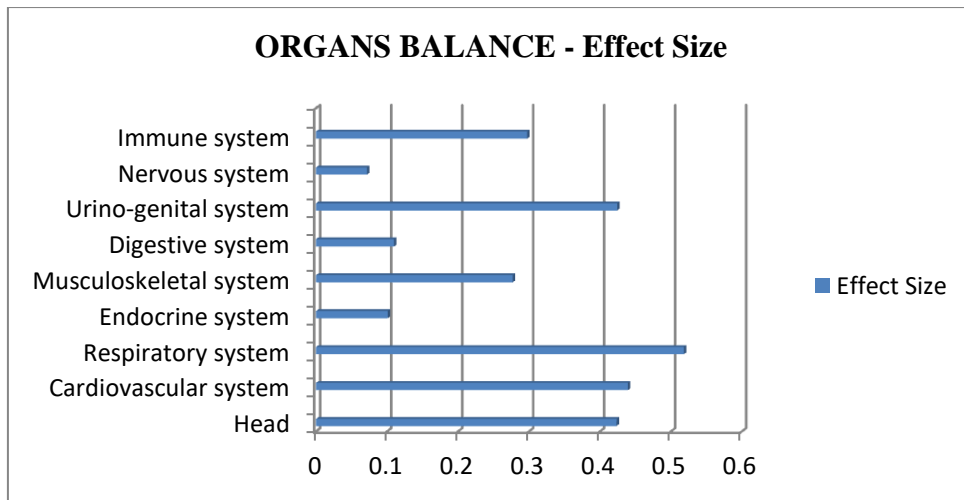
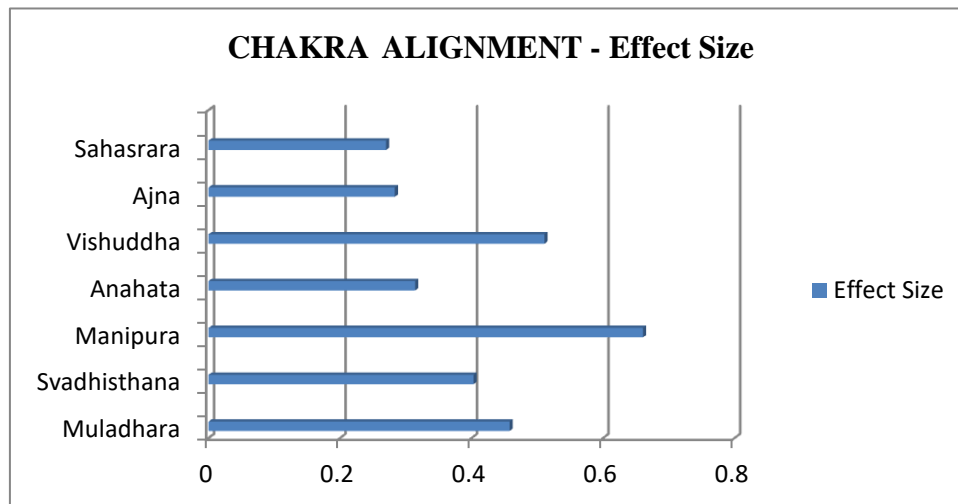


Table 6.5.5 presents the effect of long-term meditation on *Arutperunjothi Mantra* at *Chakra* Alignment. Result showed the changes in all *Chakra* but it was not significant.

Table 6.5.5: Effect of long-term Meditation on Chanting *Arutperunjothi Mantra* at Chakra Alignment

Chakra Alignment	Variables	Mean	SD	Effect Size	Power in %	P Value
Muladhara	Pre_Muladhara	86.76	9.02	0.45	40.3	0.177
	Post_Muladhara	90.63	7.74			
Svadhithana	Pre_Svadhithana	93.66	6.3	0.40	15.51	0.507
	Post_Svadhithana	92.14	5.83			
Manipura	Pre_Manipura	89.72	8.05	0.66	69.55	0.067
	Post_Manipura	94.33	3.78			
Anahata	Pre_Anahata	91.34	7.01	0.31	21.78	0.362
	Post_Anahata	88.87	8.5			
Vishuddha	Pre_Vishuddha	89.52	10.7	0.51	48.12	0.181
	Post_Vishuddha	94.26	5.78			
Ajna	Pre_Ajna	92.21	8.8	0.28	18.58	0.323
	Post_Ajna	94.37	4.21			
Sahasrara	Pre_Sahasrara	92.28	6.92	0.26	17.3	0.380
	Post_Sahasrara	94.01	5.73			



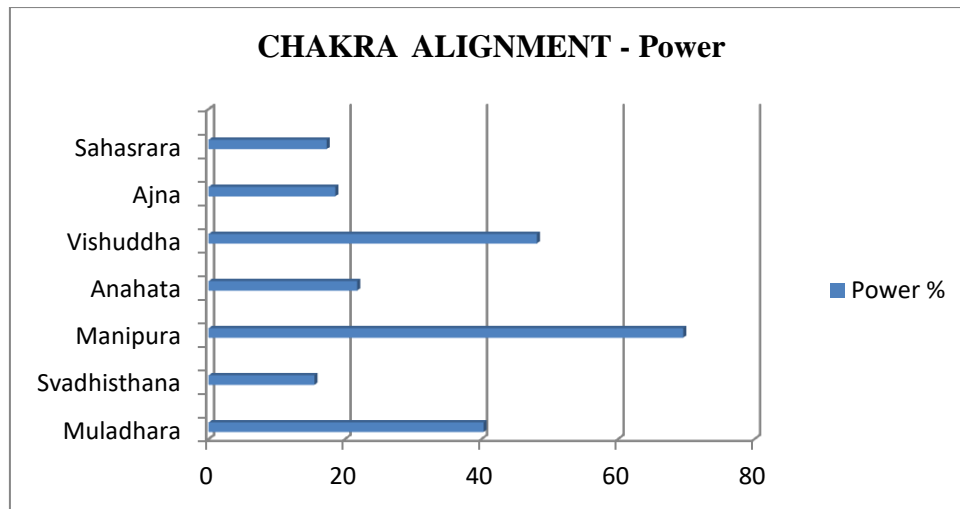


Table 6.5.6 presents the effect of long-term meditation on *Arutperunjothi Mantra* at *Chakra* Value. Result showed the significant changes in all *Chakra*.

Table 6.5.6: Effect of long-term Meditation on Chanting *Arutperunjothi Mantra* at *Chakra* Value

Chakra Value	Variables	Mean	SD	Effect Size	Power in %	P Value
Muladhara	Pre_Muladhara	3.7	0.53	2.79	100	< 0.001
	Post_Muladhara	5	0.34			
Svadhisthana	Pre_Svadhisthana	3.74	0.46	2.53	100	< 0.001
	Post_Svadhisthana	4.77	0.31			
Manipura	Pre_Manipura	3.69	0.51	2.30	100	< 0.001
	Post_Manipura	4.72	0.32			
Anahata	Pre_Anahata	3.8	0.49	2.25	100	< 0.001
	Post_Anahata	4.81	0.39			
Vishuddha	Pre_Vishuddha	3.69	0.66	2.32	100	< 0.001
	Post_Vishuddha	5.13	0.57			
Ajna	Pre_Ajna	3.4	0.37	1.72	99	< 0.001
	Post_Ajna	4.02	0.35			
Sahasrara	Pre_Sahasrara	3.57	0.24	2.59	100	< 0.001
	Post_Sahasrara	4.22	0.26			

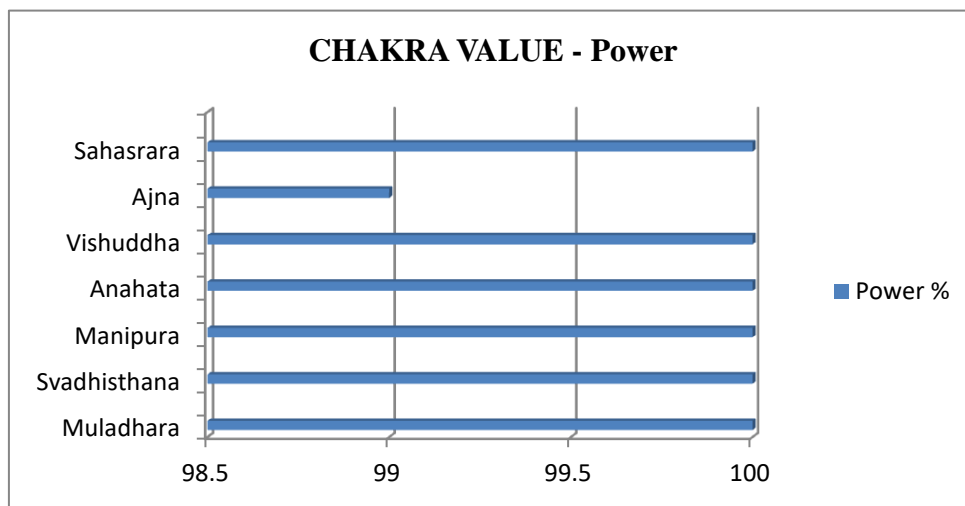
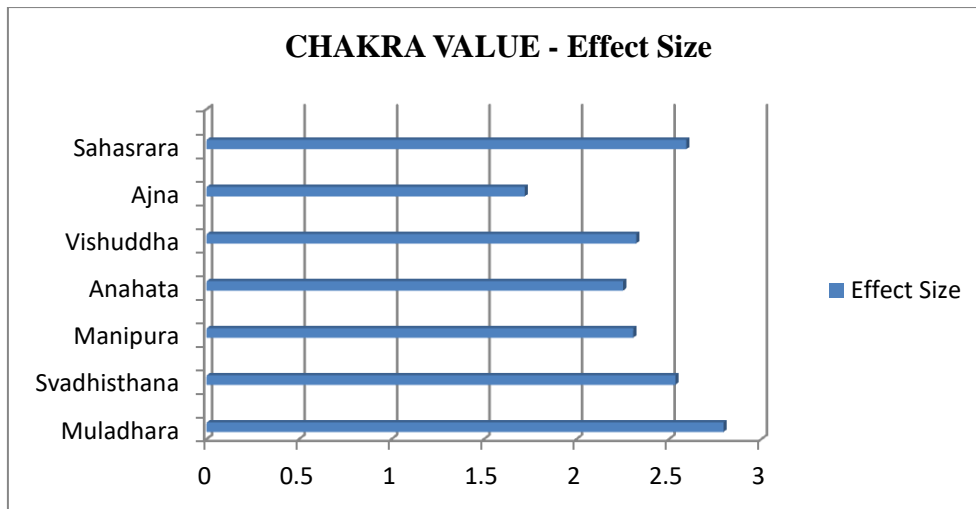
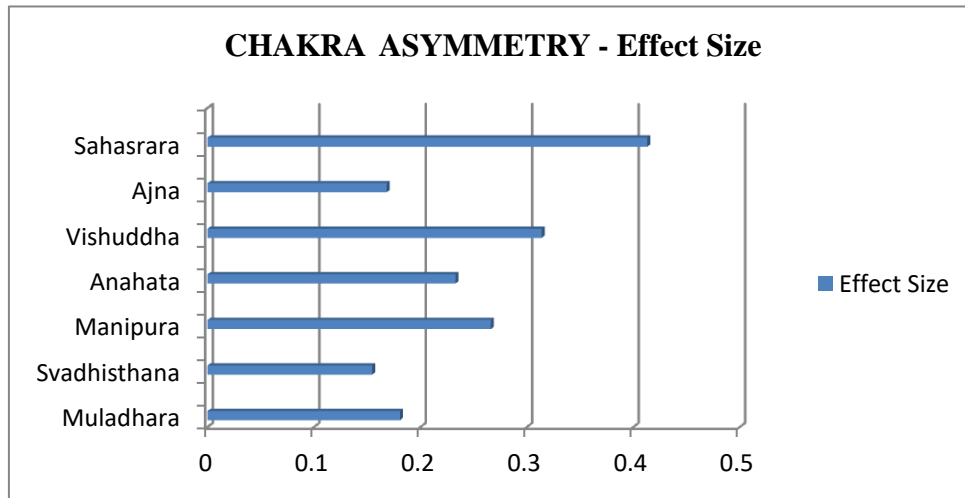


Table 6.5.7 presents the effect of long-term meditation on *Arutperunjothi Mantra* at *Chakra* Asymmetry. Result showed the changes in all *Chakra* but it was not significant.

