

2.0 LITERARY RESEARCH

2.1 AIM OF LITERARY RESEARCH

To understand concepts of yogic practices presented in ancient texts in relation to attain the optimum physical and mental health

2.2 OBJECTIVES

The most important objectives achieved by exploring ancient yogic texts are as follows:

- To explain benefits of *asanās* through various ancient texts for achieving optimum physical health
- To find out the importance of yogic practices for intellectually disabled children through ancient texts

2.3 METHODOLOGY

To find out the related literature, the researcher visited *Kaivalyadhama, Lonavala (Pune, Maharashtra, India)* Library. Further, he consulted several research scholars in Philosophy and Literary Research to gather relevant information in relation to the present investigation. Various ancient texts and manuscripts were explored to find out the relation between yogic practices and beneficial effects on intellectually disabled children. The sources have been presented as follows:

2.4 VEDIC SOURCES

Yoga, literally means integration, aims at unfolding all inherent capabilities of its practitioners. The process of integration may start at the body level (*Hatha yoga*) or at

the mental level (*patanjali yoga*). However, the process culminates, invariably, into a psycho-physiological health and harmony. The word *yoga* has been used in religious aphorisms in the sense of ‘preventing the mental defects like attraction’ etc.

अष्टमोऽध्यायः मूढगर्भनिदान

Aṣṭamo'dhyāyaḥ mūṛhagarbhanidāna

ग्राम्यधर्मयानवाहनाध्वगमनप्रस्खलनप्रपतनप्रपीडनधावनाभिघातविषमशयनासनोपवासवेगा भिघातातिरुक्ष

कटुतिक्तभोजनशोकातिक्षारसेवनातिसारवमनविरेचनप्रेङ्खोलनाजीर्णगर्भशातनप्रभृतिभिर्विशेषैर्बन्धनान्मुच्यते

गर्भः

फलमिव वृन्तबन्धनादभिघातविशेषैः ॥३॥

Grāmyadharmayānavāhanādhwagamanapraskhalanaprapatanaprapīḍanadhāvanābhig

hātaviṣamaśayanāsanopavāsavegā bhighātātirukṣa

Kaṭutiktabhojanaśokātikṣārasevanātisāravamanavirecanapreṅkholanājīrṇagarbhaśāta

naprabhutibhirviśeṣairbandhanānmucyate garbhaḥ

Phalamiva vuntabandhanādabhighātaviśeṣai ḥ ॥3॥

Due to indulge sex, traveling by chariot or bullock cart or camel, traveling due to vehicle, fell down on road pressing by moving, running fast, wound on belly, sleeping on up and down bed, prolonged sitting, prolonged fasting, suppressing the natural urges, purgation and imitation, by taking abortive medicine, by all these means *garbha* detaches from endometrium with placenta e.g. fruit detaches from the branch. Such *garbha* is called as *garbha muḍha*.

विकृतासात्मसमलाद्विषमादुपयोगतः ।

विषण्ण स्वाल्पसत्त्वस्य व्याधिवेगसमुद्रमात् ।

क्षीणस्य चेष्टावैषम्यात् पूज्यपूजाव्यतिक्रमात् ।

आधिभिश्चिताविभ्रंशाद् विवेणोपविषेण च ॥

॥ वा उ ६. २.३ ॥

Vikrutāsātmasamalādviṣamādupayogataḥ ।

Viṣaṣṇa svālpasattvasya vyādhivegasamudgamāta ।

Kṣīṅsya ceṣṭāvaiṣamyāt pūjyapūjāvryatikramāt ।

Ādhibhiścītāvibhrāṅsād viveṇopaviṣeṇ ca ॥

॥ Vā. U. 6. 2,3 ॥

Loss of memory, anxiety, instability, nystagmus, irrelevant talking, emptiness in heart and brain, patient does not know what happiness is and sorrow, such patient behaves like mental person, normal behavior not behave by the patient. Mind, intellect and memory power, get vitiated due to this reason the patient wonders here and there.

