

## **IMPACT OF POWER YOGA AND OM CHANTING ON LANGUAGE AND ORIENTATION SKILLS AMONG CEREBRAL PALSY AFFECTED CHILDREN**

**Dr. P. Kumaravelu\***, Assistant Professor, Department of Physical Education, Tamil Nadu Physical Education and Sports University, Melakottaiyur Post, Chennai- 600127, Tamil Nadu, India. E-mail: [drpkv007@gmail.com](mailto:drpkv007@gmail.com), Mob: +91 9894254700

**Mr. Deb Kumar Das**, Assistant Professor, Department of Yoga, Shri Paranjothi Yoga College, 113, Sri Paranjothi Nagar, Thirumoorthi Hills, Udumalpet, Tiruppur (Dt), Tamil Nadu – 642 112, India. E-mail: [debkumar071990@gmail.com](mailto:debkumar071990@gmail.com), Mob: +91 73583 31413

**\*Corresponding author: Dr. P. Kumaravelu\***, Assistant Professor, Department of Physical Education, Tamil Nadu Physical Education and Sports University, Melakottaiyur Post, Chennai- 600127, Tamil Nadu, India. E-mail: [drpkv007@gmail.com](mailto:drpkv007@gmail.com), Mob: +91 9894254700

### **ABSTRACT**

The study was designed to find out the impact of power yoga and om chanting on language and orientation skills among cerebral palsy affected children. It was hypothesized that there would be significant differences in language and orientation skills due to the influence of power yoga with and om chanting. To achieve the purpose of the study, 45 children with cerebral palsy from National Institute of Empowerment of Persons with Multiple Disabilities Chennai, aged between 8 and 16 years were selected randomly and they were divided into three groups namely experimental group I, Experimental group II and control group of 15 subjects each. Experimental Group I underwent practice of power yoga, Experimental Group II underwent practice of om chanting for the period of 12 weeks, six days per week for the maximum of an hour in the morning. The Control group was not exposed to any specific training but they participated in the regular activities. The pre-test and post-test were conducted before and after the training for all the three groups. The

language and orientation skills were measured using Mini Mental State Examination (MMSE) Questionnaire. The data pertaining to the variables collected from the three groups before and after the training period were statistically analyzed by using analysis of covariance (ANCOVA) to determine the significant difference and tested at 0.05 level of confidence. The results of the study proved that the two experimental groups had significant improvement in language and orientation skills due to the influence of power yoga practice and om chanting than control group. Among the experimental groups power yoga group had better significant improvement than om chanting group.

**Key Words:** Power Yoga, Om Chanting, Cerebral palsy, Language and Orientation skills.

## **INTRODUCTION**

Cerebral palsy is caused by abnormal development or damage to the parts of the brain that control movement, balance and posture. Most often the problems occur during pregnancy; however, they may also occur during childbirth, or shortly after birth. Cerebral palsy (CP) is a group of permanent movement disorders that appear in early childhood. Often, symptoms include poor coordination, stiff muscles, weak muscles, and tremors. There may be problems with sensation, vision, hearing, swallowing, and speaking. Often babies with cerebral palsy do not roll over, sit, crawl, or walk as early as other children of their age.

**(Archie Hinchcliffe 2007)**

Power yoga another name call Vinyasa yoga. The main concept of vinyasa is originated from the basic sequences of Sri Krishnamacharya (1888- 1989). Yoga poses elaborately explained and enlightened by Srivatsa Ramaswami who is the disciple of Sri Krishnamacharya. The word “vinyasa” can be translated as “arranging something in a special way” like yoga poses for example. Vinyasa is also the term used to describe a specific sequence of poses. Vinyasa is a Sanskrit term often employed in relation to certain styles of

yoga, that usually refers transition between two different positions (**Srivatsa Ramaswami 2005**)

Om chanting are means of purifying the mind. Each Mantra is a store house of infinite devine power and all mantras are equally powerful. The mantras are energy based sounds and thought based waves. Repetition of Mantras set up vibrations that activate the chakras whereby there is an even flow of beneficial energy in the body. Mantras can be used in single or in combination with others for the healing process. (**Swami Vishnu Devananda, 2002**)

A language is a system of communication which consists of a set of sounds and written symbols which are used by the people of a particular country or region for talking or writing. (Collins English Dictionary)

Orientation refers to the ability to know space, time and place for moving from one room to another or walking downtown for a shopping trip. An Orientation and Mobility (O&M) Specialist provides instruction that can help to develop or re-learn the skills and concepts that need to travel safely and independently within the home and in the community.