Table 6.5.7: Effect of long-term Meditation on Chanting *Arutperunjothi Mantra* at Chakra Asymmetry

Chakra Asymmetry	Variables	Mean	SD	Effect Size	Power in %	P Value
Muladhara	Pre_Muladhara	-0.03	0.49	0.18	10.41	0.506
	Post_Muladhara	0.05	0.37			
Svadhithana	Pre_Svadhithana	0.14	0.23	0.15	8.93	0.664
	Post_Svadhithana	0.1	0.28			
Manipura	Pre_Manipura	-0.1	0.39	0.26	16.95	0.306
	Post_Manipura	-0.01	0.21			
Anahata	Pre_Anahata	0	0.34	0.23	14.09	0.452
	Post_Anahata	0.09	0.42			
Vishuddha	Pre_Vishuddha	-0.12	0.44	0.31	21.75	0.363
	Post_Vishuddha	0	0.25			
Ajna	Pre_Ajna	-0.11	0.34	0.16	9.67	0.492
	Post_Ajna	-0.06	0.21			
Sahasrara	Pre_Sahasrara	0.15	0.28	0.41	34	0.317
	Post_Sahasrara	0.04	0.25			



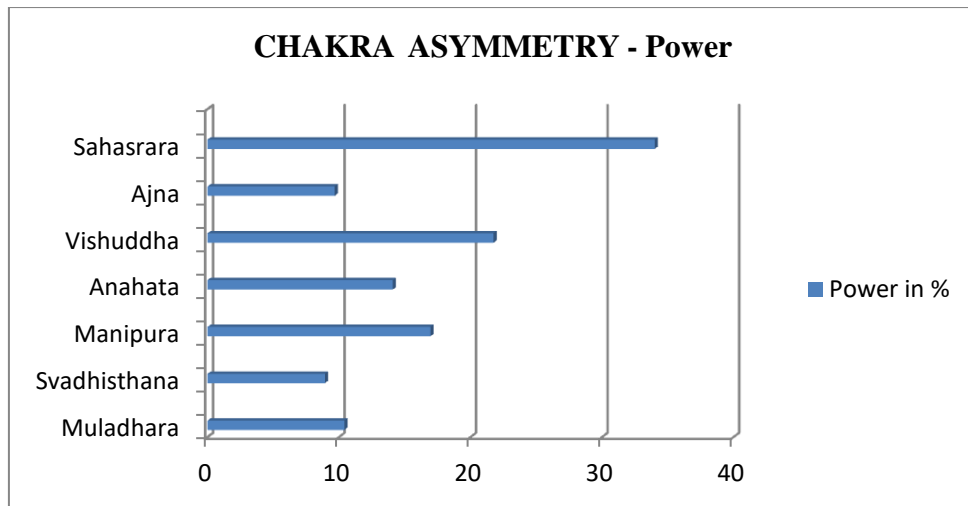


Table 6.5.8 presents over all significant changes for long-term meditation on *Arutperunjothi Mantra*.

Table 6.5.8: Significant Changes in Meditation on *Arutperunjothi Mantra* - long-term Intervention

Parameters	Variables	Mean	SD	Effect Size	Power in %	P Value
Energy	Pre_Energy	45.89	2.8	3.55	100	< 0.001
	Post_Energy	54.91	2.14			
Organs balance	Pre_OB	89.07	3.69	0.71	73.74	0.013
	Post_OB	91.46	2.86			
Entropy coefficient	Pre_EC	2.33	0.19	0.69	74.14	0.015
	Post_EC	2.19	0.21			
Form Coefficient	Pre_FC	2.9	0.39	1.24	99.63	0.001
	Post_FC	2.48	0.2			
Organs Energy	Variables	Mean	SD	Effect Size	Power in %	P Value
Head	Pre_Head	3.52	0.45	2.46	100	< 0.001
	Post_Head	4.52	0.34			
Cardiovascular system	Pre_CS	3.39	0.27	2.77	100	< 0.001
	Post_CS	4.14	0.27			
Respiratory system	Pre_RS	4.02	0.5	3.17	100	< 0.001
	Post_RS	5.52	0.44			
Endocrine system	Pre_ES	3.56	0.36	2.47	100	< 0.001
	Post_ES	4.35	0.25			
Musculoskeletal system	Pre_MS	3.69	0.46	2.51	100	< 0.001
	Post_MS	4.7	0.28			
Digestive system	Pre_DS	3.6	0.36	2.59	100	< 0.001
	Post_DS	4.43	0.25			

Urino-genital system	Pre_UGS	4.1	0.65	2.68	100	< 0.001
	Post_UGS	5.68	0.5			
Immune system	Pre_IS	3.25	0.53	0.64	64.69	0.024
	Post_IS	3.59	0.53			
Chakra Value	Variables	Mean	SD	Effect Size	Power in %	P Value
Muladhara	Pre_Muladhara	3.7	0.53	2.79	100	< 0.001
	Post_Muladhara	5	0.34			
Svadhithana	Pre_Svadhithana	3.74	0.46	2.53	100	< 0.001
	Post_Svadhithana	4.77	0.31			
Manipura	Pre_Manipura	3.69	0.51	2.30	100	< 0.001
	Post_Manipura	4.72	0.32			
Anahata	Pre_Anahata	3.8	0.49	2.25	100	< 0.001
	Post_Anahata	4.81	0.39			
Vishuddha	Pre_Vishuddha	3.69	0.66	2.32	100	< 0.001
	Post_Vishuddha	5.13	0.57			
Ajna	Pre_Ajna	3.4	0.37	1.72	99	< 0.001
	Post_Ajna	4.02	0.35			
Sahasrara	Pre_Sahasrara	3.57	0.24	2.59	100	< 0.001
	Post_Sahasrara	4.22	0.26			
Energy Field	Variables	Mean	SD	Effect Size	Power in %	P Value
Area_Left	Pre_Larea	61915.4	6900.4	1.10	98.54	0.001
	Post_Larea	69083.9	5901.4			
Area_Front	Pre_Farea	60305.4	7197.5	1.21	99.47	< 0.001
	Post_Farea	67996.8	4815.3			
Area_Right	Pre_Rarea	62760.3	5783.6	1.29	99.8	0.001
	Post_Rarea	69400.1	3929.4			

6.6. BASELINE MATCH BETWEEN CHANTING AND MEDITATION GROUP

Below tables showed that demographic details of both groups with Effect size, Power and P value for base line matching. The groups were differed only in Entropy Coefficient (Table 6.6.1), *Muladhara* and *Manipura Chakra* Alignment (Table 6.6.5), *Manipura* and *Sahasrara Chakra* Asymmetry values (Table 6.6.7), whereas no significant difference found in all other variables.

Table 6.6.1: Baseline Match between Chanting and Meditation Group at both Psycho-physiological Levels

Parameters	Variables	Mean	SD	Effect Size	Power in %	P Value
Emotional Pressure	Pre_Chant_EP	3.38	0.64	0.52	36.52	0.162
	Pre_Meditation_EP	3.07	0.54			
Energy	Pre_Chant_Energy	45.9	3.85	0.002	5	0.997
	Pre_Meditation_Energy	45.89	2.8			
L/R Symmetry	Pre_Chant_LRS	95.43	3.97	0.33	17.95	0.399
	Pre_Meditation_LRS	96.58	2.76			
Organs balance	Pre_Chant_OB	88.86	4.23	0.05	5.32	0.866
	Pre_Meditation_OB	89.07	3.69			
Entropy coefficient	Pre_Chant_EC	2.22	0.17	0.61	48.73	0.044
	Pre_Meditation_EC	2.33	0.19			
Form Coefficient	Pre_Chant_FC	2.81	0.51	0.19	9.38	0.288
	Pre_Meditation_FC	2.9	0.39			

Figure: Comparison between Chanting and Meditation wrt to Parameter

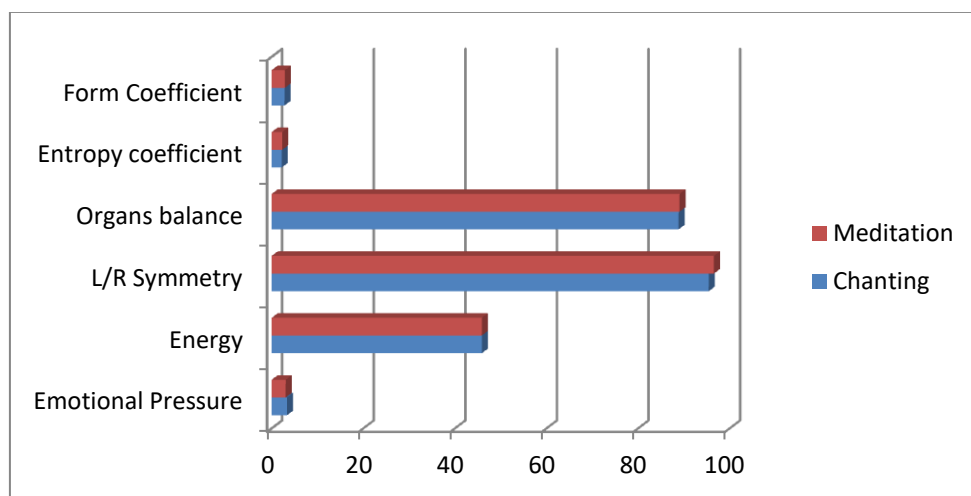


Table 6.6.2: Baseline Match between Chanting and Meditation Group at Energy Field

Energy Field	Variables	Mean	SD	Effect Size	Power %	P Value
Area_Left	Pre_Chant_Larea	60586.5	6945.25	0.19	9.1	0.350
	Pre_Meditation_Larea	61915.4	6900.36			
Energy_Left	Pre_Chant_Lenergy	21.99	4.13	0.49	34.37	0.118
	Pre_Meditation_Lenergy	24.03	4.15			
Area_Front	Pre_Chant_Farea	59349.5	6790.13	0.13	7.16	0.658
	Pre_Meditation_Farea	60305.4	7197.48			
Energy_Front	Pre_Chant_Fenergy	21.35	4.09	0.41	24.67	0.139
	Pre_Meditation_Fenergy	23.04	4.1			
Area_Right	Pre_Chant_Rarea	61089.7	6365.32	0.27	13.98	0.386
	Pre_Meditation_Rarea	62760.3	5783.58			
Energy_Right	Pre_Chant_Renergy	22.41	3.87	0.53	39.18	0.098
	Pre_Meditation_Renergy	24.36	3.43			

Figure: Comparison between Chanting and Meditation wrt to Energy Field

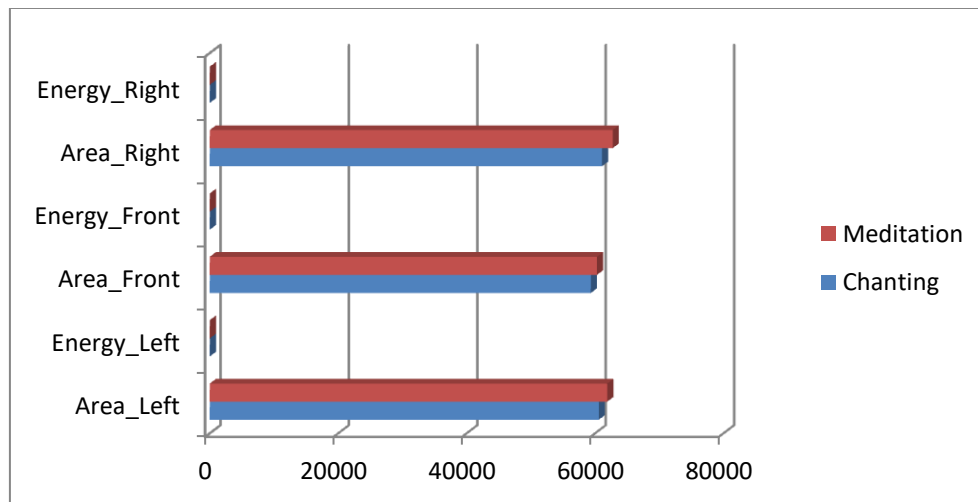


Table 6.6.3: Baseline Match between Chanting and Meditation Group at Organs Energy