Apastambha says-

दोषाणां तु विनिर्घातो योगमूल् इह जीविते ।

निहत्य भुतदाहीयन् क्षेमं गच्छति पण्डिताः ॥

॥ आप ध सू १-२३-३ ॥

Doṣāṇāṃ tu vinirghāto yogamūl ih jīvite |

Nihnatya bhutadāhīyan kṣemamm gacchati paṇḍitāḥ ||

॥ *Āpa dha sū 1-23-3* ॥

The mental defects are prevented in yogic life. By removing these that burn the beings, a *Paṇḍita* attains well-being.

He enumerates the constituents of yoga as follows:

अक्रोधोऽहर्षोऽ रोषो अनसूया संविभागस्त्याग

आर्जवं मार्दवं शमो दमः सर्वभूतैरविरोधो योगः ।

॥ आप ध सू १-२३-६ ॥

Akrodho 'harṣo' roṣo anasūyā samvibhāgastyāga

Ārjavam mārḍavam śamo damaḥ sarvabhūtairavirodho yogaḥ |

॥ *Āpa dha sū 1-23-6* ॥

Non-anger, non-delight, non-despise, non-envy, sharing with other, abandonment, straightforwardness, soft-ness, peace of mine, sense-control, having no conflict with all beings- (this) is yoga.

Baudhyana Vaśiṣṭha say-

योगेनावाप्यते ज्ञानं योगो धर्मस्य लक्षणम् ।

योगमूला गुणाः सर्वे तस्मादुक्तः सदा भवेत् ॥

॥ बौ ध सू ४-१-२६ वसि २५ ॥

Yogenāvāpyate jñānam yogo dharmasya lakṣaṇam |

Yogamūlā guṇāḥ sarve tasmāduktāḥ sadā bhaveta ||

|| *Bau dha sū 4-1-26 vasi 25* ||

By yoga, knowledge is attained. Yoga is the characteristic mark of *Dharma*. All merits are rooted in yoga. Hence, one should be always a *Yukta* (one who observes yoga). Thus, yoga has also been prescribed for attaining knowledge and merits.

लाघवं कर्मसामर्थ्यं दीप्तोऽग्निर्मेदसः क्षयः

विभक्तघनगात्रत्वं व्यब्रयब्रमादुपजायते

|| अ. स. १.३. ६२ ||

Lāghavaṁ karmasāmarthyam dīpto'gnirmedasaḥ kṣayaḥ

Vibhaktaghana-gātratvaṁ vyāyāmādupajāyate

Lightness (of the body), ability to do (hard) work, keen digestion, depletion of (excess) gas, stable and distinct physique accrues from *Vyāyāma*. (physical exercise). Persons suffering from diseases of *Vāta* and *Pitta* children, the aged and those having indigestion should avoid it.

अर्धशतकया निषेव्यस्तु बलिभिः स्निग्धभोजिभिः

शीतकाले वसन्ते च मन्दमेव ततोऽन्यदा ।

|| अ. स. ११ ||

Ardhaśatkayā niṣevyastu balibhiḥ snigdhabhojibhiḥ

Śītakāle vasante ca mandameva tato'nyadā |

|| A sa 11 ||

Persons who are strong and who indulge in fatty foods (daily); in cold seasons and spring (season) should do it (exercise) to half of their strength (capacity) only; while others (and in other seasons) should do it mildly.

तं कृत्वाऽनुसुखं देहं मर्दयेच्च समन्ततः ॥

|| अ. स. १२ ||

Tam krutvā'nusukham deham mardayecca samantataḥ ||

|| A sa 12 ||

After doing it (exercises) all the parts of the body should be massaged comfortably.

तृष्णा क्षयः प्रतमको रक्तपित्तं श्रमः क्लमः

अतिव्ययामतः कासो ज्वरछर्दिश्च जायते ॥

|| अ. स. १३ ||

Truṣṇā kṣayaḥ pratamako raktapittam śramaḥ klamaḥ |

Ativyayāmataḥ kāso jvarachardīśca jāyate ||

|| A sa 13 ||

Thirst, emaciation, severe dyspnea (difficult or excess breathing), bleeding diseases, exhaustion, feeling of debility (even without any work), cough, fever and vomiting are caused by excess of exercise.