**OBJECTIVES OF THE STUDY:** To find out whether there would be any significant improvement on language and orientation skills due to the practice of power yoga and om chanting among cerebral palsy affected children.

**HYPOTHESIS:** It was hypothesized that there would be significant improvement on language and orientation skills among cerebral palsy affected children due to the practice of power yoga and om chanting.

**METHODOLOGY:** Forty five children with cerebral palsy between the age group of 8 to 16 years were selected randomly from NIEPMD, Chennai. The children were grouped in to three namely Experimental Group I, Experimental Group II, and Control Group, where the

Experimental Group I children practiced Power yoga, Experimental Group II children Om chanting for six days per week, 60 minutes practice in the morning for the period of 12 weeks, the control group children were not exposed to any training. Prior to and after the training programme the data were collected on language and orientation skills using Mini Mental State Examination Questionnaire. The collected data were statistically analysed using Analysis of Co-Variance (ANCOVA) to test the hypothesis.

**STATISTICAL ANALYSIS:** Prior to and after the training programme the data were collected on language and orientation skills using Mini Mental State Examination Questionnaire. The collected data were statistically analysed using Analysis of Co-Variance (ANCOVA) to test the hypothesis .To find out paired mean difference among the groups Scheffe's Post hoc test was used at 0.05 level of confidence.

#### **ANALYSIS OF COVARIANCE OF THE MEANS OF LANGUAGE SKILLS AMONG TWO EXPERIMENTAL AND CONTROL GROUPS**

(Scoring Points)

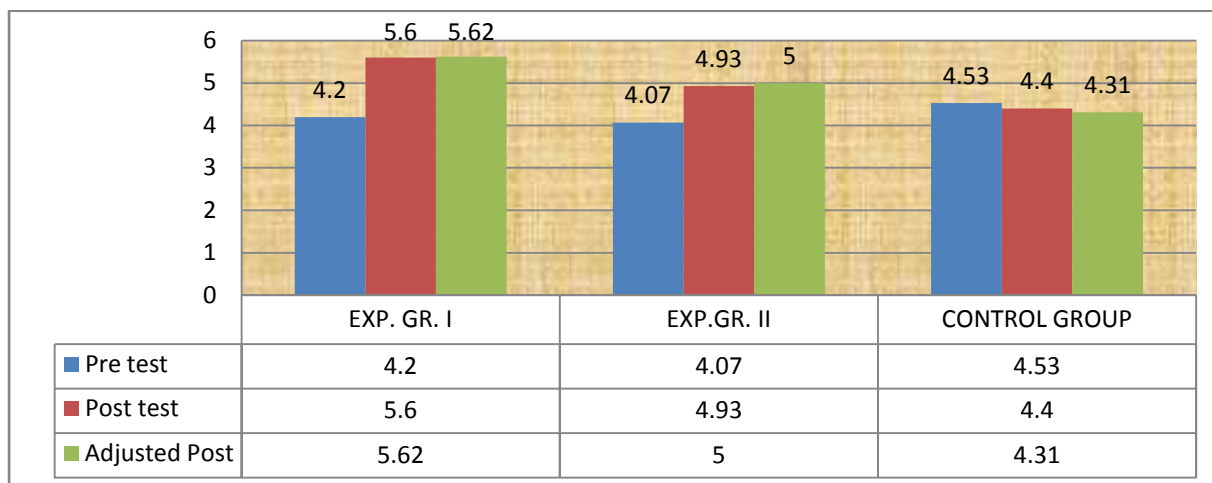
Test	Exp. Group I	Exp. Group II	Control group	Source of Variance	Sum of Squares	Degrees of Freedom	Mean Squares	F ratio
Pre Test	4.20	4.07	4.53	Between	1.73	2	0.87	2.13
				Within	17.07	42	0.41	
Post Test	5.60	4.93	4.40	Between	10.84	2	5.42	<b>11.31*</b>
				Within	20.13	42	0.48	
Adjusted Post Test	5.62	5.00	4.31	Between	12.43	2	6.22	<b>14.18*</b>
				Within	17.98	41	0.44	
Mean Gain	1.40	0.87	0.13					