Organs Energy	Variables	Mean	SD	Effect Size	Power %	P Value
Head	Pre_Chant_Head	3.48	0.41	0.09	5.99	0.709
	Pre_Meditation_Head	3.52	0.45			
Cardiovascular system	Pre_Chant_CS	3.29	0.4	0.29	15.25	0.379
	Pre_Meditation_CS	3.39	0.27			
Respiratory system	Pre_Chant_RS	4.19	0.48	0.34	19.5	0.263
	Pre_Meditation_RS	4.02	0.5			
Endocrine system	Pre_Chant_ES	3.53	0.46	0.07	5.61	0.830
	Pre_Meditation_ES	3.56	0.36			
Musculoskeletal system	Pre_Chant_MS	3.77	0.42	0.18	8.85	0.547
	Pre_Meditation_MS	3.69	0.46			
Digestive system	Pre_Chant_DS	3.65	0.49	0.11	6.57	0.681
	Pre_Meditation_DS	3.6	0.36			
Urino-genital system	Pre_Chant_UGS	4.46	0.56	0.59	46.62	0.052
	Pre_Meditation_UGS	4.1	0.65			
Nervous system	Pre_Chant_NS	3.07	0.67	0.38	22.19	0.108
	Pre_Meditation_NS	3.3	0.51			
Immune system	Pre_Chant_IS	2.97	0.57	0.50	36.25	0.111
	Pre_Meditation_IS	3.25	0.53			

Figure: Comparison between Chanting and Meditation wrt to Organs Energy

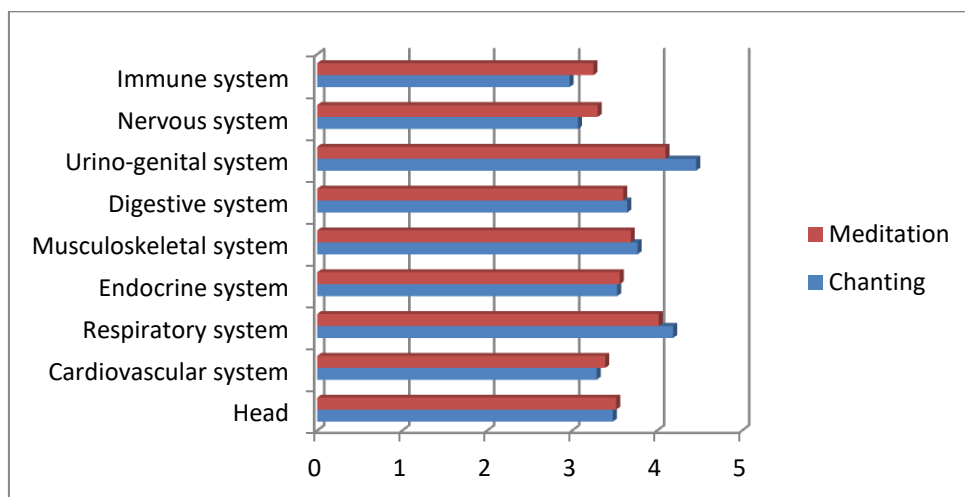


Table 6.6.4: Baseline Match between Chanting and Meditation Group at Organs Balance

Organs Balance	Variables	Mean	SD	Effect Size	Power %	P Value
Head	Pre_Chant_Head	90.15	5.78	0.02	5.09	0.263
	Pre_Meditation_Head	90.38	9.9			
Cardiovascular system	Pre_Chant_CS	93.23	5.17	0.05	5.28	0.826
	Pre_Meditation_CS	93.48	4.68			
Respiratory system	Pre_Chant_RS	89.61	9.3	0.03	5.13	0.808
	Pre_Meditation_RS	89.93	9.34			
Endocrine system	Pre_Chant_ES	93.58	4.21	0.42	25.5	0.125
	Pre_Meditation_ES	95.36	4.24			
Musculoskeletal system	Pre_Chant_MS	87.25	11.18	0.26	12.85	0.304
	Pre_Meditation_MS	90.06	10.11			
Digestive system	Pre_Chant_DS	90.97	7.29	0.04	4.56	0.935
	Pre_Meditation_DS	90.62	8.04			
Urino-genital system	Pre_Chant_UGS	90.57	9.98	0.24	11.64	0.326
	Pre_Meditation_UGS	88	11.14			
Nervous system	Pre_Chant_NS	79.9	20.25	0.12	6.67	0.738
	Pre_Meditation_NS	81.94	11.71			
Immune system	Pre_Chant_IS	84.5	13.87	0.20	9.51	0.350
	Pre_Meditation_IS	81.86	12.34			

Figure: Comparison between Chanting and Meditation wrt to Organs Balance

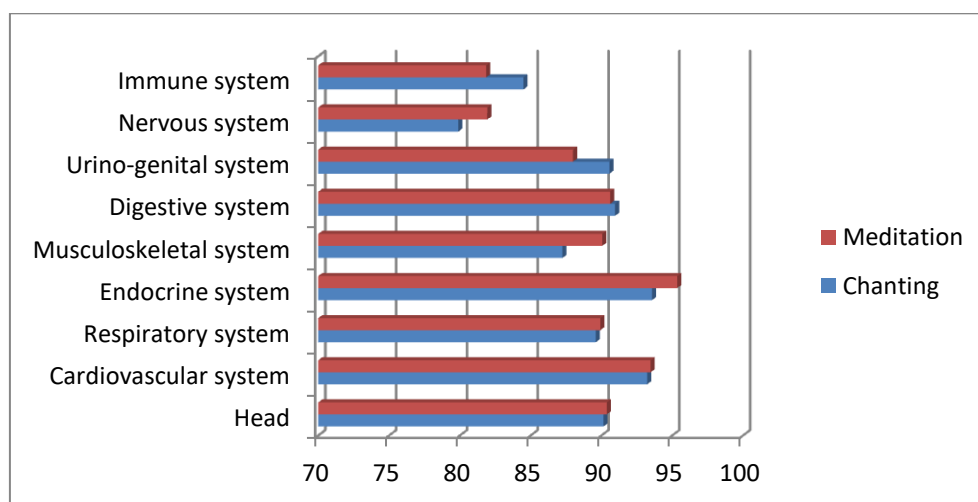


Table 6.6.5: Baseline Match between Chanting and Meditation Group at *Chakra* Alignment

Chakra Alignment	Variables	Mean	SD	Effect Size	Power %	P Value
Muladhara	Pre_Chant_Muladhara	92.29	6.64	0.69	57.67	0.034
	Pre_Meditation_Muladhara	86.76	9.02			
Svadhithana	Pre_Chant_Svadhithana	91.79	7.51	0.26	13.23	0.368
	Pre_Meditation_Svadhithana	93.66	6.3			
Manipura	Pre_Chant_Manipura	93.23	6.9	0.46	30.33	0.047
	Pre_Meditation_Manipura	89.72	8.05			
Anahata	Pre_Chant_Anahata	88.7	12.48	0.26	13.16	0.782
	Pre_Meditation_Anahata	91.34	7.01			
Vishuddha	Pre_Chant_Vishuddha	93.02	6.01	0.40	23.77	0.474
	Pre_Meditation_Vishuddha	89.52	10.7			
Ajna	Pre_Chant_Ajna	95.74	4	0.51	35.7	0.208
	Pre_Meditation_Ajna	92.21	8.8			
Sahasrara	Pre_Chant_Sahasrara	93.72	5.35	0.23	11.09	0.556
	Pre_Meditation_Sahasrara	92.28	6.92			

Figure: Comparison between Chanting and Meditation wrt to *Chakra* Alignment

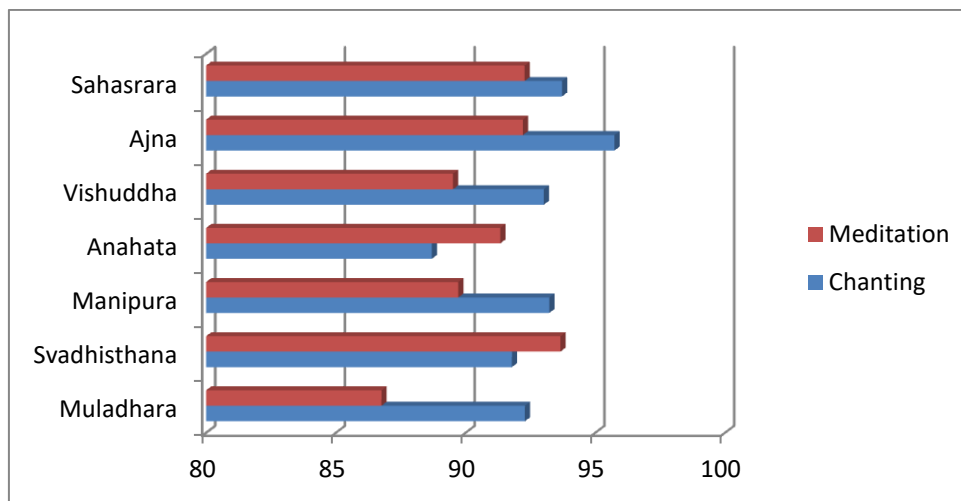


Table 6.6.6: Baseline Match between Chanting and Meditation Group at *Chakra* Value

Chakra Value	Variables	Mean	SD	Effect Size	Power %	P Value
Muladhara	Pre_Chant_Muladhara	3.92	0.46	0.44	28.85	0.149
	Pre_Meditation_Muladhara	3.7	0.53			
Svadhithana	Pre_Chant_Svadhithana	3.85	0.5	0.22	11.18	0.473
	Pre_Meditation_Svadhithana	3.74	0.46			
Manipura	Pre_Chant_Manipura	3.84	0.56	0.28	13.89	0.755
	Pre_Meditation_Manipura	3.69	0.51			
Anahata	Pre_Chant_Anahata	3.96	0.6	0.29	15.19	0.376
	Pre_Meditation_Anahata	3.8	0.49			
Vishuddha	Pre_Chant_Vishuddha	3.75	0.57	0.09	6.09	0.747
	Pre_Meditation_Vishuddha	3.69	0.66			
Ajna	Pre_Chant_Ajna	3.23	0.34	0.47	32.73	0.123
	Pre_Meditation_Ajna	3.4	0.37			
Sahasrara	Pre_Chant_Sahasrara	3.44	0.42	0.38	21.63	0.149
	Pre_Meditation_Sahasrara	3.57	0.24			

Figure: Comparison between Chanting and Meditation wrt to *Chakra* Value

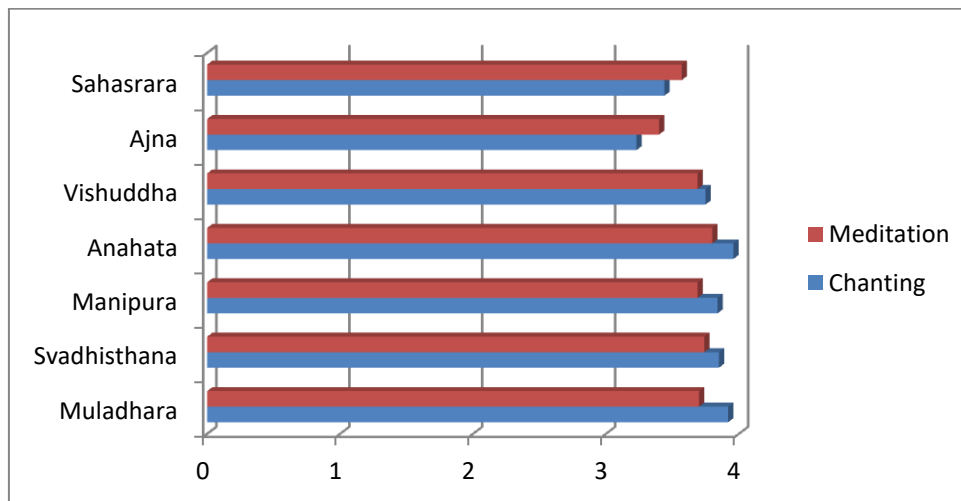


Table 6.6.7: Baseline Match between Chanting and Meditation Group at *Chakra* Asymmetry

Chakra Asymmetry	Variables	Mean	SD	Effect Size	Power %	P Value
Muladhara	Pre_Chant_Muladhara	0.04	0.31	0.17	8.4	0.593
	Pre_Meditation_Muladhara	-0.03	0.49			
Svadhithana	Pre_Chant_Svadhithana	-0.02	0.34	0.55	41.37	0.103
	Pre_Meditation_Svadhithana	0.14	0.23			
Manipura	Pre_Chant_Manipura	0.1	0.27	0.59	46.98	0.046
	Pre_Meditation_Manipura	-0.1	0.39			
Anahata	Pre_Chant_Anahata	0.05	0.51	0.11	6.46	0.503
	Pre_Meditation_Anahata	0	0.34			
Vishuddha	Pre_Chant_Vishuddha	-0.05	0.27	0.19	9.3	0.485
	Pre_Meditation_Vishuddha	-0.12	0.44			
Ajna	Pre_Chant_Ajna	0.03	0.17	0.52	36.2	0.221
	Pre_Meditation_Ajna	-0.11	0.34			
Sahasrara	Pre_Chant_Sahasrara	-0.02	0.25	0.64	52.54	0.034
	Pre_Meditation_Sahasrara	0.15	0.28			

