

**1. TITLE OF PROJECT: THERAPEUTIC AND BENEFICIAL EFFECTS OF INDIAN CLASSICAL DANCE ON THE MIND AND BODY OF A LEARNER  
DANCE STYLE TAKEN FOR DEMONSTRATION: BHARATANATYAM**

2. ABOUT THE AUTHOR: GURU SMT KANAKA SUDHAKAR IS A WELL KNOWN BHARATANATYAM EXPONENT DISCIPLE OF GURU V.P AND SHANTA DHANANJAYANS OF CHENNAI, INDIA. SHE IS AN ABLE CHOREOGRAPHER, MENTOR AND ARTISTE AND HAS TRAINED MORE THAN A THOUSAND YOUTH TO MASTER THE ART OF BHARATANATYAM. BEING A RETIRED PARA MEDIC FROM DELHI GOVT. AND THE DIRECT DISCIPLE OF DR. L. RAMACHANDRAN NATURE CURIST KANAKA SUDHAKAR OBSERVED THAT INDIAN CLASSICAL DANCERS PERFORM TILL THEIR OLDER YEARS AND WAS INSPIRED TO CONDUCT A DETAILED THEORETICAL AND THEN AN EXPERIMENTAL RESEARCH DELVING INTO THE BENEFICIAL AND THERAPEUTIC ASPECTS OF INDIAN CLASSICAL DANCES ON THE MIND AND BODY OF A LEARNER. SHE HAS CONDUCTED MANY LECTURE DEMONSTRATIONS ON THIS TOPIC TO CREATE MASS AWARENESS. SHE IS THE PRESIDENT OF SUNAINA – SOCIETY FOR THE UPLIFTMENT OF NATIONAL ARTS OF INDIA – DIRECTOR OF NRITYABHARATI ACADEMY FOR BHARATANATYAM AND BUDDING BLOSSOMS – A SCHOOL FOR UNDER PRIVILEGED CHILDREN. SHE HAS BEEN PRESENTED WITH MINSITY OF CULTRE FELLOWSHIP, NATIONAL SWAMI VIVEKANANDA ASWARD, NRITYA BHUSHAN, BHARAT EXCELLENCE AWARD ETC FOR HER CONTRIBUTION TO THE ART.

**THEME**

When we see a young classical dancer what do we observe? The grace, poise, an energetic and fit body, charming smile, expressive eyes, sensitive, an enigmatic personality, humility and a traditional outlook with a love for music, literature and culture. This is in great contrast to the many youngsters we see, many of whom are irritated, breaking into fits of anger and rage, mostly lethargic and far from fit, sometimes going into depression, stressed and some even take to drugs. When we see the elder artists in their 80s we see very elegant, personality ready to grasp at new ideas eyes sparkling with creativity and experience, very flexible and fit

What is the magic behind this transformation? Yes it is the art of Indian classical dance that they are pursuing that is doing the wonder.

Training in Indian classical dance gifts to the learner incidental benefits that actually benefit the learner in a very positive manner affecting not only their body but also the mind

To benefit the body in such a way we need an ideal movement system. What are the characteristics of an ideal movement system?

According to me:

- 1, It should be an enjoyable experience full of variety, boosting creativity and self expression**
- 2, It should be symmetrical using every single part of the body**
- 3, It should stimulate the nervous system and the brain in equal measure**
- 4. It should strengthen the heart, improve circulation and increase longevity**
- 5 It should improve immunity of the body.**
- 6 It should not foster any unhealthy competitive spirits and should fulfill the innate instinct of play**

**Incidentally our Indian Classical Dance forms like Bharatanatyam and Kuchipudi have all the qualities of an ideal movement system.**

**In the first place I have termed Bharatanatyam as a muscular trigger. If you may have noticed every single part of the body is given movement while performing. Now the internal organs cannot be stimulated directly but the more we move our voluntary or skeletal muscles the internal organs are stimulated.**

**I have given another term SSM to Indian Classical dance movements which means Simultaneous symmetric movement system.**

**In dance we make sure every part is moved by following 3 simple rules.  
Whatever is done on the right is repeated on the left**

**The angle of bending on the right and left is the same  
Look where your hands go**

In the Abhinayadarpanam the variety of movements in which the head, eyes, chin, neck hand and every part of the body can move is shown clearly Thus there are 6 eyebrow, 8 eye, 9 head, , 4 chin, 52 hand 10 leg , 28 single hand and 23 double hand movements and the list goes on.