**\*Significant**

**SCHEFEE'S POST-HOC TEST FOR ADJUSTED MEANS OF LANGUAGE SKILLS**

Group I	Group II	Control Group	Mean Difference	Required C.I
5.62	5.00	----	<b>0.62*</b>	0.61
----	5.00	4.31	<b>1.32*</b>	0.61
5.62	----	4.31	<b>1.31*</b>	0.61

**\*Significant**



**ANALYSIS OF COVARIANCE OF THE MEANS OF ORIENTATION SKILLS AMONG TWO EXPERIMENTAL AND CONTROL GROUPS**

**(Scoring in Points)**

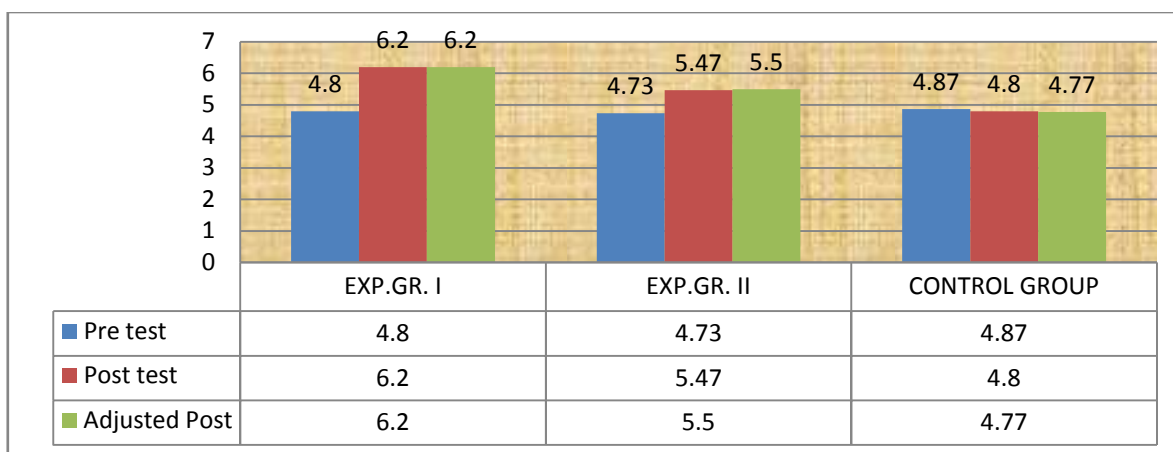
Test	Exp. Group I	Exp. Group II	Control group	Source of Variance	Sum of Squares	Degrees of Freedom	Mean Squares	Obtained F ratio
Pre Test	4.80	4.73	4.87	Between	0.13	2	0.07	2.52
				Within	7.07	42	0.17	
Post Test	6.20	5.47	4.80	Between	14.71	2	7.36	<b>15.05*</b>
				Within	20.53	42	0.49	
Adjusted Post Test	6.20	5.50	4.77	Between	15.24	2	7.62	<b>16.27*</b>
				Within	19.20	41	0.47	
Mean Gain	1.40	0.73	0.07					

**\*Significant**

**SCHEFEE’S POST-HOC TEST FOR ADJUSTED MEANS OF ORIENTATION SKILLS**

Group I	Group II	Control Group	Mean Difference	Required C.I
6.2	5.5	----	<b>0.94*</b>	0.82
----	5.5	4.77	<b>2.07*</b>	0.82
6.2	----	4.77	<b>3.02*</b>	0.82

**\*Significant**



**CONCLUSIONS:**

The results presented in the above tables proved that there was significant improvement in language and orientation skills among cerebral palsy affected children due to the practice of power yoga and om chanting for the period of 12 weeks, Hence the hypothesis accepted at 0.05 level of confidence. Among the two Experimental groups the Group I children had better significant improvement than the Group II children in language and orientation skills, as it is proved in the Tables. Thus it is concluded that power yoga had better significant improvement than om yoga. Thus the hypothesis accepted at 0.05 level of confidence.

## REFERENCES

1. **Archie Hinchcliffe (2007)** Children with cerebral palsy, Second edition, Sage publications, New Delhi, India.
2. **Alfred L. Scherzer (2001)** Early Diagnosis and Interventional Therapy in cerebral Palsy, Third edition, Vol.11., Marcel Dekker publishers, New York, USA.
3. **Srivatsa Ramaswami (2005)** “The complete book of Vinyasa Yoga”, Published by Da Capo Press, Cambridge.
4. **Swami Vishnu Devananda (2002)**“Meditation and Mantras”, Motilal Banarsi Dass Publishers Pvt. Ltd.