Figure: Comparison between Chanting and Meditation wrt to *Chakra* Asymmetry

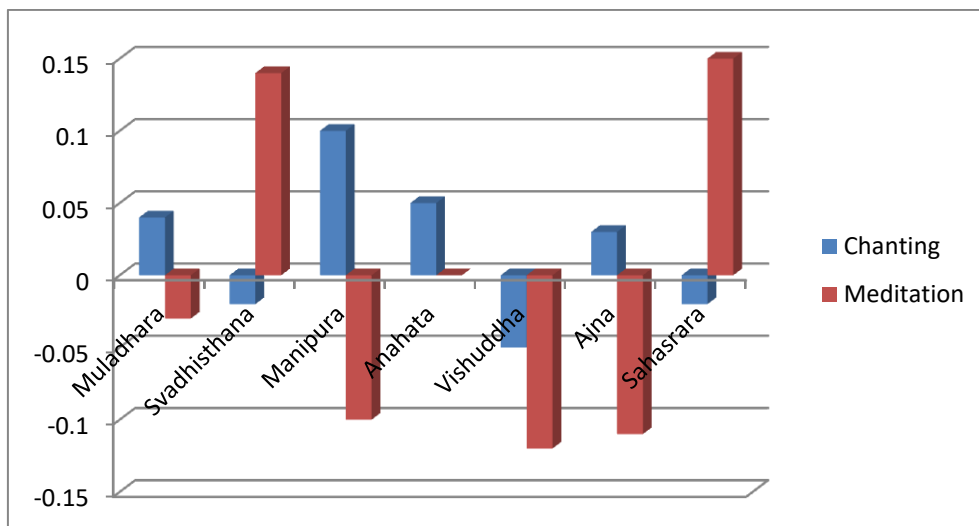


Table 6.6.8: Significant Changes between Chanting and Meditation Group - Baseline Match

Parameters	Variables	Mean	SD	Effect Size	Power %	P Value
Entropy coefficient	Pre_Chant_EC	2.22	0.17	0.61	48.73	0.044
	Pre_Meditation_EC	2.33	0.19			
Chakra Alignment	Variables	Mean	SD	Effect Size	Power %	P Value
Muladhara	Pre_Chant_Muladhara	92.29	6.64	0.69	57.67	0.034
	Pre_Meditation_Muladhara	86.76	9.02			
Manipura	Pre_Chant_Manipura	93.23	6.9	0.46	30.33	0.047
	Pre_Meditation_Manipura	89.72	8.05			
Chakra Asymmetry	Variables	Mean	SD	Effect Size	Power %	P Value
Manipura	Pre_Chant_Manipura	0.1	0.27	0.59	46.98	0.046
	Pre_Meditation_Manipura	-0.1	0.39			
Sahasrara	Pre_Chant_Sahasrara	-0.02	0.25	0.64	52.54	0.034
	Pre_Meditation_Sahasrara	0.15	0.28			

6.7. COMPARISON BETWEEN CHANTING AND MEDITATION GROUP

Below tables showed that changes between Chanting and Meditation Group with Effect size, Power and P value. The groups were differed only in Energy (Table 6.7.1), Energy level in Cardiovascular system, Respiratory system, Urogenital system (Table 6.7.3), *Chakra* value of *Svadhithana*, *Anahata*, *Ajna*, *Sahasrara* (Table 6.7.6), whereas no significant difference was found in all other variables.

Table 6.7.1: Comparison between Chanting and Meditation Group at both Psycho-physiological Levels

Parameters	Variables	Mean	SD	Effect Size	Power %	P Value
Emotional Pressure	Post_Chant_EP	3.25	0.57	0.10	6.2	0.917
	Post_Meditation_EP	3.31	0.58			
Energy	Post_Chant_Energy	52.06	4.27	0.84	75.99	0.004
	Post_Meditation_Energy	54.91	2.14			
L/R Symmetry	Post_Chant_LRS	97.47	1.92	0.20	9.99	0.509
	Post_Meditation_LRS	97.85	1.76			
Organs balance	Post_Chant_OB	92.03	2.41	0.21	10.46	0.475
	Post_Meditation_OB	91.46	2.86			
Entropy coefficient	Post_Chant_EC	2.17	0.19	0.09	6.09	0.773
	Post_Meditation_EC	2.19	0.21			
Form Coefficient	Post_Chant_FC	2.51	0.21	0.14	7.36	0.8808
	Post_Meditation_FC	2.48	0.2			

Figure: Comparison between Chanting and Meditation wrt to Parameter

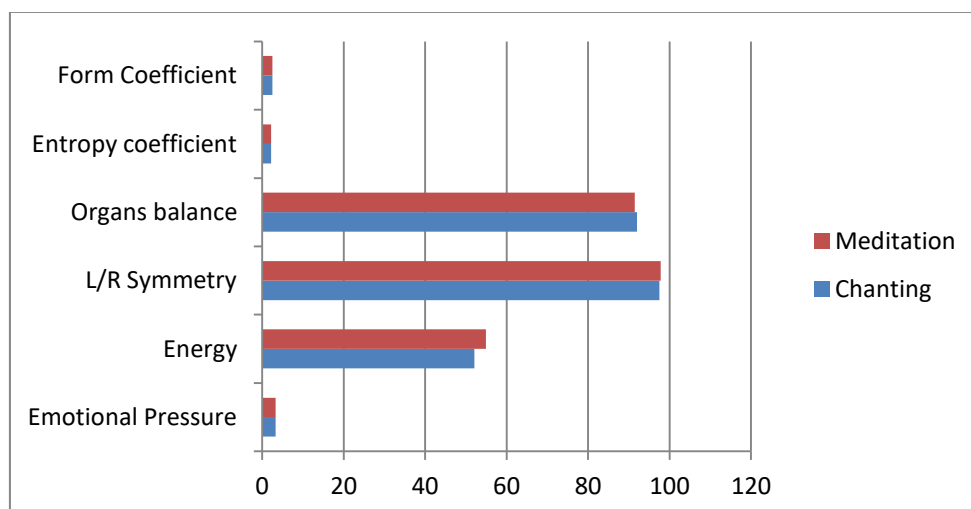


Table 6.7.2: Comparison between Chanting and Meditation Group at Energy Field

Energy Field	Variables	Mean	SD	Effect Size	Power %	P Value
Area_Left	Post_Chant_Larea	67191.57	6477.6	0.31	16.16	0.336
	Post_Meditation_Larea	69083.94	5901.36			
Energy_Left	Post_Chant_Lenergy	24.2	4.05	0.29	14.89	0.366
	Post_Meditation_Lenergy	25.31	3.65			
Area_Front	Post_Chant_Farea	65523.1	5819.18	0.46	31.01	0.153
	Post_Meditation_Farea	67996.81	4815.29			
Energy_Front	Post_Chant_Fenergy	23.28	3.66	0.45	29.42	0.163
	Post_Meditation_Fenergy	24.81	3.14			
Area_Right	Post_Chant_Rarea	66749.97	6417.39	0.49	34.99	0.139
	Post_Meditation_Rarea	69400.12	3929.37			
Energy_Right	Post_Chant_Renergy	24.21	3.71	0.51	36.68	0.119
	Post_Meditation_Renergy	25.89	2.78			

Figure: Comparison between Chanting and Meditation wrt to Energy Field

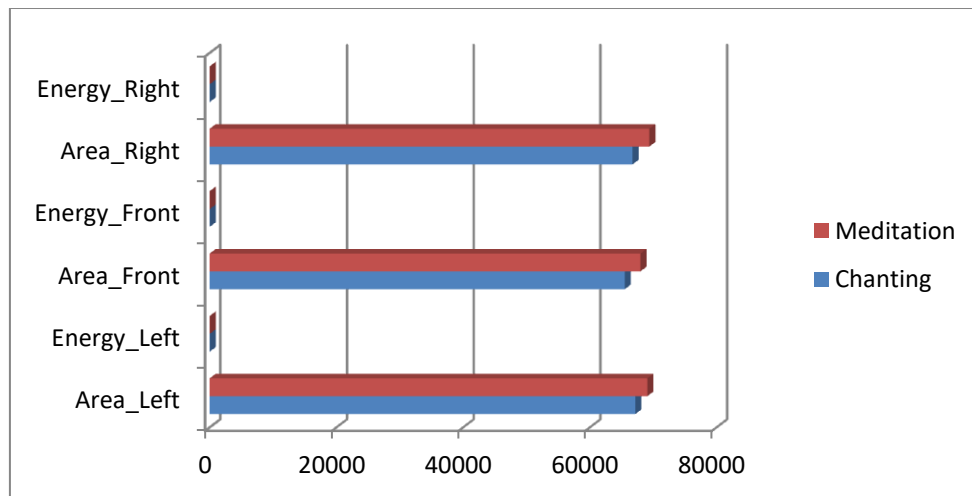


Table 6.7.3: Comparison between Chanting and Meditation Group at Organs Energy

Organs Energy	Variables	Mean	SD	Effect Size	Power %	P Value
Head	Post_Chant_Head	4.26	0.49	0.62	49.53	0.065
	Post_Meditation_Head	4.52	0.34			
Cardiovascular system	Post_Chant_CS	3.84	0.42	0.49	76.56	0.012
	Post_Meditation_CS	4.14	0.27			
Respiratory system	Post_Chant_RS	5	0.68	0.91	81.82	0.008
	Post_Meditation_RS	5.52	0.44			
Endocrine system	Post_Chant_ES	4.12	0.43	0.65	54.23	0.058
	Post_Meditation_ES	4.35	0.25			
Musculoskeletal system	Post_Chant_MS	4.46	0.58	0.53	38.42	0.067
	Post_Meditation_MS	4.7	0.28			
Digestive system	Post_Chant_DS	4.28	0.42	0.43	27.85	0.152
	Post_Meditation_DS	4.43	0.25			
Urino-genital system	Post_Chant_UGS	5.2	0.78	0.73	63.87	0.031
	Post_Meditation_UGS	5.68	0.5			
Nervous system	Post_Chant_NS	3.54	0.71	0.07	5.53	0.827
	Post_Meditation_NS	3.5	0.43			
Immune system	Post_Chant_IS	3.46	0.51	0.25	12.04	0.299
	Post_Meditation_IS	3.59	0.53			

Figure: Comparison between Chanting and Meditation wrt to Organs Energy

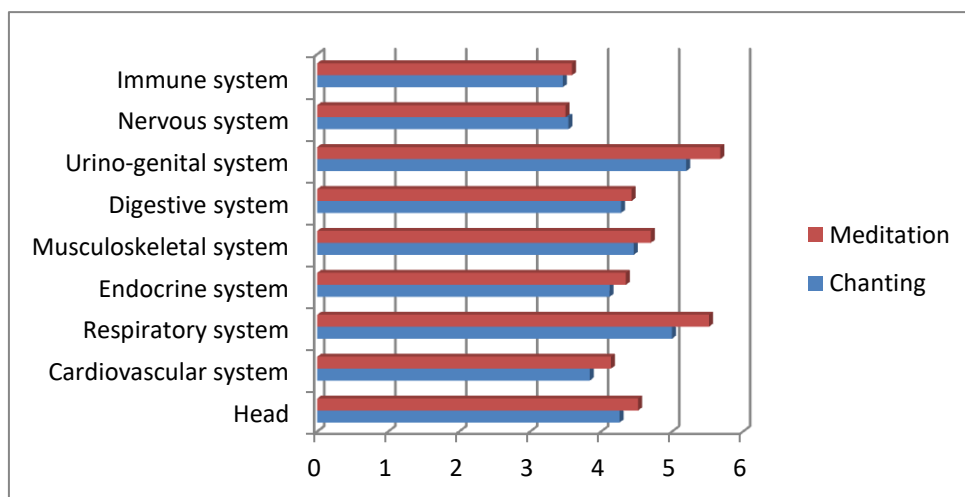


Table 6.7.4: Comparison between Chanting and Meditation Group at Organs Balance

Organs Balance	Variables	Mean	SD	Effect Size	Power %	P Value
Head	Post_Chant_Head	92.95	4.05	0.27	13.55	0.426
	Post_Meditation_Head	94.04	3.88			
Cardiovascular system	Post_Chant_CS	94.6	6.56	0.14	7.03	0.826
	Post_Meditation_CS	95.3	3.19			
Respiratory system	Post_Chant_RS	94.79	4.41	0.12	6.56	0.817
	Post_Meditation_RS	94.17	5.89			
Endocrine system	Post_Chant_ES	95.51	4.12	0.14	7.23	0.387
	Post_Meditation_ES	94.96	3.6			
Musculoskeletal system	Post_Chant_MS	92.98	5.11	0.09	5.94	0.703
	Post_Meditation_MS	92.49	5.43			
Digestive system	Post_Chant_DS	92.53	5.99	0.17	8.28	0.603
	Post_Meditation_DS	91.44	6.68			
Urino-genital system	Post_Chant_UGS	91.93	7.29	0.04	5.15	0.880
	Post_Meditation_UGS	92.21	7.88			
Nervous system	Post_Chant_NS	85.64	10.68	0.14	7.22	0.880
	Post_Meditation_NS	83.26	21.18			
Immune system	Post_Chant_IS	87.34	12.1	0.19	8.84	0.217
	Post_Meditation_IS	85.26	10.21			