Now when all these movements are performed simultaneously and symmetrically we get the SSM movements in which the maximum number of movements can be done in the minimum time of course with beauty and agility.

If we take the example of the Alarippu the shortest item of Bharatanatyam last for 2.5 minutes there are 97 movements in the first half and 217 movements in the second half a total of 314 movements! A very comprehensive and compact movement system, Bharatanatyam practitioners have very tones musculo- skeletal system.

## **FOOT ACCUPRESSURE BENEFITS**

In my collaboration with Dr. Raman Kapur it was found that the foot movements on bare feet have preventive acupressure effects in such a way that a session of Indian Classical dance proves to be a perfect acupressure massage where so many diseases like poor eye sight, colitis, blood pressure, thyroid problems etc are cured or prevented from affecting the learner increasing substantially his/her immunity at the same time. This is because most of the internal organs have their nerve ending at the base of the foot or the planta. A child who learns or performs this art form incidentally gets the benefit of good health through the acupressure massage that goes on for years of rigorous training

## **FOOD FOR THE BRAIN**

Indian Classical dance requires extreme concentration and focus for many reasons

In this art form the artiste performs sequentially a variety of movements set to a particular tala cycle in three speeds and 5 different gaits or time intervals. There are a total of 175 tala. When this type of circuit training is done, it has been proved that the oxygen transport capacity to the brain is increased; I.Q. improves and not only that it wakes up the senile or dormant cells of the brain

Tala is not only used in pure dance but in the expressive items also. For example in Thodayam the dancer performs expression to five different rhythmic settings – 5,7,9,6 and 4 beat intervals in both expression and rhythm.

The artiste first remembers the literature portion and the actions and feelings and sets it to the talam.

There is the shloka that describes the 10 qualities of a dancer

**Javaha sthiratvam rekhacha brahmari drishti shramaha  
Medha shradha vacho gitam patra pranaha dasham smrutaha**

**SWIFTNESS, STEADYNESS, SYMMETRY, WHIRLING, APPROPRIATE GLANCES,  
HARD WORK AND EASE OF MOVEMENT, INTELLIGENCE, DEDICATION,  
ABILITY TO SPEAK AND SING ARE THE 10 QUALITIES OF A DANCER**

These qualities are desired to be in a dancer and in reverse a practice in this dance forms builds these qualities in a person. It is like the battery and the bulb. The battery needs a bulb to work and the bulb needs the battery.

#### THE CIRCULATORY SYSTEM

We now move towards the very important part the heart and circulatory system. Many astounding discoveries we made during my study but I will stick to only one or two.

Bharatanatyam dance exploits the use of every voluntary skeletal muscle in the body.

The arterioles or capillaries which actually travel inside each muscle fibre (the intramuscular blood capillary) – in a trained person the muscle fibril is in a continuous state of vibration even at rest. The vibration helps in pushing the blood towards the heart thus reducing the work of the heart in the venous return

In an untrained person this is absent thus depriving the heart of its assistants which we can term as mini hearts. There are about 10,000 muscle fibril in the body that means about 10,000 assistants. In the trained muscle the heart has less strain and its longevity increased. In the other case the heart feels more strain. The Thillana is a very strenuous piece in which combined with intricate calculations there is complicated footwork

**The BEAT COUNTS OF A THILLANA COMBINATION**

$(2+1+9) \times 3 + (4 \times 3) + 8 + (5+4+5) + (2+ 5 \times 3) + (2+4 \times 3) + (3+3 \times 3) = 112$  which is a multiple of 8.