व्यायामजागराध्वस्त्रीहास्यभाष्यादि साहसम् ।

गजं सिंह इवाकर्षणं भजन्नतिविनश्यति ॥

॥अ. स. १४ ॥

Vyāyāmajāgarādhvastrīhāsyabhāṣyādi sāhasam ।

Gajan̄ simha ivākarṣaṇa bhajannativinaśyati ॥

॥A sa 14 ॥

Those who indulge daily in too much of physical exercise, keeping awake at night (loss of sleep), walking long distances, sexual intercourse, too much of laughing, speaking and such other strenuous activities perish, just as a lion, after vanquishing an elephant.

लाघवं कर्मसामर्थ्यं स्थैर्यं विभक्तघनगात्रता ।

दोषक्षयोऽग्निवृद्धिक्षच व्यब्रयब्रमादुपजायते ॥

॥भा प्र ४७ ॥

Lāghavaṁ karmasāmarthyam sthairyam vibhaktaghanagātratā ।

Doṣakṣayo'gnivṛddhikṣca vyāyāmādupajāyate ।

॥ bhā pra 47 ॥

Lightness of the body, capacity to work, well-shaped and thick body build, mitigation of *dosas*, an increase of digestive capacity, accrue from exercise.

व्यायामदृढगात्रस्य व्याधिर्नास्ति कदाचन ।

विरूद्धं वा विदग्धं वा भुक्तं शीघ्रं विपच्यते ॥

॥भा प्र ४८ ॥

Vyāyāmaddadhagātrasya vyādhirnāsti kadācana ।

Virūdhdaṁ vā vidagghaṁ vā bhuktaṁ śīghraṁ vipacyate ॥

॥ *bhā pra 48* ॥

The person who exercises daily and so possesses a strong body does not suffer from diseases any time; foods which are incompatible or improperly cooked though consumed get digested quickly.

भवन्ति शीघ्रं नैतस्य देहे शिथिलतादयः ।

न चैवं सहसाऽक्रम्य जरा समधिरोहति ॥

॥ भा प्र ४९ ॥

Bhavanti śīghraṁ naitasya dehe śithilatādayaḥ ।

Na caivam sahasā'kramya jarā samadhirohati ॥

॥ *bhā pra 49* ॥

His body does not develop weakness or looseness (of joints) etc. quickly, nor old age invades him quickly.

न चास्ति सदृशं तेन किञ्चित्स्थौल्यपकर्षकम् ।

स सदा गुणमादत्ते वलिनां स्निग्धभोजिनाम् ॥

॥ भा प्र ५० ॥

Na cāsti saddaśam tena kiñcithsthaulyapakarṣakam ।

Sa sadā guṇamāddatte valinām snigdhabhōjinām ॥

॥ bhā pra 50 ॥

These is no other thing equal to it (exercise) in removing obesity (stoutness), it draws the qualities of a thin built man who is attracted by moderate eating habits.

वसन्ते शीतसमये सुतरां स हितो मतः ।

अन्यदाऽपि च कर्तव्यो बलार्धेन यथा बलम् ॥

॥भा प्र ५१ ॥

Vasante śītasamayē sutarām sa hito mataḥ ।

Anyadā'pi ca kartavyo balārdhena yathā balam ॥

॥bhā pra 51 ॥

It is especially beneficial during *vasanta* (spring) and *sita* (winter), even in other seasons it should be done to half the strength of the person.

हृदयस्थो यदा वायुर्वक्रं शीघ्रं प्रपदते ।

मुखं च शोषं लभते तद् बलार्धस्य लक्षणम् ॥

॥भा प्र ५२ ॥

Hradayastho yadā vāyurvakraṁ śīghraṁ prapaddate ।

Mukhaṁ ca śoṣaṁ labhate tad balārdhasya lakṣṇam ॥

॥bhā pra 52 ॥

The symptoms of half the strength (of the person) are *vāyu* (air) present in *hradaya* (chest) moves up to the mouth quickly and mouth becomes dry.