Figure: Comparison between Chanting and Meditation wrt to Organs Balance

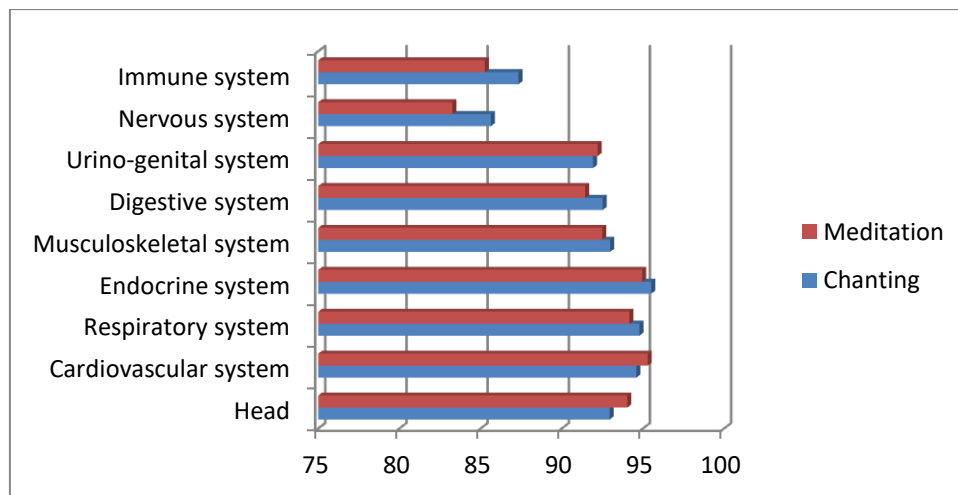


Table 6.7.5: Comparison between Chanting and Meditation Group at *Chakra* Alignment

Chakra Alignment	Variables	Mean	SD	Effect Size	Power %	P Value
Muladhara	Post_Chant_Muladhara	91.75	6.33	0.16	7.78	0.73
	Post_Meditation_Muladhara	90.63	7.74			
Svadhithana	Post_Chant_Svadhithana	91.69	12.66	0.05	5.22	0.49
	Post_Meditation_Svadhithana	92.14	5.83			
Manipura	Post_Chant_Manipura	94	5.36	0.07	5.55	0.83
	Post_Meditation_Manipura	94.33	3.78			
Anahata	Post_Chant_Anahata	89.44	9.6	0.06	5.43	0.65
	Post_Meditation_Anahata	88.87	8.5			
Vishuddha	Post_Chant_Vishuddha	94.03	4.91	0.04	5.2	0.53
	Post_Meditation_Vishuddha	94.26	5.78			
Ajna	Post_Chant_Ajna	94.64	4.88	0.06	5.38	0.54
	Post_Meditation_Ajna	94.37	4.21			
Sahasrara	Post_Chant_Sahasrara	92.35	12.91	0.17	8.06	0.57
	Post_Meditation_Sahasrara	94.01	5.73			

Figure: Comparison between Chanting and Meditation wrt to *Chakra* Alignment

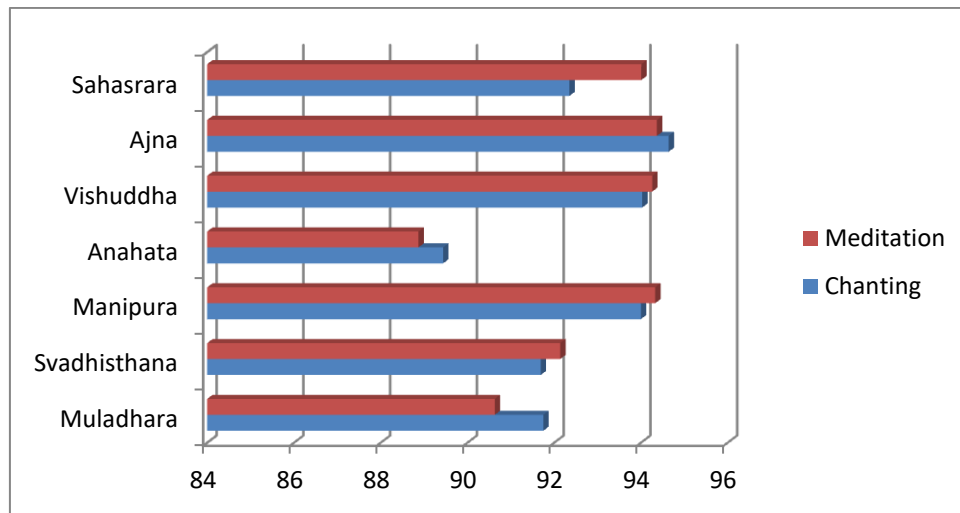


Table 6.7.6: Comparison between Chanting and Meditation Group at *Chakra* Value

Chakra Value	Variables	Mean	SD	Effect Size	Power %	P Value
Muladhara	Post_Chant_Muladhara	4.76	0.56	0.52	37.35	0.121
	Post_Meditation_Muladhara	5	0.34			
Svadhithana	Post_Chant_Svadhithana	4.43	0.51	0.81	72.09	0.007
	Post_Meditation_Svadhithana	4.77	0.31			
Manipura	Post_Chant_Manipura	4.52	0.56	0.44	28.33	0.178
	Post_Meditation_Manipura	4.72	0.32			
Anahata	Post_Chant_Anahata	4.48	0.55	0.69	58.98	0.040
	Post_Meditation_Anahata	4.81	0.39			
Vishuddha	Post_Chant_Vishuddha	4.84	0.72	0.45	29.2	0.172
	Post_Meditation_Vishuddha	5.13	0.57			
Ajna	Post_Chant_Ajna	3.75	0.43	0.69	58.55	0.031
	Post_Meditation_Ajna	4.02	0.35			
Sahasrara	Post_Chant_Sahasrara	3.93	0.44	0.80	71.46	0.008
	Post_Meditation_Sahasrara	4.22	0.26			

Figure: Comparison between Chanting and Meditation wrt to *Chakra* Value

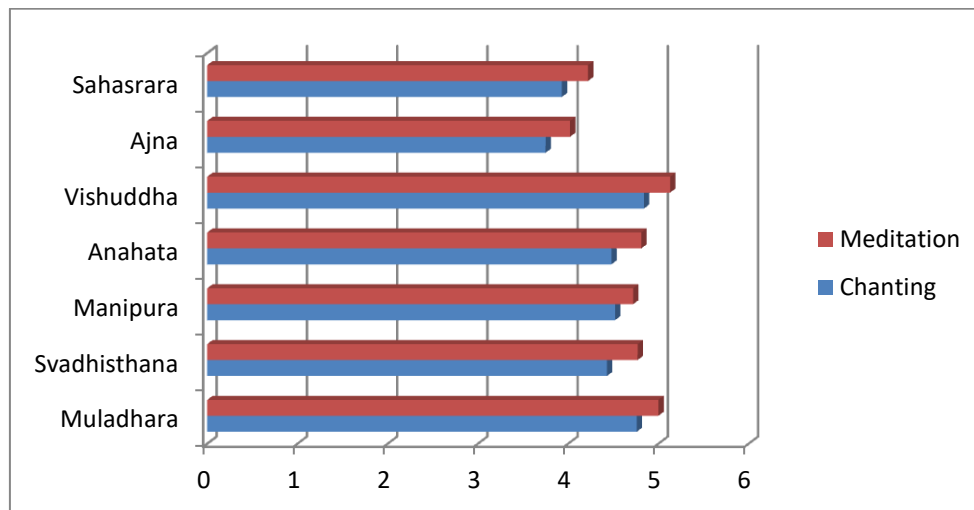


Table 6.7.7: Comparison between Chanting and Meditation Group at *Chakra* Asymmetry

Chakra Asymmetry	Variables	Mean	SD	Effect Size	Power %	P Value
Muladhara	Post_Chant_Muladhara	0.03	0.31	0.06	5.39	0.826
	Post_Meditation_Muladhara	0.05	0.37			
Svadhithana	Post_Chant_Svadhithana	-0.1	0.44	0.54	38.71	0.103
	Post_Meditation_Svadhithana	0.1	0.28			
Manipura	Post_Chant_Manipura	0.05	0.24	0.27	13.4	0.456
	Post_Meditation_Manipura	-0.01	0.21			
Anahata	Post_Chant_Anahata	0.08	0.43	0.02	5.06	0.920
	Post_Meditation_Anahata	0.09	0.42			
Vishuddha	Post_Chant_Vishuddha	-0.07	0.22	0.29	15.05	0.069
	Post_Meditation_Vishuddha	0	0.25			
Ajna	Post_Chant_Ajna	-0.06	0.21	0	5	0.888
	Post_Meditation_Ajna	-0.06	0.21			
Sahasrara	Post_Chant_Sahasrara	-0.09	0.44	0.36	20.17	0.149
	Post_Meditation_Sahasrara	0.04	0.25			

Figure: Comparison between Chanting and Meditation wrt to *Chakra* Asymmetry

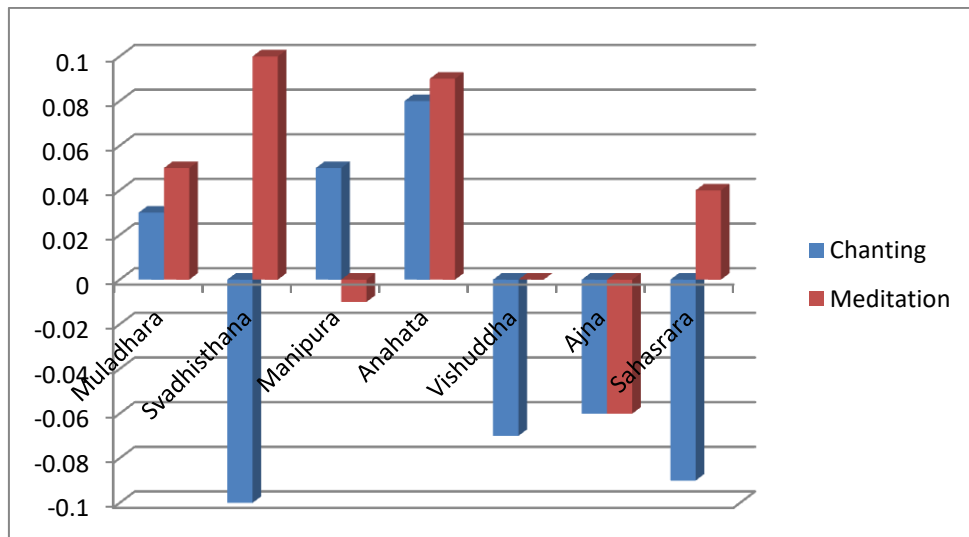


Table 6.7.8: Significant Changes between Chanting and Meditation Group - After Long-term Intervention

Parameters	Variables	Mean	SD	Effect Size	Power in %	P Value
Energy	Post_Chant_Energy	52.06	4.27	0.85	75.99	0.004
	Post_Meditation_Energy	54.91	2.14			
Organs Energy	Variables	Mean	SD	Effect Size	Power in %	P Value
Cardiovascular system	Post_Chant_CS	3.84	0.42	0.49	76.56	0.012
	Post_Meditation_CS	4.14	0.27			
Respiratory system	Post_Chant_RS	5	0.68	0.91	81.82	0.008
	Post_Meditation_RS	5.52	0.44			
Urino-genital system	Post_Chant_UGS	5.2	0.78	0.73	63.87	0.031
	Post_Meditation_UGS	5.68	0.5			
Chakra Value	Variables	Mean	SD	Effect Size	Power in %	P Value
Svadhithana	Post_Chant_Svadhithana	4.43	0.51	0.81	72.09	0.007
	Post_Meditation_Svadhithana	4.77	0.31			
Anahata	Post_Chant_Anahata	4.48	0.55	0.69	58.98	0.040
	Post_Meditation_Anahata	4.81	0.39			
Ajna	Post_Chant_Ajna	3.75	0.43	0.69	58.55	0.031
	Post_Meditation_Ajna	4.02	0.35			
Sahasrara	Post_Chant_Sahasrara	3.93	0.44	0.80	71.46	0.008
	Post_Meditation_Sahasrara	4.22	0.26			

7. DISCUSSION AND CONCLUSION

7.1. DISCUSSION

The aim of the study was to observe the influence of chanting *Arutperunjothi Mantra* and meditation on *Arutperunjothi Mantra* in bio-energy pattern in different vital organ system, psycho physiological and energy level in healthy individuals using EPI. Assessment was done to show the immediate effect of chanting and meditation, long-term chanting and meditation, also to show the difference between chanting and meditation.