Indian classical dance is a steady state exercise aerobic in nature. Due to the alternate relaxation and work out after some time the steady state is attained and what may at the beginning have seemed to be a painful exercise starts to feel comfortable and easy thus increasing the reserve capacity.

#### A THING OF BEAUTY IS A JOY FOR EVER

I would like to just touch upon the benefits expressive portion of dance called abhinaya.

The act of communication. We communicate through angika (body parts) vachika (dialogue) aharya (costumes and make up) and satvika the involuntary reaction.\

The mudras that had no meaning in nritta now assume meaning. By using the different aspects Rasa is created or the relish or enjoyment. There is nothing more fulfilling for a young dancer to feel the appreciation in the audience of a piece well presented.

Children love to act to imitate to create and play acting has been a part of child to Adult hood. There is an experimental side and an imitative side. Indian Classical dance fulfills both sides of a person. The learner first imitates the teacher after which creates and improvises on his own.

In Indian Mythology Krishna used to play with his friends tease the Gopis and steal the butter.

The ear listens to the lyrics and music and Tal the mind correlates the body responds the mind expresses thus creating a perfect coordinated performance

Neuromaturational Delays in school going children and Indian Classical Dance

An educational psychologist Dr. PN Singh told when we were working together that 50 % of children studying in schools are slow learners due to neuro maturational delays. For example a child till the age of three should have overcome many physical barriers in movement like alternate movement, identification of fingers , synchronous movements choiroform movements sequential movements etc. If these problems persist even till age 4 or 5 and above that means there is a neuro maturational delay.

These children are slow learners and score less. Parents send them for tuitions. Some may take them to a specialist who will then give them certain exercises that will trigger the parietal lobe and bring some improvements in their performance levels.

Indian classical dance is itself endowed with these therapeutic and effective movements.

The tests that were conducted on 18 experimental children and control group brought out many astounding results.

1. **VISUAL PERCEPTION:** The visualization of shapes in the air like triangles, rectangles, circles and squares. Visualization of characters, like mother, child, God, situations.
2. **SEQUENTIAL PERCEPTION :** Remembering the sequence of movements and actions that goes on throughout the dance performance
3. **GROSS AND FINE MOTOR MOVEMENTS:** The movements of the major body parts like the head, arms, torso and feet coordinated with the minor body parts like eyes, neck and eyebrows.
4. **MIRROR MOVEMENTS TEST:** The repetition of the same movement in the exact same manner o both sides
5. **FINGER AGNOSIA TEST :** identification of fingers without seeing to make different mudras or hand gestures
6. **IMITATION TEST:** Imitating the abhinaya or expressional outlet.
7. **ALTERNATING MOVEMENTS TEST:** Doing different movements in the different hands and limbs alternatively
8. **DOUBLE STIMULATION TST:** responding to stimulation of rhythmic sound and musical sound at the same time
9. **MUKLTIPLE MOTOR MOVEMENTS TEST:** performing multiple movements requiring different stimulations
10. **MOTOR IMPERSISTENCE TEST :** holding on to a position either posture, karana, or position for a longer time
11. **LEFT RIGHT HAND DISCRIMINATION TEST:** Performing in expression or rhythmic pure dance a different action in the right hand and a different action in the left.

Training in Indian classical dance can certainly change a person and gift him or her benefits that can change her life.

SO A SHY, INTROVERT , DULL CHILD WHO ENROLS INTO A DANCE CLASS COMES  
OUT AFTER A FEW YEARS AS A CONFIDENT, EXPRESSIVE EXTROVERT YOUTH,  
CREATIVEE FULL OF ENERGY READY TO TAKE ON THE WORLD WITH HIS OR  
HERR ACQUIRED KNOWLEDGE

GURU KANAKA SUDHAKAR

ORIGINAL WORK

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