किं वा ललाटे नासायां गात्रसन्धिषु कक्ष्योः ।

यदा स्न्जायते स्वेदो बलाधं तु तदादिशेत ॥

॥ भा प्र ५३ ॥

Kim vā lalāṭe nāsāyāṁ gātrasandhiṣu kakṣyoḥ ।

Yadā snjāyate svedo balādhaṁ tu tadādiśeta ॥

॥ bhā pra 53 ॥

Or when seat appears (in more quantity) on the forehead, nose, joints, axillae, etc. these are the symptoms of half the strength (of the person).

Contraindications for Vyayama

भुत्कवान्कृतसम्भोगः कासी श्वासी कृश क्षयी ।

रक्तपितो क्षति शोषी न तं कुर्यात्कदाचन ॥

॥ भा प्र ५४ ॥

Bhuttkaṅkrutasambhogaḥ kāśī ścāsī kruśa kṣayī ।

Rakttapito kṣati śoṣī na taṁ kruryātkadācana ॥

॥ bhā pra 54 ॥

A person who has taken food just then, who has indulged in consumption, bleeding disease, injury to lungs or tuberculosis should never exercise.

अतिव्यायामतः कासो ज्वरश्छर्दिः श्रमः क्लृमः

तृष्णाक्षयः प्रतमको रक्तपित्तं च जायते ॥

॥ भा प्र ५५ ॥

Ativyāyāmataḥ kāso jvaraśchardīḥ śramaḥ klāmaḥ

Truṣṇākṣayaḥ pratamako raktapittam ca jāyate ॥

॥ bhā pra 55 ॥

Excess of exercise gives rise to cough, fever, vomiting, debility, fatigue, thirst consumption, bronchial asthma and bleeding diseases.

There have been various branches of yoga known as *Karmayoga*, *Jñāanayoga*, *Bhaktiyoga* and others. *Haṭhayoga* deals with physical health and longevity. *Haṭhayoga* or *Ghaṭhastha* yoga, as it is called in *Gheraṇḍa Saṁhitā* seems to be a perfect science in itself, leading to modifications in human physiology and psychology. Anyone who practices for sufficient length of time knows that not only does it strengthen muscles, bones and ligaments; but has a profound effect on the functioning of the internal organs. In the human body, the internal systems can be trained according to needs. For example, a person who keeps regular weekly fast can tolerate it better than a person who does not fast at all. Muscle growth and increase in strength is demonstrable after regular exercise. It is quite possible that by regular practice of certain techniques, neuronal growth takes place in the central nervous system with the formation of new inter-neuronal connections which may lead to the establishment of perfect control of the conscious mind over one's subconscious and the autonomic nervous function.

The *Svetāśveta Upaniṣada* benefits of regular practice of yoga have been summarized below: -

लघुत्वमारोग्यमलोलुपत्वं वर्णप्रसाद स्वरसौष्टवं च ।

गंधः शुभो मूत्रपुरीषमल्पं योगप्रवृत्तिं प्रथमां वदन्ति ॥

॥ श्वेताश्वतरोपनिषद् २-१३ ॥

Laghutvamārogyamalolupatvaṁ varṇaprasāda svarasauṣṭhavaṁ ca ।

Gandhaḥ śubho mūtrapurīṣamalpaṁ yogapraravṛttiṁ prathamāṁ vadanti ॥

॥ *Śvetāśvataropaniṣda* 2-13 ॥

Lightness of the body, good health, no compulsion to run after worldly wealth, lightness of complexion, melodiousness of voice, pleasant smell in the body, reduced quantities of urine and stool are the initial achievements of yoga.

वपुः कृशत्वं वदनं प्रसन्नता नादस्फुटत्वं नयने सुनिर्मले ।

अरोगता बिन्दुजयोग्निदीपनं नडीविशुद्धिर्हृत्सिद्धिलक्षणम् ।

॥ हठप्रदिपिका २-७८ ॥

Vapuḥ krūśatvaṁ vadanam prasannatā nādasphuṭatvaṁ nayane sunirmale ।

Arogatā bindujayognidīpanam naḍīviśuddhirhṛtśiddhilakṣaṇama ।

॥ *Haṭhapradīpikā* 2-78 ॥

Leanness in the body, a glowing face, melodious voice, sparkling eyes, freedom from disease, control over semen, good appetite, clear channels (for flow of air and other vigours) result from success in *Haṭhayoga*.