Immediate effect of Chanting and Meditation

The present finding showed that immediate effect of Chanting more influenced the bio energy pattern than immediate effect of meditation. Also it showed energy balance between the L/R Symmetry (Left and Right side). Meditation more influenced the *Ajna* chakra than chanting which showed the significant difference ($p - 0.019$). *Ajna* Chakra influences the Pituitary gland. It increases the intuitive power and also it creates pure *prana* in the body (Vidyananad, 2015). But Immediate Chanting showed the significant difference in overall bio energy pattern specifically in Endocrine system ($p - 0.024$). Also it showed the significant difference in *Anahata* ($p - 0.012$) and *Sahasrara* Chakra ($p - 0.017$). Master Choa kok sui mentioned in his Twin heart Meditation these chakras represent the seat of being of Divine Love (Sui, 1998). *Anahata* Chakra is responsible for heart and lungs (Vidyananad, 2015).

Effect of Long-term Chanting and Meditation

The result showed that both Chanting and Meditation influenced and improved the energy of all organs system which showed the power around 99%, also result showed the significant improvement in harmonious of inner system which works together and the significant reduction in the disorderliness of energy.

The result of both Chanting and Meditation showed the significant improvement in balancing all organs and also in Chakra value which showed the power around 99%. Additionally long-term chanting showed the significant energy balance between the L/R Symmetry (Left and

Right side) also energy of organs system influenced the organs system of Head, Respiratory system and Muscular Skeletal system.

Comparison between Chanting and Meditation

Even though long term Chanting and Meditation showed the significant changes and improvement in Bio-Energy level, the result from the table 6.7.8 showed meditative people get more benefited than chanting people. But the result from the table 6.2.8 and 6.3.8 showed that the Chanting influenced the bio-energy level immediately than Meditation.

General Discussion from the feedback of participants

Some of them felt very lightness and relaxation in their mind after chanting this mantra which influenced them to chant regularly and continuously even after completing this research.

A participant whose age was 48yrs affected by Cancer in Uterus, Weakness in nerves, Numbness in hands and legs. She couldn't do even her own work without support. But after chanting mantra one week slowly she started to do her own work without any support, she become active to do enough work.

Another Participant whose age was 30 affected by PCOS and also with painful Menstruation. But after started to do Meditation continuously, she didn't feel pain in the next cycle.

Surroundings of people changed positively within the family and outside of family. One family shared after starting the Chanting, the relationship between husband and wife became matured and understandable. Few people shared that the people who hurt them, they itself came and spoke in friendly way. They became very happy.

7.2. CONCLUSION

Findings show that Chanting as well as Meditation on *Arutperunjothi Mantra* may play a significant role on modifying the Bio-energy pattern along with other psycho-physiological parameters and Organs System including *Chakras* that in turn help in better improvement in health and lifestyle management.

8. APPRAISALS

8.1. STRENGTHS OF THE STUDY

- Main Strength of this study is even though the study was completed, still people are continuing their *Sadhana*.
- This study served as a platform to create awareness about the effect of Chanting and Meditation on *Arutperunjothi Mantra*.
- Using GDV overall benefits could be able to find. The result also showed the significant improvement in bio-energy pattern along with organs system and *chakra* level.
- Participants voluntarily came to participate.

8.2. LIMITATIONS OF THE STUDY

- Many of those screened, dropped out in between the intervention due to time, work constraints and other commitments
- The major demerit of this study was Convenience Sampling and also lack of control group.

8.3. IMPLICATIONS OF THE STUDY

- This study will be helpful to the seeker who wants to know about *this Arutperunjothi Mantra*.
- This intervention influences the energy pattern of *Anahata Chakra* which creates compassion within. This energy transformation also influences the people surroundings which creates beautiful relationship within family as well as outside.
- All people want this kind of transformation for healthy and joyful life.

8.4. SCOPE FOR FUTURE STUDY

- Similar study can be done for unhealthy people using different tools to see the changes.

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10. APPENDIX

10.1. DEMOGRAPHIC DETAILS

10.1.1. REGISTRATION FORM

Activity Name :

Place :

Name :

Date :

DOB :

Age :

Address :

Email ID :

Mobile :

Education :

Occupation :

Gender :

Marital Status :

Weight :

Height :

Veg/Non-Veg :

Bowel :

Sleep :

Smoking/Alcohol :

Reason to participate :

Present Illness (Yes/No) :

If Yes, Details about it :

Parameter List :

Parameter	Pre -Test	Post -Test
Respiratory Rate (bpm)		
Brahmari Time (sec)		
Pulse Rate (bpm)		
Oxygen Level (%)		
Happiness Index		

10.1.2. DAILY ACTIVITY SHEET

Name :

Age :

Activity Name :

Place :

No.	Date	Morn/ Eve	Time	No.	Date	Morn/ Eve	Time	No.	Date	Morn/ Eve	Time
1.				17.				33.			
2.				18.				34.			
3.				19.				35.			
4.				20.				36.			
5.				21.				37.			
6.				22.				38.			
7.				23.				39.			
8.				24.				40.			
9.				25.				41.			
10.				26.				42.			
11.				27.				43.			
12.				28.				44.			
13.				29.				45.			
14.				30.				46.			
15.				31.				47.			
16.				32.				48.			

10.2. INTEGRATED ARUTPERUNJOTHI MEDITATION TECHNIQUE (IAMT)

1. Breath Awareness (Anapana Sati) & watch mind in Padmasana or Sukhasana (2 mins)

Sit in a comfortable meditative posture with your spine, neck and head in one straight line. Relax your whole body with 3 to 5 deep breaths. Now observe the flow of natural breath at the entry of both the nostrils. Now observe the mind as a passive observer. The rising of thoughts and feelings.

2. Pranayama – Sectional Breathing[4x5R], Nadi Shuddi[5R] and Bhramari [5R] (10 mins)

Now let us practice pranayama. First let us regulate the breath with *sectional breathing*. Adopt chinmudra in both the hands and keep it on the knees. Let us practice only abdominal breathing for 5 deep breaths. Inhale slowly & deeply and bulge the abdomen out. Exhale completely and suck the abdomen towards the back. Now feel the energization of the lower portion of the lungs. Next let us practice thoracic (chest) breathing for 5 deep breaths. Adopt Chinmaya mudra in both the hands. As you inhale deeply now expand your chest alone to the sides and as you exhale slowly relax the chest muscles. Feel the energization of the middle portion of the lungs. Now let us practice clavicular breathing for 5 deep breaths. Adopt Adi mudra in both the hands. As you inhale deeply and slowly raise the collar bone along with the shoulders slightly and take it little bit back. As you exhale completely bring the shoulders little bit forward and lower it down. Feel the energization of the upper portion of the lungs. Now let us practice full yogic breathing for 5 deep breaths. As you inhale deeply and slowly first bulge the abdomen out, then expand the chest to the sides and then raise the collar bone. As you exhale first lower down the collar bone, then relax the chest muscles and then suck the abdomen towards the back. Feel the energization of the entire lungs.

Next let us practice *Naddi Shuddi Pranayama* for balancing the breath. Adopt chin mudra in the left hand and keep it on the left knee. Adopt pranayama mudra in the right hand. Exhale the remaining air in the lungs through both the nostrils. Close the right nostril with right thumb and then inhale slowly, deeply and continuously through the left nostril. Then close the left nostril with the right little and ring finger. Then exhale slowly

and completely through the right nostril. Now inhale through the right nostril and exhale through the left nostril. This completes one round. Let us repeat it for 5 rounds.

Next let us practice *Bhramari pranayama* for deepening our awareness. Touch the tip of the tongue to the upper palate. Close the ears with the index fingers. Inhale deeply and as you exhale completely produce humming bee sound in the pit of the throat. Feel the resonance throughout the body, especially in the brain. At the end of 5 rounds feel the increased awareness and calmness of the mind.

3. Experience deep peace (1 min)

Maintain the deep silence and peace for some time.

4. During inhalation chant mentally “Arutperunjothi” and Thaniperungkarunai” on exhalation at the eyebrow center (5R) (3 mins)

Now let us take our awareness to the eyebrow center and feel as if we are breathing through our eyebrow center for some time. Then as you continue to breath through the eyebrow center chant mentally “Arutperunjothi” with each inhalation and “Thaniperungkarunai” on each exhalation.

5. Breath awareness (1 min)

Now observe the flow of natural breath at the entry of both the nostrils.

6. Concentrate on stillness (pause) after inhalation and exhalation with breath awareness (2 mins)

Let us now try to observe the stillness after each inhalation and exhalation phase along with breath awareness. Feel the deep awareness and concentration.

7. Golden shining flame ‘Arutperunjothi’ at the base of spine (30 secs)

Bring the awareness to the base of spine and visualize a tiny flame(Arutperunjothi) with effulgent golden light surrounding it. Feel the strong pulsation of the flame.

8. Effulgent flame moving from base of spine to center of head (30 secs)

Now visualize and feel the flame is ascending up from the base of the spine crossing each major chakras along the spine and reaching the center of the head behind the eyebrow center. The golden flame is shining on the top of a beautiful white lotus.

9. Feel the effulgent flame pulsating strongly at center of head (30 secs)

10. Shower of energy chanting “Arutperunjothi Mahamantra” (30 secs)

Now as you visualize the effulgent flame shining, start to chant continuously the ‘Arutperunjothi Mahamantra’ mentally.

11. Golden flame expands and its light fills the body and beyond to reach the all pervasive awareness. Feel deep peace, joy and silence (3 mins)

Now as you continuously chant the mahamantra feel the effulgent light filling the entire body and then gradually expanding beyond it to the boundaries of the room where we are sitting. Then expand the awareness towards the boundaries of the district and then to the state. Further expand to the boundaries of the country and then the circumference of the world. Then expand into the space all around till you reach the all pervasive awareness. Feel the total silence. Enjoy deep peace, joy and harmony as the mantra is repeated slowly in the mind. Feel the oneness with all living beings in this universe thus establishing universal brotherhood.

12. Shanti Mantra with feeling of compassion, peace and happiness to one and all (5 min)

Now let us feel the suffering of living beings and invoke compassion towards them praying for their wellbeing as you chant mentally the shanthi mantra “Ella Uyirgalum Inbutru Vazhga”.

Then gradually shrink back your awareness to the circumference of the world, then to the boundaries of the country, state, district and then to the boundaries of the room where we are now. Slowly shrink the awareness to a few inches away from the body and then to the physical body. Then bring back the awareness to the middle of the head behind the eyebrow center. Visualise the effluent flame on the white lotus.

13. Concentrate on the effulgent flame in the middle of the head. Then watch the mind (2 min)

14. Breath awareness near the entry of nostrils (2 mins)

15. Observe silence (2 mins)

Total duration = 35 minutes

Integrated Arutperunjothi Meditation Technique is a simple healing meditation with combination of pranayama, creative visualization and meditation.

IAMT designed by K.Saravanan, M.Sc(yoga)., Director, Arrutjothi Yoga Center, Salem, Tamilnadu

10.3. INFORMED CONSENT



Swami Vivekananda Yoga Anusandhana Samsthana

No.19, Eknath Bhavan, Gavipuram Circle, Kempegowdanagar, Bangalore- 560019, India.