Conquered Senses

Manu has explained the importance of sense-restraint in verses such as-

इन्द्रियाणां विचरतां विषयेष्वपहारिषु ।

संयमे यत्नमातिष्ठेद्विद्वान् यन्तेव वाजिनाम् ॥

इन्द्रियाणां प्रसङ्गेन दोषमृच्छत्यसंशयम् ।

सनियम्य तु त्तान्येव ततः सुधिदं नियच्छति ॥

॥ मनु ८८ ९३ ॥

Indriyāṅṅāṁ vicaratām viṣayeṣvapahāriṣu ।

Sānyame yatnamātiṣṭhedvidvāna yanteva vājināma ॥

Indriyāṅṅāṁ prasaṅgena doṣamrucchatyasamśayama ।

Saniyamya tu ttānyeva tataḥ sudhidiṁ niyacchati ॥

॥ *Manu 88.93* ॥

A wise man should try to control the senses that wander amongst the robbing objects just as the charioteer and the horses. Undoubtedly, one acquires a demerit due to over attachment to sense, but by controlling the same, thereby, he acquires success. (*Manu* II. 88, 93).

It has been clearly prescribed that control on senses is the highest means of preserving knowledge in passages such as-

इन्द्रियाणां तु सर्वेषां यद्देकं क्षरतीन्द्रियम् ।

तेनास्य क्षरति प्रज्ञा द्रुतेः पात्रादिवोदकम् ॥

॥ मनु २।९९ ॥

Indriyāṅṅāṁ tu sarveṣāṁ yaddekaṁ kṣaratīndriyama ।

Tenāsya kṣarati prajñā druteḥ pātrādivoodakama ॥

॥ *Manu 2|99* ॥

Out of all the senses, if even one sense is let loose, his knowledge slips away by it like water from a hole of a leather bag. (*Manu* II-99)

Vyāsa has explained this victory or control on senses in the *Yogasutrabhyāsa* as follows:

शब्दादिष्वव्यसनमिन्द्रियजय इति केचित । सक्तिर्व्यसनम व्यस्यत्येनं श्रेयस इति ॥

अविरुद्धा प्रतिपत्तिर्न्याय्या । शब्दादिसंप्रयोगः स्वेच्छयेत्यन्ये ।

रागद्वेषाभादि सुखदुःखशून्यं शब्दाविज्ञानमिन्द्रियजय इति केचित ।

चित्तंकाग्र्यादप्रतिपत्तिरेवेति जैगीषव्यः ॥

॥ व्यासभाष्य २।५५ ॥

Sabdādiṣvavyasanamindriyajaya iti kecita ।

Saktirvyasanama vyasyatyenam śreyasa iti ॥

Avirudhdā pratipattirnyāyyā ।

Śabdādisamprayogaḥ svecchayetyanye ।

Rāgadveṣābhādi sukhaduḥkhaśunyanī śabdāvijñānamindriyajaya iti kecita ।

Cittāṅkāgryādapratipattireveti jaigīṣavyaḥ ॥

॥ *Vyāsabhāṣya* 2।55 ॥

According to some non-indulgence in sense, objects-sound etc., is a victory over senses. Attachment is indulgence as it removes him from well-being. Indulgence unopposed (to the scriptures) is justifiable, others say that contact with sound etc., should be

voluntary. According to *Jaigisavya*, there should be no indulgence with a concentrated mind. (*Manu* II-55). Out of the four views quoted here, the first three are acceptable to *Manu*. This can be seen from the following verse:

श्रुत्वा स्पृष्ट्वा च दृष्ट्वा च भुक्त्वा घ्रात्वा च यो नरः ।

न हृष्यति ग्लायति वा स विज्ञेयो जितेन्द्रियः ॥

॥ मनु २।९८ ॥

Srutvā spuṣṭavā ca dṛṣṭavā ca bhuktvā ghrātvā ca yo narah |

Na hṛṣyati glāyati vā sa vijñeyo jitendriyah ||

॥ *Manu* 2|98 ॥

While hearing, touching, seeing, experiencing and smelling, a man who is neither delighted nor dejected, should be known as one who has conquered the senses. (*Manu* II-98).