Informed Consent form for Participants who wish to participate in a Research.

Title: Effect of *Arutperunjothi Mantra* on Subtle Energy using Electro Photonic Imaging

Name of Principal Investigator: Archana Devi. P

Name of Organization: SVYASA University, Bangalore.

This Informed Consent Form has two parts:

- **Information Sheet (to share information about the research with you)**
- **Certificate of Consent (for signatures if you agree to take part)**

You will be given a copy of the full Informed Consent Form

PART I: Information Sheet

Introduction

I am Archana, doing MSC Yoga Therapy in VYASA University, Bangalore. I'm doing research on Chanting *Maha Mantra*. I am going to give you information and invite you to be part of this research. You do not have to decide today whether or not you will participate in the research. Before you decide, you can talk to anyone you feel comfortable with about the research. There may be some words that you do not understand. Please ask me to stop as we go through the information and I will take time to explain. If you have questions later, you can contact me.

Purpose of the research

Thiru Arutprakasa Vallalar, He is full of compassion. He attained *~Jaana dEkam*. There is a proverb "What you think that you are". If we think or study about God or Deathless education (*Chaakaa kalvi*) forever, we will become like that. Vallalar proved that. Vallalar gave this

mantra which he got directly from God. In *Mantra Arutperunjothi* represents *Chachchithaana~ntham*/The Vast Grace Light/Source of all, we meditate directly towards the source of all beings. So this mantra is called *Maha Mantra*. I would like to expose the value of this *Mantra*.

Intervention

There are two groups. Intervention for first group is *Maha mantra* chanting with feelings 108 times (Loud Chanting and Chanting in Mind slowly with awareness on breathing) and silence for 10 min. Intervention for second group is Meditation on *Arutperunjothi Mantra*. It may take 45 min to 1 hr.

Objective of Study

- To find the changes in Physiological and Psychological state after chanting the *Maha Mantra*, and meditating on it.

Voluntary Participation

Your participation in this research is entirely voluntary. It is your choice whether to participate or not. You may change your mind later and stop participating even if you agreed earlier.

Benefits

It helps for Spiritual growth.

It may improve your health in physically and psychologically

Procedures and Protocol

First day we measure your Physiological and Psychological state by using GDV and let you chant *Maha Mantra* which we mentioned in Intervention earlier. Then after intervention, we will immediately measure again by using GDV. Then you should continue practice daily in the same time and in same way for 48 days. Then we will do same assessment in 50th day. Total Duration of this research is around two months.

Side Effects: There are no Side Effects and Risks

Reimbursements: You will not be given any money or gifts to take part in this research.

Confidentiality

The information that we collect from this research project will be kept confidential. Information about you that will be collected during the research will be put away and no-one but the researchers will be able to see it. Any information about you will have a number on it instead of your name. Only the researchers will know what your number is and we will lock that information up with a lock and key. It will not be shared with or given to anyone except our Research team.

Sharing the Results

The knowledge that we get from doing this research will be shared with you through community meetings before it is made widely available to the public. Confidential information will not be shared. There will be small meetings in the community and these will be announced. After these meetings, we will publish the results in order that other interested people may learn from our research.

Right to Refuse or Withdraw

You do not have to take part in this research if you do not wish to do so. You may also stop participating in the research at any time you choose. It is your choice and all of your rights will still be respected

Who to Contact

If you have any questions you may ask them now or later, even after the study has started. If you wish to ask questions later, you may contact this number [Archana, 9449521089/arjunaitians@gmail.com].

This proposal has been reviewed and approved by [Local IRB of VYASA University], which is a committee whose task it is to make sure that research participants are protected from harm.

PART II: Certificate of Consent

I have read the foregoing information, or it has been read to me. I have had the opportunity to ask questions about it and any questions that I have asked have been answered to my satisfaction. I consent voluntarily to participate as a participant in this research.

Print Name of Participant _____

Signature of Participant _____

Date _____

Day/month/year

If illiterate

I have witnessed the accurate reading of the consent form to the potential participant, and the individual has had the opportunity to ask questions. I confirm that the individual has given consent freely.

Print name of witness _____
participant

AND

Thumb print of

Signature of witness _____

Date _____

Day/month/year



Statement by the researcher/person taking consent

I have accurately read out the information sheet to the potential participant, and to the best of my ability made sure that the participant understands that the following will be done:

- 1. Explained about the Research.**
- 2. Explained about their participant**
- 3. Explained about their benefits**

I confirm that the participant was given an opportunity to ask questions about the study, and all the questions asked by the participant have been answered correctly and to the best of my ability. I confirm that the individual has not been coerced into giving consent, and the consent has been given freely and voluntarily.

A copy of this ICF has been provided to the participant.

Print Name of Researcher/person taking the consent_____

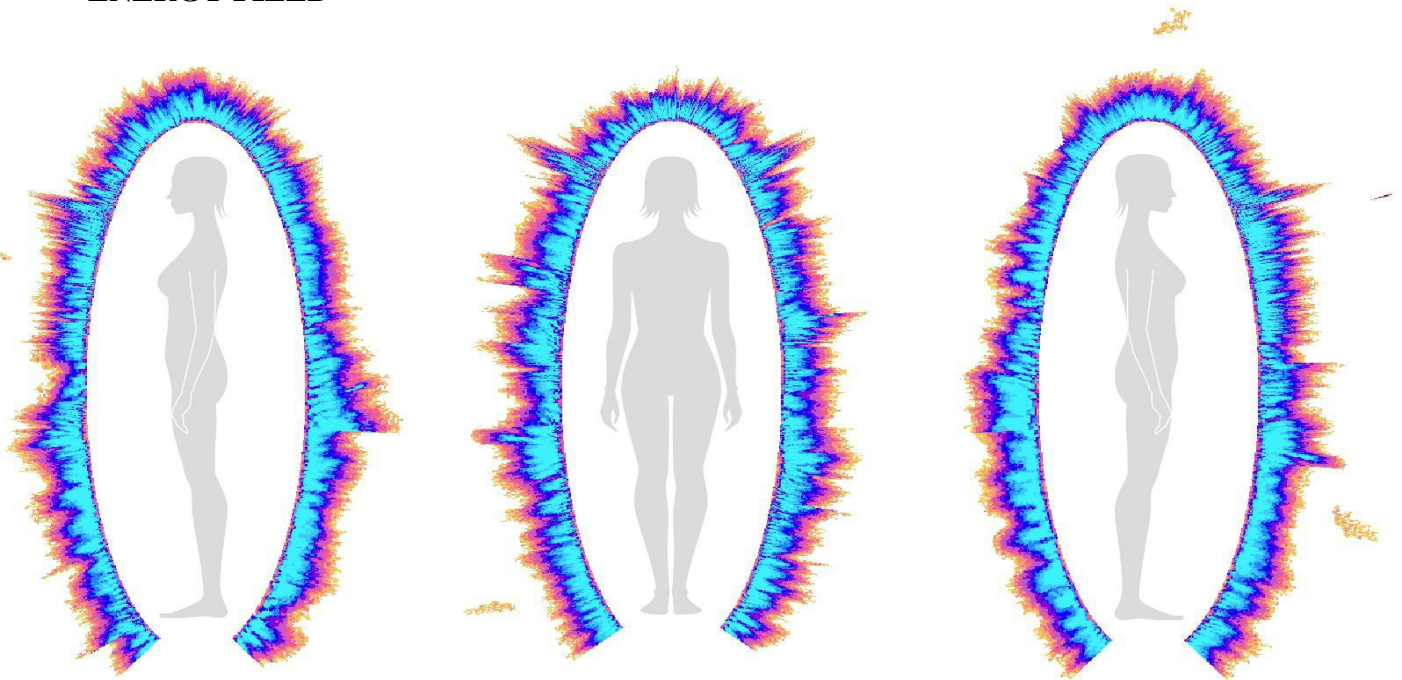
Signature of Researcher /person taking the consent_____