In this verse, sense indulgence without delight or dejection is said to be the sign of victory over senses. It can be seen that this victory over senses has been greatly recommended in the *Smṛuti* literature for acquiring wisdom. *Manu* says in this respect that by letting loose a sense organ not only that sense organ but also the wisdom slips away. (*Manu* II-99). The same has been said in the following verse from the *Bhagavadgītā* -

इन्द्रियाणां हि चरतां यन्मनोऽनुविधीयते ।
तदस्य हरति प्रज्ञां वायुर्नावमिवाम्भिसि ॥

॥गीता २।६७ ॥

Indriyāṇāṃ hi caratām yanmano'nuvidhīyate ।

Tadasya harati prajñām vāyurnāvamivāmbhisi ॥

॥ *Gītā* 2|67 ॥

When the mind is allowed to follow the wandering senses that take away his wisdom as does wind, the boat in the water. (*Gītā* II-67).

Haṭha Pradīpikā, Siva Saṃhitā. Gheraṇḍasaṃhitā, Patanjali Yoga Sutrāja mention the clearly perceptible and favorable effects of yoga practices at bodily and mental levels. In *Haṭha Pradīpikā*, mental contemplation, on the body parts to be treated and healed, is recommended (H.P. V: 9)

2.5 SUMMARY

Individuals with intellectual disability have been found by many investigators to be a population with low levels of health-related physical fitness, which may be because of an inactive lifestyle. In fact, these children typically exhibit lower levels of cardiovascular fitness than their non-disabled peers. These findings were interpreted to suggest that adolescents with mild intellectual disability had difficulty in making optimal use of their working memory when new or complex situations tax their abilities.

Physical fitness of an individual who is developmentally disabled has received relatively little attention in the special education literature when compared to intellectual functioning (e.g., learning, memory, and language) and to the acquisition of functional skills (e.g., self-care, community, and vocational). Despite an increased interest in recreational programming stimulated by the concept of functional curricula, teachers may still be reluctant to include physical fitness activities in their students' schedules. Perhaps physical fitness programming for those with developmental disabilities would have wider appeal and application.

In fact, individuals with intellectual and developmental disabilities need effective and motivating physical fitness training intervention. Nevertheless, there are many studies conducted with physical activity positively affected balance, muscle strength, and quality of life in individuals with intellectual disability. Further, various physical training interventions have been devised to achieve greater physical fitness for children with intellectual disability, who otherwise exercise insufficiently. Such training may also facilitate socializing and play at school. Results showed that children receiving functionally focused activities achieved greater improvements in independence when performing movement activities. However, there seems to be a gap in the literature with respect to comparative studies exploring efficacy of yoga intervention on health-related physical fitness, cognitive motor development and execution abilities in intellectually disabled children. Though there are many studies indicating benefits of yoga across a host of normal population but very few studies are conducted on intellectually disabled children. Therefore, this study seems to be justified and logical.

The textual references also indicate that attitudes, goals, beliefs, desires, expectancies, cognitions and attributions have been found to change in favorable directions as one advances in the path of yoga. A general psychosomatic composure and an increasingly better psycho-physical health can be gained in the process. Yoga practices not only endow its practitioners with psycho-physiological abilities to squarely face the three types of diseases viz., endogenous, exogenous, and psychic diseases (*Caraka Samhitā* Vol.2) but also strengthen and sharpen their mental and physical abilities. New ecstasies, rare thrills of achievements and, correspondingly, meaningfulness and an inward awareness can be experienced at different stages of yoga practices.

Further, both *Hatha Yoga* and *Patanjali Yoga* speak of attaining a near total control over almost all functions of mind-body complex through their practices. In *Patanjali Yoga Sutrāja* an elaborate description of various “*Vibhūtija*” (miraculous powers, gained only through a definite rule of yoga) and “*Siddhija*” (the miraculous powers gained not necessarily through yoga alone) through ‘*Samyama*’ is found, apart from the description of psychological benefits of stability, comfort, overcoming conflicts and blissful experience accruing through yoga practices.