Date _____

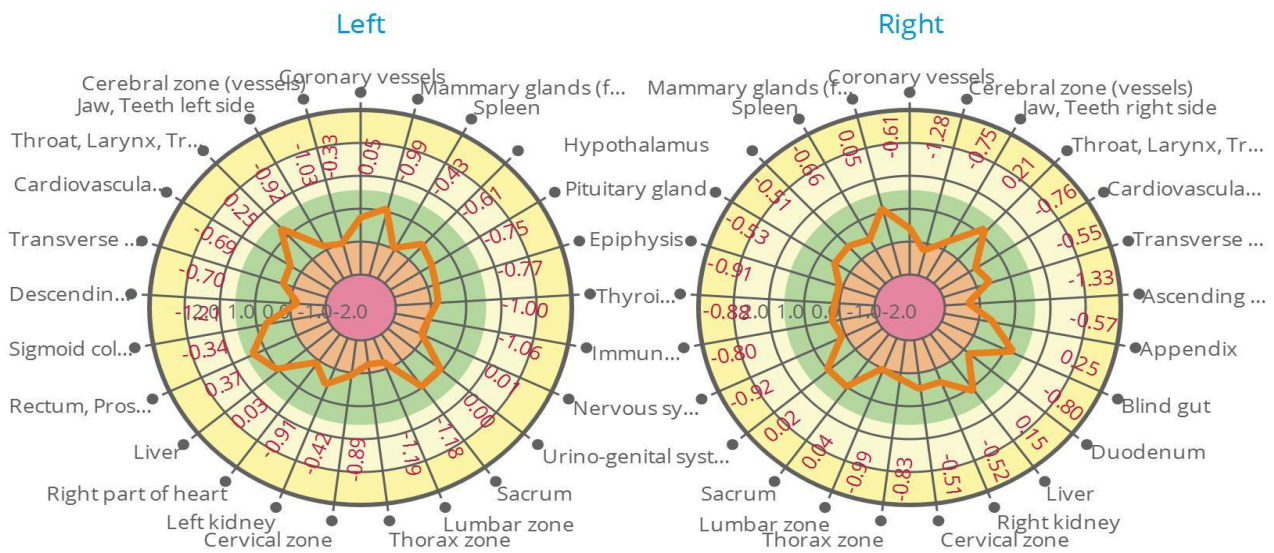
Day/month/year

10.4. SAMPLE IMAGES

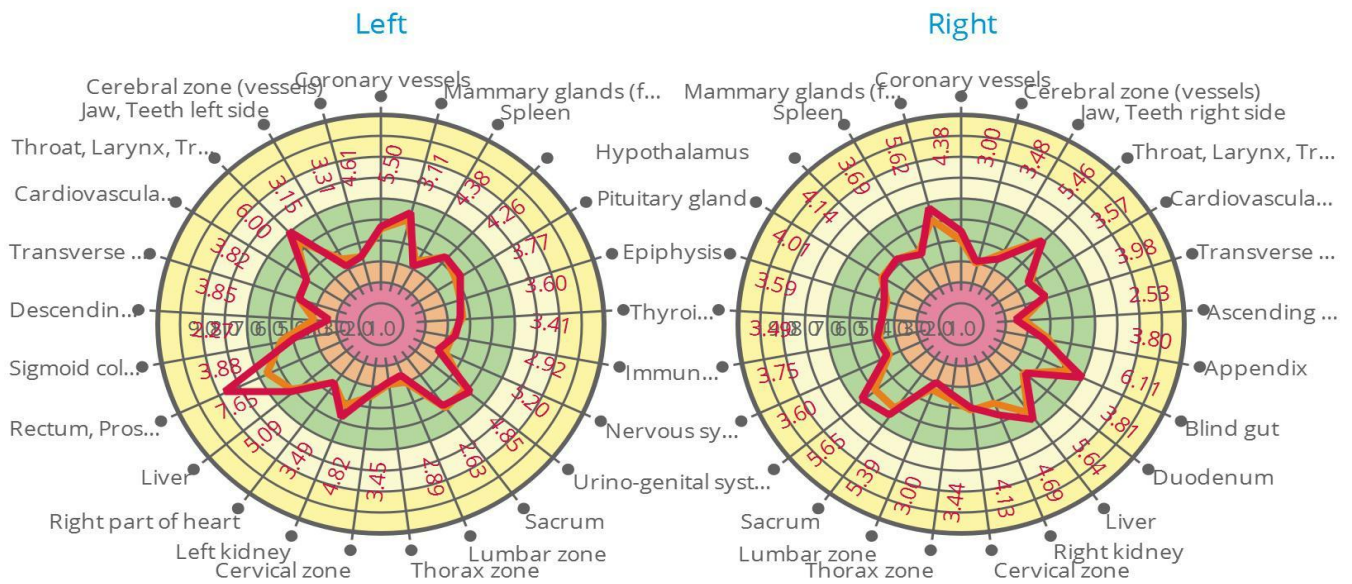
ENERGY FIELD



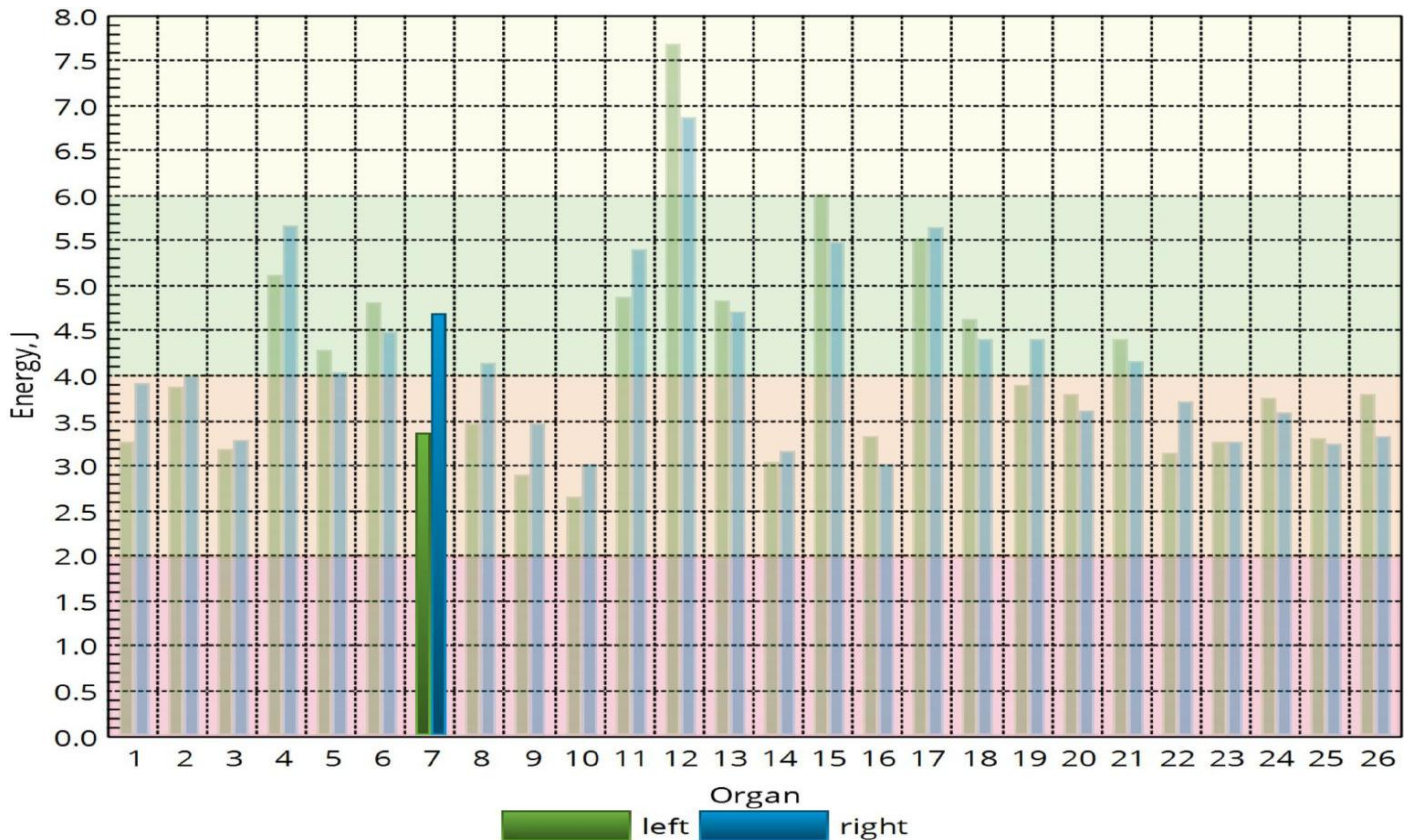
HEALTH STATUS



ENERGY RESERVE



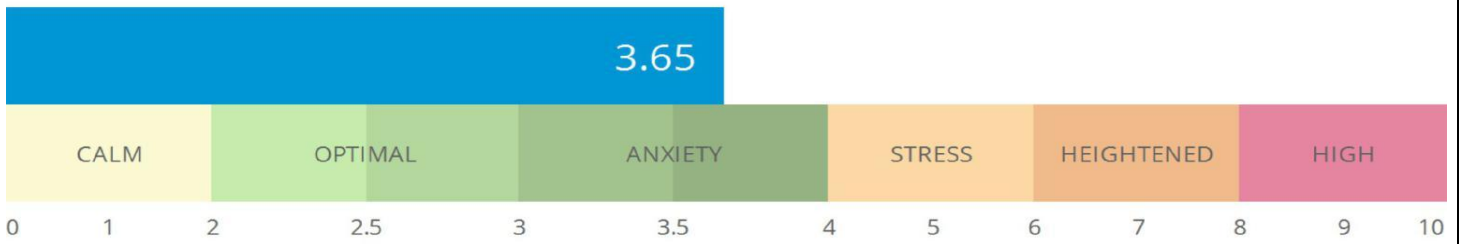
ENERGY BALANCE



1. Heart 2. Colon - transverse 3. Pancreas 4. Liver 5. Pituitary gland 6. Thyroid gland 7. Adrenals 8. Spine - cervical zone 9. Spine - thorax zone 10. Spine - lumbar zone 11. Sacrum 12. Coccyx, Pelvis minor zone 13. Kidneys 14. Ears, nose, maxillary sinus 15. Throat, larynx, trachea 16. Cerebral zone (vessels) 17. Mammary glands (for women), Respiratory system 18. Coronary vessels 19. Thorax zone 20. Epiphysis 21. Hypothalamus 22. Spleen 23. Right eye 24. Left eye 25. Jaw, Teeth 26. Cerebral zone (cortex)

ANALYSIS

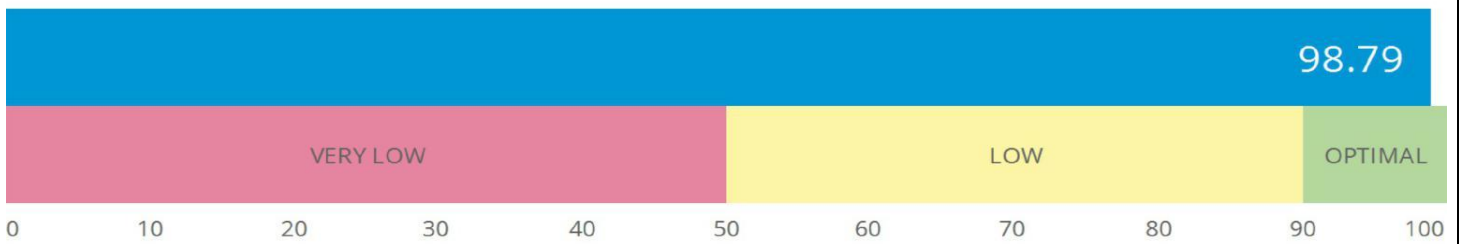
EMOTIONAL PRESSURE: Anxiety



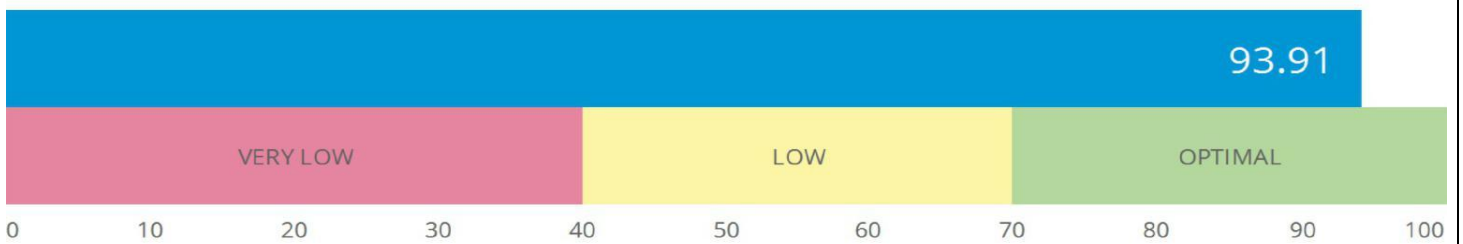
ENERGY: Optimal



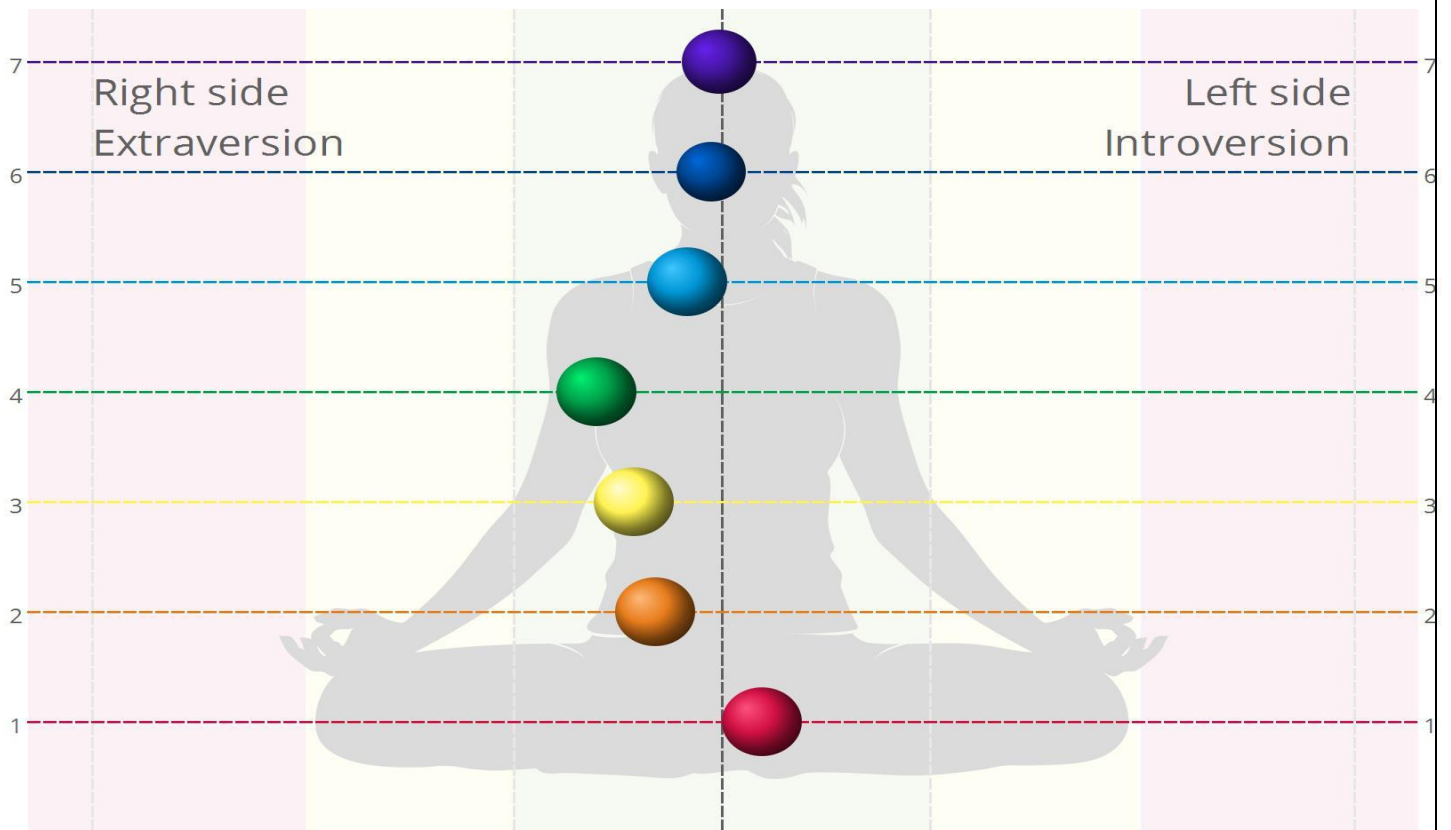
L/R SYMMETRY: Optimal



ORGANS BALANCE: Optimal



CHAKRAS



GDV BIO-WELL

